Final Report
on
Developing Pest List of Plants and Plant Products in Bangladesh

Strengthening Phytosanitary Capacity in Bangladesh Project

Plant Quarantine Wing

Department of Agricultural Extension

Khamarbari, Farmgate, Dhaka-1215.

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Submitted By

Center for Resource Development Studies Ltd.

13C/8C Babar Road, Block-B, Mohammadpur, Dhaka-1207, Bangladesh
Tel: 88-02-55020295; Email: crdslbd@yahoo.com

June 2019

Panel of Authors

Dr. Hamiz Uddin Ahmed	**Team Leader**
Dr. Md. Abdul Latif	**Senior Entomologist**
Dr. Md. Fazlul Huq	**Agronomist**
Dr. Abu Taher Mia	**Plant Pathologist**
Prof. Dr. Md. Abdul Latif	**Entomologist**
Dr. M.A. Rahman	**Bacteriologist**
Dr. Shaker Ahmed	**Economist**

Reviewed By

Md. Ahsan Ullah

PRA Consultant, SPCB Project, DAE

Strengthening Phytosanitary Capacity in Bangladesh Project

Plant Quarantine Wing

Department of Agricultural Extension

Khamarbari, Farmgate, Dhaka-1215.

Foreward

The Strengthening Phytosanitary Capacity in Bangladesh (SPCB) Project under Plant Quarantine Wing (PQW), Department of Agricultural Extension (DAE), Ministry of Agriculture conducted the study for "Developing Pest List of Plants and Plant Products in Bangladesh" according to the provision of contract agreement signed between SPCB-DAE and Centre for Resource Development Studies (CRDS) Ltd. on 15 December 2018. The study is a five-month assignment commencing from 15 December 2018 to 14 May 2019 under the SPCB, DAE. The overall objectives of developing the pest list of Plants and Plant Products by the SPCB Project is to support the National Plant Protection Organization (NPPO) for knowing which pests are present in Bangladesh, which pests we need to evaluate in the study, which pests are associated with the commodities, which pests are present in the exporting country that may introduce into Bangladesh as an Invasive Alien Species (IAS), which pests are reasonably likely to follow the pathways and which pests are Quarantine pests for importing country. To carry out the study, the consultants of the Consulting Firm collected information from 47 Deputy Directors of Agricultural Extension, visited 14 Plant Quarantine Stations (PQSs), and 18 Horticultural Centre of DAE in the country. The study covered the interview of BARI Researchers/scientists from 16 locations, 06 stations of BRRI, 04 Regional stations of BINA, 02 Tea Research Institutes one at Moulovibazar and the other at Panchagarh, 05 stations of BJRI and 06 regions of CDB. Information were also collected from Forest Research Institute, Sugar Crop Research Institute, Wheat and Maize Research Institute, Sugar Mills Corporation and above all from the Professors of 12 leading Universities of the country. Physical inspection and visits were made to the sea and land ports of the concerned districts. The consultants also reviewed secondary sources of information related to the study.

The study findings revealed that 133 insect and mite pests on cereal crops, 83 on pulse crops, 125 on oilseed crops, 76 on fiber crops, 69 on sugar crops, 39 on tuber crops, 190 on vegetable crops, 313 on fruit crops, 75 on spices crops, 87 on flower crops, 546 on forest trees, 71 on narcotics and beverage crops and 133 on medicinal plants were listed. Number of diseases on cereals, pulses, oilseeds, fibre crops, sugar crops, tuber crops, vegetable crops, fruits, spices, flowers and ornamental plants, forest trees, narcotics and beverage and medicinal plants were 179, 171, 158, 92, 60, 79, 367, 291, 129, 68, 920, 111 and 16 respectively. Altogether records of 2641 diseases on 405 plant species were recorded. Number of these 2641 diseases caused by fungi, bacteria, virus, nematode and plant parasites were 1758, 66, 145, 364 and 108 respectively. As many as 97, 19, 31, 43, 56, 9, 42, 29, 30, 21, 17, 38 and 16 Weed species were recorded on Cereal crops, Pulse crops, Oilseeds crops, Fibre crops, Sugar crops, Tuber crops, Vegetable crops, Fruit crops, Spices crops, Flower and Ornamental Plants, Forest trees, Narcotics and Beverage crops, and Medicinal Plants respectively. There are many Weed species common to different crops, the prevalence and status also varied in different locations. There was interception of pests at various quarantine stations but with very limited scale. The available information was not adequate. A total of 832 Insect and mite species, 833 pathogens causing diseases and 170 weed species were recorded with hosts and are alphabetically presented in summary table. Similarly, the distributions of major pests in 14 agricultural regions of the country were also presented. However, detail of the status of each pest was presented in the report.

The findings of the study were presented in the National Level Workshop organized by the SPCB, PQW of DAE on 17 June 2019. The concerned professionals of agricultural and other universities of Bangladesh, DAE (Department of Agricultural Extension), research organizations and other relevant personnel from different organizations were attended the workshop. The online version of this report will be published at www.dae.gov.bd.

I would like to congratulate the Consultant Team of CRDS for conducting the Developing Pest List study successfully in the stipulated time. I am also thankful to concerned SPCB professionals in making the total endeavor a success. I express my heartfelt thanks to the officials of DAE, Ministry of Agriculture, Agricultural and other Universities and Research Organizations for their assistance and cooperation extended in Making Pest List study a success. Thanks are also due to all members of Technical Committees for their active cooperation. Special thanks are due to the Secretary, Additional Secretary (Extension), Director General of DAE, Director (PQW) and other high officials of the Ministry of Agriculture for providing us valuable advice and guidance. I hope that the report certainly would contribute to expedite the exports and imports of commodities in the country.

(Dr. Mohammad Ali)
Project Director
Strengthening Phytosanitary Capacity in Bangladesh (SPCB) Project
Plant Quarantine Wing (PQW), Department of Agriculture Extension (DAE)
Ministry of Agriculture, Bangladesh.

Preface

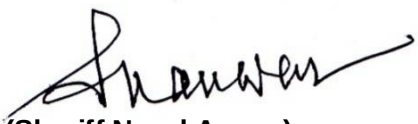
This Final Report intends to fulfill the requirement of the client according to the provision of contract agreement signed between the Project Director of Strengthening Phytosanitary Capacity in Bangladesh (SPCB) Project and the Chairman, Centre for Resource Development Studies (CRDS) Ltd. for "Developing Pest List of Plants and Plant Products in Bangladesh". This study is a five-month assignment during 15 December 2018 to 14 May 2019.

Consultancy services for "Developing Pest List of Plants and Plant Products in Bangladesh" were provided by the Centre for Resource Development Studies (CRDS) Ltd. The study team consists of five senior level experts headed by one Team Leader supported by one coordinator and several field and office level support staffs. Their untiring efforts deserve commendation.

In fact, there exists no pest list for plant and plant products in Bangladesh. The phytosanitary management strength of Bangladesh is too feeble to comply with the WTO-SPS Agreement and IPPC, hampering our trade in the context of plants and plant products. So, it was essential to develop a pest list of plants and plant products at the earliest to cope with the situation. This fact prompted the Plant Quarantine Wing of DAE to prepare a pest list for the National Plant Protection Organization (NPPO) for knowing which pests are present in Bangladesh and which pests may intrude into Bangladesh along with commodities coming from exporting countries as an Invasive Alien Species (IAS).

The Report includes methodology, vise study design, sampling framework and data collection instruments, guidelines and checklists, details of data collection method, data management, analyses and findings of the study. According to the scope of work of the study pest lists were prepared plant and plant product wise and included in the report. The report, in addition, reasonably identified the pathways followed by pests and listed pests from Importing countries needing quarantine.

The report had been reviewed and discussed thoroughly by the SPCB officials along with other experts and representatives through several discussion meetings. This report was presented in a national level workshop for obtaining further comments and suggestions to make it more resourceful. The consultants prepared the Final Report of the assigned study based on those comments and suggestions of the client and experts.



(Shariff Nurul Anwar)
Chairman
Centre for Resource Development Studies (CRDS) Ltd.
13C/8C Babar Road (Gr. Floor), Block-B, Mohammadpur,
Dhaka-1207, Bangladesh.

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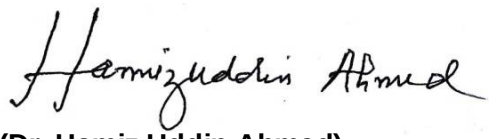
Acknowledgements

The Strengthening Phytosanitary Capacity in Bangladesh (SPCB) Project under the Plant Quarantine Wing (PQW) of the Department of Agricultural Extension (DAE) has entrusted the Centre for Resource Development Studies Ltd. (CRDS) to carry out the study "Developing pest list of plants and plant products in Bangladesh". The Report has been prepared based on data collected from 47 districts of Bangladesh during 15 December 2018 to 14 May 2019. Information was also collected from 14 Plant Quarantine Stations, 18 Horticultural Centres and from all concerned agricultural research organizations of the country. Moreover, the consultants met with the relevant Professors/Researchers of 12 leading Universities of Bangladesh. The published documents were also reviewed at the time of data collection. In the process of setting indicators, data collection formats, monitoring and supervision, data analysis and report writing, we have enjoyed the full support of SPCB-PQW. The Team Leader has finally prepared the report having inputs from Prof. Dr. Md. Abdul Latif, Dr. Abu Taher Mia, Dr. Md. Abdur Rahman, Dr. Md. Abdul Latif, Dr. Fazlul Haque and Dr. Shaker Ahmed.

The team of consultants is grateful to all persons involved in the Developing Pest List study. Our special gratitude to Mr. Mir Nurul Alam, Director General, DAE, who provided his whole hearted support and gave us an opportunity to meet his District level officers during data collection of the study. They are also thankful to Dr. Md. Azhar Ali, Director of Plant Quarantine Wing (PQW) of DAE. Special thanks are also due to Dr. Mohammad Ali, Project Director, SPCB Project; Mr. Md. Ahsan Ullah, Consultant (PRA) and Mrs. Marina Jebunehar, Senior Monitoring and Evaluation Officer, SPCB for their cooperation and valuable suggestions to the study team in line with the activities performed during the study and report writing.

We are also greatful to the Chairman, the Managing Director, Coordinator and other staff of CRDS for their constant support, inspiration and help to make the study successful and report preparation.



(Dr. Hamiz Uddin Ahmed)
Team Leader
On behalf of Team Members.

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Abbreviations

ADD	Additional Deputy Director
BARI	Bangladesh Agricultural Research Institute
BAU	Bangladesh Agricultural University
BINA	Bangladesh Institute of Nuclear Agriculture
CABI	Centre for Agriculture and Biosciences International
CRDS	Center for Resource Development Studies Limited
DAE	Department of Agricultural Extension
DD	Deputy Director
DPP	Development Project Proposal
DTO	District Training Officer
IPPC	International Plant Protection Convention
ISPM	International Standard for Phytosanitary Measures
NGO	Non-Governmental Organization
PC	Phytosanitary Certificate
PPW	Plant Quarantine Wing
PRA	Pest Risk Analysis
PSO	Principal Scientific Officer
RARS	Regional Agricultural Research Station
SAAO	Sub-Assistant Agriculture Officer
SPCB	Strengthening Phytosanitary Capacity in Bangladesh
TOR	Terms of Reference
UAO	Upazila Agriculture Officer

Executive Summary

Pest list of plants and plant products is a prerequisite for importing and exporting any commodity. According to APHIS (Animal and Plant Health Inspection Service), listing of pest of any commodity 80% work of PRA is finished. But in Bangladesh practically there is no pest list for any plants or plant products. For this reason, Strengthening Phytosanitary Capacity in Bangladesh (SPCB) Project of Plant Quarantine Wing has taken an initiative to finalize the pest list. For developing the pest list, the expert team working in the University, Research organization and Department of Agricultural Extension worked together under the umbrella of Centre for Resources Development Studies to develop a pest list of Bangladesh. Accordingly, the team conducted survey and collected pest list data from the relevant organization and then verified the data with different sources for making pest list.

Bangladesh is basically an agricultural country. Hundreds of plant species are grown in this country. A large number of commodities are both exported and imported annually. In both cases, knowledge on pest problems of exporting as well as importing countries in full scale is pre-requisite before exportation and/or importation. Unfortunately Bangladesh has no document on full account of pest problems of plants and plant products of the country. The Govt. of Bangladesh is implementing a project on "Strengthening Phytosanitary Capacity in Bangladesh" under Plant Quarantine Wing of Department of Agricultural Extension (DAE) under the Ministry of Agriculture (MoA). The Plant Quarantine Wing is executing an assignment on making pest list of plants and plant products in Bangladesh with the assistance of Center for Resource Development Studies Ltd. (CRDS). The major task of the Firm is to make a pest list (Insect and mites, diseases, weeds) of all plants and plant products of this country.

For convenience, all plants are grouped under 13 categories namely Cereal crops, Pulse crops, Oilseed crops, Fibre crops, Sugar crops, Tuber crops, Vegetable crops, Fruit crops, Spices crops, Flower and Ornamental Plants, Forest trees, Narcotics and Beverage crops, and Medicinal plants. Under each category three separate lists i.e. insect and mite pests, diseases and weeds were prepared. In addition, all recorded pests are summarized alphabetically showing hosts. Finally a table has been prepared on the distribution of recorded pests in 14 agricultural regions of the country. The report also included the information on intercepted pests at various Quarantine stations of the country.

The sources of data are the published documents of all agricultural research institutes, Universities, DAE, Quarantine Stations, Personal Contact and Internet searching.

Results revealed that altogether 133 insect and mite pests were recorded on cereal crops of which 65, 27, 27, 8 and 6 pests were recorded on rice, wheat, maize, sorghum and millets respectively. A total of 83 insect and mite pests of pulse crops are listed, of which 8, 14, 19, 7, 11, 14, 6 and 4 pests were recorded on lentil, chickpea, mungbean, grasspea, cowpea, blackgram, pigeon pea and field pea respectively. Altogether 125 insect and mite pests of oil seed are listed, of which 8, 45, 9, 7, 8, 4, 37, 4 and 3 pests were recorded on mustard, groundnut, sesame, linseed, sunflower, safflower, soybean, niger and castor respectively. Altogether 76 insect and mite pests of fiber crops are listed, of which 19, 4, 4, 31,13 and 5 pests were recorded on jute, kenaf, mesta, cotton, silk cotton and Burma shimul respectively. Altogether 69 insect and mite pests of sugar crops are listed, of which 38, 7, 12, 9 and 3 pests were recorded on sugarcane, sugar beet, date palm, palmyra palm and golpata respectively. Insect and mite pests of 17 different vegetable crops such as brinjal, potato, sweet potato, aroids, yam, cabbage, cauliflower, knolkhol, radish, turnip, lady's finger, tomato, cucurbits, bean, kangkong, lettuce and amaranthus are included under the pests of vegetable crops. Altogether 229 insect and mite pests

of vegetable crops are listed. Insect and mite pests of 28 different fruit crops are included under the pests of fruit crops. Altogether 313 insect and mite pests of fruit crops are listed. Insect and mite pests of 15 different spices crops are included under this category. Altogether 75 insect and mite pests of spices crops are listed. Insect and mite pests of 21 different flower crops are included. Altogether 87 insect and mite pests of flower crops are listed. Insect and mite pests of 52 different forest trees are included under the pests of forest trees. Altogether 546 insect and mite pests of forest trees are listed. Insect and mite pests of 6 different narcotics and beverage crops such as tobacco, hemp, betel leaf, betel nut, tea and coffee are included under this category. Altogether 71 insect and mite pests of narcotics and beverage crops are listed. Insect and mite pests of 24 different medicinal plants are included under this category. Altogether 133 insect and mite pests of medicinal plants are listed.

The total number of plant species under twelve groups was 401 and the number under each group was found to vary. Plant species under cereals, pulses, oilseeds, fibre crops, sugar crops, tuber crops, vegetables, fruit crops, spices, flowers crops, forest trees, narcotics & beverage and medicinal plants were 8, 8, 9, 7, 4, 3, 29, 38, 18, 25, 242, 7 and 6 respectively. The pathogens involved in causing these diseases were fungi, bacteria, viruses, nematodes and parasitic plants. Number of diseases on cereals, pulses, oilseeds, fibre crops, sugar crops, tuber crops, vegetable crops, fruits, spices, flowers and ornamental plants, forest trees, narcotics & beverage and medicinal plants were 179, 171, 158, 92, 60, 79, 367, 291, 129, 68, 920, 111 and 19 respectively. Altogether records of 2644 diseases on 401 plant species were recorded. Number of these 2644 diseases caused by fungi, bacteria, virus, nematode and plant parasites were 1966, 66, 145, 356 and 111 respectively.

As many as 97, 19, 31, 43, 56, 51, 29, 30, 21, 17, 38 and 16 Weed species were recorded on Cereal crops, Pulse crops, Oilseeds crops, Fibre crops, Sugar crops, Vegetable crops, Fruit crops, Spices crops, Flower and Ornamental Plants, Forest trees, Narcotics and Beverage crops, and Medicinal Plants respectively. There are many Weed species common to different crops, the prevalence and status also varied in different locations.

There was interception of pests at various quarantine stations but with very limited scale. The available information was not adequate. Actually the facilities and activities of quarantine stations required improvement.

A total of 832 Insect and mite species, 833 pathogens causing diseases and 170 weed species were recorded with hosts and are alphabetically presented in summary table. Similarly, the distributions of major pests in 14 agricultural regions of the country are also presented in a separate table. There was variation in weed occurrence in different regions.

This report has immense value for import and export of commodities from and to other countries. It is important to note that such list needs to be updated in every five years. The Quarantine Wing of DAE will develop necessary program for such study.

1.0 SCOPE AND METHODOLOGY OF PEST LISTING OF PLANT AND PLANT PRODUCTS IN BANGLADESH

1.1 Background

Pest risk analysis provides the rationale for phytosanitary measures for a specified PRA area. It evaluates scientific evidence to determine whether an organism is a pest. If so, the analysis evaluates the probability of introduction and spread of the pest and the magnitude of potential economic consequences in a defined area, using biological or other scientific and economic evidence. If the risk is deemed unacceptable, the analysis may continue by suggesting management options that can reduce the risk to an acceptable level. Subsequently, pest risk management options may be used to establish phytosanitary regulations.

For some organisms, it is known beforehand that they are pests, but for others, the question of whether or not they are pests should initially be resolved.

The pest risks posed by the introduction of organisms associated with a particular pathway, such as a commodity, should also be considered in a PRA. The commodity itself may not pose a pest risk but may harbour organisms that are pests. Lists of such organisms are compiled during the initiation stage. Specific organisms may then be analyzed individually, or in groups where individual species share common biological characteristics.

Less commonly, the commodity itself may pose a pest risk. When deliberately introduced and established in intended habitats in new areas, organisms imported as commodities (such as plants for planting, biological control agents and other beneficial organisms, and living modified organisms (LMOs)) may pose a risk of accidentally spreading to unintended habitats causing injury to plants or plant products. Such risks may also be analyzed using the PRA process.

The PRA process is applied to pests of cultivated plants and wild flora, in accordance with the scope of the IPPC. It does not cover the analysis of risks beyond the scope of the IPPC.

Provisions of other international agreements may address risk assessment (e.g. the Convention on Biological Diversity and the Cartagena Protocol on Biosafety to that convention).

Bangladesh is importing and exporting several crops and crop products from other countries and for that a knowledge on existing pests of different crops are essential. Unfortunately Bangladesh has no document with full account of pest problems of plants and plant products of the country. Thus the present study was undertaken.

1.2 Scope of Pest Listing

The major functions and responsibilities of the Firm will be to develop a pest list of plants and plant products as specified in the TOR following the guideline provided by the Project Director, SPCB against the desired outputs. To collect the necessary information the firm is required to visit all Agricultural Research Institutions/Organizations, relevant Universities, DAE and Plant Quarantine Wing of DAE, Agricultural products Importers and Exporters Association, Food Product Processing Industries, EPB, Private sector agricultural research institutions and Hortex Foundation etc.

1.3 Objectives

The overall objective of the study is to compile a Pest List of plants and plant products to support National Plant Protection Organization (NPPO) for knowing (a) which pests are present in Bangladesh; (b) which pests we need to evaluate in the PRA and (c) (i) which pests are associated with the commodity (ii) which pests are present in exporting country that may introduce into Bangladesh as an Invasive Alien Species (IAS) (iii) which pests are reasonably likely to follow the pathways (iv) which pests are Quarantine pests for importing country.

The **Specific Objectives** of the study are:

- Developing a list of all kinds of pest present in Bangladesh that attacks plants and plant products;
- While developing pest list the above mentioned guideline may be followed. Addition to the list like status of distribution (High/Medium/Low) is encouraged &
- Perform other responsibilities assigned by PD of SPCB.

1.4 Areas of Pest Listing

The Consulting firm will collect raw and reliable data from the aforesaid areas by field visit, interviewing or by strong communication. Evaluation of secondary data is essential. The proposed work areas are as follows:

1. Bangladesh Agricultural Research Institute (All stations and centres)
2. Bangladesh Rice Research Institute (All stations and centres)
3. Wheat and Maize Research Institute (All stations and centres)
4. Bangladesh Jute Research Institute (All stations and centres)
5. Bangladesh Institute of Nuclear Agriculture (All stations and centres)
6. Bangladesh Tea Research Institute
7. Bangladesh Forest Research Institute
8. Bangladesh Agricultural University, Mymensingh
9. Sher-e-Bangla Agricultural University, Dhaka
10. Bangabandhu Sheikh Mujibur Rahman Agricultural University
11. University of Dhaka
12. University of Chittagong
13. University of Rajshahi
14. Hajee Mohammad Danesh Science and Technology University
15. Khulna University
16. Patuakhali Science and Technology University
17. Sylhet Agricultural University
18. Jahangir Nagar University, Savar, Dhaka.
19. All entry points of Plant Quarantine Stations
20. Deputy Directors of Centers of Chapaigonj, Baradi, Rahmatpur, Noorbag, Keotkhali, Ramu, Balagata, Keotkhali, Khejurbagan
21. Deputy Directors of Agricultural Extension of all point of entry plant quarantine station districts with Comilla, Norshingdhi, Faridpur, Mymensingh, Bogra, Manikgonj, Rajshahi, Noakhali, Rangamati.

1.5 Methodology of Data Collections

This section includes a discussion on the collection of data from the study area, study population and its selection procedures, instruments to be used, implementation strategy, quality control procedure and data management etc. Considering the objectives of the study, time and types of respondents under the study, both qualitative and quantitative research methods will be applied in the study conforming to the objectives as stated in the TOR. In consultation with the client /PD, SPCB the necessary changes could be undertaken.

Collection of Documents and Review

To be familiar with the study, the review of relevant literature and collection of secondary data are necessary. The review of literature will include the relevant project documents i.e. Project Proforma (PP), project reports and relevant reports i.e. Bangladesh Journal of Entomology published by Bangladesh Entomological Society, Bangladesh Journal of Zoology published by Zoological Society of Bangladesh, Bangladesh Journal of Phytopathology published by Bangladesh Phytopathological Society, Bangladesh Agronomy Journal published by Bangladesh Society of Agronomy, Bangladesh Journal of Weed Science published by Weed Science Society of Bangladesh, Bangladesh Journal of Botany published by Bangladesh Botanical Society, Bangladesh Journal of Agricultural Research (BJAR) published by Bangladesh Agricultural Research Institute (BARI), Tea Journal of Bangladesh published by Bangladesh Tea Research Institute, Bangladesh Journal of Forest Science published by Bangladesh Forest Research Institute (BFRI) have been searched. Moreover, information from other journals related to insect pests, diseases, weeds etc. published by different research organizations and universities of Bangladesh and abroad were reviewed.

Discussion with Experts in the Discipline

The Project Director (PD) holds a key position and may select the area of intervention. The PD along with the PRA Consultant of SPCB being highly knowledgeable will be source of information and guidance from time to time. The study team will meet him at the early stage of the commencement of study to apprise him of the approach to the work and guideline from him. The assignment is highly technical and specific to the subject and substantial information may be given the experts in the discipline. The team will meet with experts of plant Protection Wing of DAE and BARI and others places. The discussion will help in finalizing the approach to the study.

Identification of Pests Specific to an Area

Some pests are common in almost all area. But there are some species, the prevalence of which is more specific to an area(s). For this initially secondary data will be sorted to identify the area of prevalence according to pest species. Subsequently primary data will be collected by field visit in selected area as well as research organizations/institutions and interviewing with the phytosanitary experts (including PRA Consultant, PD SPCB). Finally the analysis of all data will lead to the identification specific area.

Development of Data Collection Instruments/Survey format

The survey Formats for collection of information on insect and mite pests, diseases and weeds of different plants and plant product have been developed and are presented in Appendices-II, III & IV. Similarly all recorded pests are arranged alphabetically in a separate Format (Appendix-V). The Regional distribution of pests are also included (Appendix-VI). Data collection on intercepted pests form Quarantine stations intercepted pest are also done (Format-VII). All proposed Formats for Data collection are discussed with SPCB.

Data collection using Formats

The secondary data on insect pests, diseases and weeds of pulses were collected from scientists of research institutes, university teachers, DAE personnel, books, journals, published reports, CD of CABI and internet searching. After analysis and editing of all collected data, four types of reports are prepared i.e. pests problem in plants and plant product, summary of all recorded pests arranged alphabetically with hosts, distribution of pests to 14 agricultural regions and pests interception in quarantine stations.

Rating of pests

Based on information from different sources rating of pests was done on the basis of its distribution, incidence and severity of damage as follows:

+++ = very widespread and very important
++ = widespread and important
+ = important locally present
- = not present

2.0 RECORDED INSECT AND MITE PESTS OF PLANT AND PLANT PRODUCTS

Insect and mites are the important organisms in the world as well as in Bangladesh causing damage to plant and plant products both in field and storage. They cause considerable yield loss every year and so is the case in Bangladesh. These organisms could be easily disseminated with different plant parts not only within the boundary of a country but may move globally. In order to avoid unnecessary hindrance of international trade every country should have a complete list of pests. Therefore, the present work is the efforts towards making a list of insect and mite pests of different plants and plant products for Bangladesh.

The relevant information was collected from different authentic sources such as discussions with the scientists from the research organizations and teachers of different Universities and from different documents like article published in annual reports, bulletins, scientific journals and proceedings of workshops/ conferences/ seminars and the internet resources. Plant and plant products are categorized into 12 groups such as cereal crops, pulse crops, oilseed crops, fiber crops, sugar crops, vegetable crops, fruit crops, spices crops, flower and ornamental plants, forest trees, narcotics and beverage crops and medicinal plants. Insect and mite pests of each plant and plant group listed separately herein.

2.1 Recording Insect and Mite Pests of Cereal Crops

On the basis of information from different authentic sources insect and mite pests of cereal crops in Bangladesh are grouped as rice, wheat, maize, soughum and millets pests. Altogether 133 insect and mite pests of cereal crops are listed in Table 1. Out of 133 pests 65, 27, 27, 8 and 6 pests were recorded on rice, wheat, maize, sorghum and millets respectively. In rice, status of the 20 pests was in the range of medium to high with common to wide distribution in the country. Similarly, for wheat, maize, sorghum and millet number of pests with medium to high status and common to wide distribution were 6, 8, 6, and 5 respectively (Table 1). Plant parts affected include leaf, seedling, root, stem, panicle, grain, and flouer.

Table 1. Insect and Mite Pests of Cereal Crops

Sl. No.	Name of plant and plant products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
01.	Rice *(Oryza sativa)*	Short horned grasshopper	*Acrida exaltata* Walker	Orthoptera	Acrididae	Leaf, panicle	Low	+	4, 7, 12, 15, 20, 21
02.		Black fungus beetle	*Alphitobius piceus* (Olivier)	Coleoptera	Tenebrionidae	Rice	Low	+	20
03.		Seedling maggot	*Atherigona oryzae* Malloch	Diptera	Muscidae	Seedling	Low	+	7, 20, 21
04.		Short horned grasshopper	*Attractomorpha crenulata* Fabricius	Orthoptera	Acrididae	Leaf and panicle	Low	+	4, 7, 12, 15, 20, 21

Sl. No.	Name of plant and plant products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
05.		Short horned grasshopper	*Attractomorpha parasitica* (de Haan)	Orthoptera	Acrididae	Leaf and panicle	Low	+	4, 7, 12, 15, 20, 21
06.		Mealybug	*Brevennia rehi* (Lindinger)	Homoptera	Cicadellidae	Whole plant	Low	+	1, 7, 12, 20, 21, 22
07.		Tropical warehouse moth	*Cadera cautella* Walker	Lepidoptera	Pyralidae	Rice, flour	Low	+	20
08.		Flea beetle	*Chaetocnema basalis* Baly	Coleoptera	Chrysomelidae	Leaf	Low	+	20, 21, 22
09.		Flea beetle	*Chaetocnema basalis* Baby	Colepoptera	Chrysomelidae	Leaf	Low	+	15, 20
10.		Dark headed stem borer	*Chilo polychrysus* (Meyrick)	Lepidoptera	Crambidae	Tiller, panicle	Medium	++	1, 20, 21
11.		Rice leaf folder	*Cnaphalocrocis medinalis* (Guen.)	Lepidoptera	Crambidae	Leaf	High	+++	1, 5, 7, 12, 19, 20, 21, 22, 23
12.		White leaf hopper	*Cofana spectra* (Distant)	Homoptera	Pseudococcodae	Leaf	Low	+	20, 21
13.		Long horned grasshopper	*Conocephalus longipennis* (de Hann)	Orthoptera	Tettigoniidae	Leaf	Low	+	4, 7, 15, 20, 21
14.		Rice meal moth	*Corcyra cephalonica* (Stainton)	Lepiodoptera	Pyralidae	Rice, paddy	High	+++	3, 20
15.		Rice hispa	*Dicladispa armigera* (Olivier)	Coleoptera	Chrysomelidae	Leaf	low	+	1, 12, 20, 21, 22
16.		Long horned field cricket	*Euscyrtus concinnus* (de Haan)	Orthoptera	Gryllotalpidae	Leaf	Low	+	20, 21, 22
17.		Stink bug	*Eysarcoris* sp.	Hemiptera	Pentatomidae	Grain	Low	+	6, 20, 21
18.		Stink bug	*Eysarcoris ventralis* Distant	Hemiptera	Pentatomidae	Grain	Low	+	6, 20, 21
		Mole cricket	*Gryllotalpa africana* (P. de Beauv.)	Orthoptera	Gryllotalpidae	Seedling	Medium	+	20, 21
19.		White grub	*Heteronychus* sp.	Coleoptera	Scarabaeidae	Root	Low	+	20
20.		Rice whorl maggot	*Hydrellia philippina* Ferino	Diptera	Ephydridae	Leaf	Medium	++	7, 12, 20, 21, 22

Sl. No.	Name of plant and plant products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
21.		Rice root weevil	*Hydronomidus molitor* Faust	Coleoptera	Curculionidae	Root	Low	+	15, 20
22.		Rice aphid	*Hysteroneura setariae* (Thomas)	Homoptera	Homoptera	Leaf	Low	+	19, 20
23.		Flat grain beetle	*Laemophloeus minutus* (Olivier)	Coleoptera	Cucujidae	Rice, paddy	Low	+	3, 20
24.		Long headed flour beetle	*Latheticus oryzae* (Waterhouse)	Coleoptera	Tenebrionidae	Rice, flour	Low	+	3, 20
25.		Rice bug	*Leptocrisa acuta* (Thunberg)	Hemiptera	Alydidae	Grain	High	+++	1, 12, 15, 20, 21, 22
26.		Rice bug	*Leptocrisa oratorius* (Fabricius)	Hemiptera	Alydidae	Grain	Low	+	12, 15, 20, 21, 22
27.		Rice leaf folder	*Marasmia exigua* (Butler)	Lepidoptera	Crambidae	Leaf	High	+++	1, 5, 7, 12, 19, 20, 21, 22, 23
28.		Rice leaf folder	*Marasmia patnalis* Bradley	Lepidoptera	Crambidae	Leaf	High	+++	1, 5, 7, 12, 19, 20, 21, 22, 23
29.		Rice butterfly	*Melanitis leda ismene* Cramer	Lepidoptera	Satyridae	Leaf	Low	+	4, 12, 20, 21
30.		Leaf beetle	*Monolepta signata* Olivier	Coleoptera	Chrysomelidae	Leaf	Low	+	8, 20
31.		Rice ear-cutting caterpillar	*Mythimna separata* (Walker)	Lepidoptera	Noctuidae	Leaf, panicle	Low	+	1, 7, 9, 12, 20, 21, 22, 23
32.		Rice green semilooper	*Naranga aenessens* Moore	Lepidoptera	Noctuidae	Leaf	Low	+	4, 20, 21
33.		Green leaf hopper	*Nephotettix cincticeps* (Uhler)	Homoptera	Cicadelidae	Leaf	High	+++	1, 7, 12, 20, 21, 22
34.		Green leaf hopper	*Nephotettix nigropictus* (Stal)	Homoptera	Cicadelidae	Leaf	High	+++	1, 7, 12, 20, 21, 22

Sl. No.	Name of plant and plant products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
35.		Green leaf hopper	*Nephotettix virescens* (Distant)	Homoptera	Cicadelidae	Leaf	High	+++	1, 7, 12, 20, 21, 22
36.		Stink bug	*Nezara viridula* (Linneaus)	Hemiptera	Pentatomidae	Grain	Low	+	6, 20, 21
37.		Brown plant hopper	*Nilaparvata lugens* (Stal)	Homoptera	Delphacidae	Stem	High	+++	1, 4, 12, 20, 21, 22
38.		Rice case worm	*Nymphula depunctalis* (Guenee)	Lepidoptera	Crambidae	Leaf	Medium	++	1, 5, 7, 12, 20, 21, 22
39.		Red spider mite	*Oligonichus oryzae* (Hirst)	Acarina	Tetranychidae	Leaf	Low	+	20
40.		Rice gall midge	*Orseolia oryzae* (Wood-Mason)	Diptera	Cecidomyiidae	Leaf sheath, tiller	High	+++	1, 7, 12, 20, 21, 22
41.		Saw-toothed grain beetle	*Oryzaephilus surinamensis* (Linneaus)	Coleoptera	Silvanidae	Rice, flour	High	+++	3, 20
42.		Short horned grasshopper	*Oxya chinensis* (Thunberg)	Orthoptera	Acrididae	Leaf and panicle	Low	+	7, 12, 15, 20, 21
43.		Short horned grasshopper	*Oxya hyla intricata* (Stal)	Orthoptera	Acrididae	Leaf and panicle	Low	+	7, 12, 15, 20, 21
44.		Short horned grasshopper	*Oxya japonica* (Thunberg)	Orthoptera	Acrididae	Leaf and panicle	Low	+	7, 12, 15, 20, 21
45.		Short horned grasshopper	*Oxya japonica japonica* (Thunberg)	Orthoptera	Acrididae	Leaf and panicle	Low	+	7, 12, 15, 20, 21
46.		Rice skipper	*Parnara guttata* Bremer & Grey	Lepidoptera	Hesperiidae	Leaf	Low	+	4, 12, 20, 21, 23
47.		Rice skipper	*Pelopidas mathias* (Fabiricius)	Lepidoptera	Hesperiidae	Leaf	Low	+	4, 12, 20, 21, 23
48.		Indian meal moth	*Plodia interpunctella* (Hubner)	Lepidoptera	Pyralidae	Rice, flour	Low	+	20
49.		Rice hairy caterpillar	*Psalis pennatula* Fabricius	Lepidoptera	Lymantridae	Leaf	Low	+	12, 20, 21

Sl. No.	Name of plant and plant products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
50.		Leaf miner	*Pseudonapomyza asiatica* Spencer	Diptera	Agrozomyzidae	Leaf	Low	+	20, 21
51.		Zigzag leaf hopper	*Recilia dorsalis* (Motschulsky)	Homoptera	Cicadellidae	Leaf	Low	+	20
52.		Lesser grain beetle	*Rhyzopertha dominaca* (Fabricius)	Coleoptera	Bostrychidae	Paddy	High	+++	3, 20
53.		Yellow stem borer	*Scirpophaga incertulas* (Walker)	Lepidoptera	Crambidae	Tiller, panicle	High	+++	1, 4, 5, 7, 20, 21, 22
54.		Pink stem borer	*Sesamia inferens* (Walker)	Lepidoptera	Noctuidae	Tiller, panicle	Low	+	1, 20, 21
55.		Rice weevil	*Sitophilus oryzae* (Linneaus)	Coleoptera	Curculionidae	Rice, paddy	High	+++	3, 20
56.		Angoumois grain moth	*Sitotroga cerealella* (Olivier)	Lepiodoptera	Gelechidae	Rice, paddy	High	+++	3, 20
57..		White backed plant hopper	*Sogatella furcifera* (Horvath)	Homoptera	Delphacidae	stem	High	+++	1, 5, 20, 21, 22
58.		Rice swarming caterpillar	*Spodoptera mauritia acronyctoides* Guenee	Lepidoptera	Noctuidae	Leaf	Low	+	1, 7, 12, 20, 21, 22
59.		Rice swarming caterpillar	*Spodoptera mauritia* Boisduval	Lepidoptera	Noctuidae	Leaf	Low	+	1, 7, 12, 20, 21, 22
60.		Rice thrips	*Stenchaetothrips biformis* (Bagnal)	Thysanoptera	Thripidae	Leaf	Low	+	1, 12, 20, 21, 22
61.		Weevil	*Tanymecus indicus* Faust	Coleoptera	Curculionidae	Root,growing points	Low	+	20, 21
62.		Red spider mite	*Tetranychus oryzae* Hirst	Acarina	Tetranychidae	Leaf	Low	+	20
63.		Orange leaf hopper	*Thaia oryzivora* Ghauri	Homoptera	Cicadellidae	Leaf	Low	+	7, 20, 21
64.		Red flour beetle	*Tribolium castaneum* (Herbst)	Coleoptera	Tenebrionidae	Rice, paddy, flour	High	+++	3, 20

Sl. No.	Name of plant and plant products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
65.		Khapra beetle	*Trogoderma granarium* (Everts)	Coleoptera	Dermestidae	Rice	Low	+	3, 20
66.	Wheat *(Tritichum aestivum)*	Wireworm	*Agriotes* sp.	Coleoptera	Elateridae	Root	Low	+	9
67.		Cutworm	*Agrotis ipsilon* Hufnagel	Lepidoptera	Noctuidae	Seedling	Low	+	7, 23
68.		Sorghum shoot fly	*Atherigona soccata* Rondani	Diptera	Muscidae	Tiller	Low	+	9, 13
69.		Flea beetle	*Chaetocnema basalis* Baby	Colepoptera	Chrysomelidae	Leaf	Low	+	15, 21
70.		Rice meal moth	*Corcyra cephalonica* Stainton	Lepidoptera	Pyralidae	Grain	Low	+	3, 20
71.		Leaf eating caterpillar	*Helicoverpa armigera* Hübner	Lepidoptera	Noctuidae	Leaf	Low	+	7, 9, 23
72.		Flat grain beetle	*Laemophloeus minutus* (Olivier)	Coleoptera	Cucujidae	Rice, paddy	Low	+	3, 20
74.		Aphid	*Macrosiphum miscanthi* (Takahasi)	Homoptera	Aphididae	Leaf, ear	High	+++	8
75.		Grasshopper	*Melanoplus* spp.	Orthoptera	Acrididae	Leaf	Low	+	2, 23
76.		Wireworm	*Melanotus* sp.	Coleoptera	Elateridae	Root	Low	+	9
77.		Termite	Microtermes obesi Holmgren	Isoptera	Termitidae	Seedling	Low	+	2, 23
78.		Army worm	*Mythimna separata* (Walker)	Lepidoptera	Noctuidae	Leaf, panicle	Low	+	1,12, 20,
79.		Termite	Odontotermes obesus (Rambur)	Isoptera	Termitidae	Seedling	Low	+	2, 23
80.		Saw-toothed grain beetle	Oryzaephilus surinamensis *(Linnaeus)*	Coleoptera	Silvanidae	Grain	High	+++	3
81.		White grub	*Phyllophaga* spp.	Coleoptera	Scarabaeidae	Root	Low	+	7, 9
82.		Sugarcane leaf hopper	*Pyrilla purpusilla* Walker	Homoptera	Lophopidae	Leaf	Low	+	2, 9, 10
83.		Aphid	*Rhopalosiphum padi* (Linnaeus)	Homoptera	Aphididae	Leaf, ear	High	+++	8

Sl. No.	Name of plant and plant products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
84.		Aphid	*Rhopalosiphum rufiabdominalis* (Sasaki)	Homoptera	Aphididae	Whole plant	Low	+	11, 14
85.		Lesser grain borer	*Rhyzopertha dominica* (Fabricius)	Coleoptera	Bostrichidae	Grain	High	+++	3
86.		Pink borer	*Sesamia inferens* (Walker)	Lepidoptera	Noctuidae	Tiller,panicle	Low	+	1, 7
87.		Rice weevil	*Sitophilus oryzae* (Linnaeus)	Coleoptera	Curculionidae	Grain	High	+++	3
88.		Rice moth/ Angoumois grain moth	*Sitotroga cerealella* Olivier	Lepidoptera	Gelichiidae	Grain	Low	+	3
89.		Leaf eating caterpillar	*Spodoptera litura* (Fabricius)	Lepidoptera	Noctuidae	Leaf	Low	+	7, 9, 23
90.		Rust-red flour beetle	Tribolium castaneum *(Hurbst)*	Coleoptera	Tenebrionidae	Grain, flour	High	+++	3
92.		Khapra beetle	*Trogoderma granarium* Everts	Coleoptera	Dermestidae	Grain	Low	+	3
93.	Maize *(Zea mays)*	Cutworm	*Agrotis ipsilon* (Hufnagel)	Lepidoptera	Noctuidae	Seedling	Medium	++	7, 9
94.		Square-nacked beetle	*Ahasverus* (Cathartus) *advena* Linneaus	Coleoptera	Cucujidae	Grain	Low	+	3
95.		Sorghum shoot fly	*Atherigona soccata* Rondani	Diptera	Muscidae	Tiller	Low	+	*9, 13*
96.		Spotted stem borer	*Chilo partellus* (Swinhoe)	Lepidoptera	Pyralidae	Stem, cob, ear	Medium	++	17
97.		Dark headed stem borer	*Chilo polychrysus* (Meyrick)	Lepidoptera	Crambidae	Tiller	Low	+	1, 20, 21
98.		Wingless grasshopper	*Colemania sphenarioides* (Bolivar)	Orthoptera	Acrididae	Leaf	Low	+	7, 7
99.		Rice meal moth	*Corcyra cephalonica* (Stainton)	Lepiodoptera	Pyralidae	Rice, paddy	High	+++	3, 20
100.		Borer	*Helicoverpa armigera* (Hubner)	Lepidoptera	Noctuidae	Cob	Low	+	2, 9

Sl. No.	Name of plant and plant products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
101.		Corn earworm	*Helicoverpa zea* (Boddie)	Lepidoptera	Noctuidae	Cob	Low	+	7, 9
102.		White grub	*Holotrichia* spp.	Coleoptera	Melolonthidae	Root	Low	+	*9, 13*
103.		Flat grain beetle	*Laemophloeus minutus* (Olivier)	Coleoptera	Cucujidae	Rice, paddy	Low	+	3, 20
104.		Aphid	*Macrosiphum miscanthi* (Takahashi)	Homoptera	Aphididae	Leaf, stem, tassel	low	+	11, 14
105.		Termite	*Microtermes obesi* Holmgren	Isoptera	Termitidae	Seedling	Low	+	2, 9
106.		Flea beetle	*Monolepta* spp.	Coleoptera	Chrysomelidae	Silk	Low	+	7
107.		Blister beetle	*Mylabris* spp.	Coleoptera	Meloidae		Low	+	2, 7
		Leaf weevil	*Mylloceros discolor* Bohemann	Coleoptera	Curculionidae	Leaf	Low	+	7, 9
108.		Armyworm	*Mythimna separata* (Walker)	Lepidoptera	Noctuidae	Leaf	Low	+	1,12, 16, 20, 21, 22
109.		Green stink bug	*Nezara viridula* (Linnaeus)	Hemiptera	Pentatomidae	Leaf, stem	Low	+	7, 9
110.		Termite	Odontotermes obesus (Rambur)	Isoptera	Termitidae	Seedling	Low	+	2, 9
111.		Asian corn borer	*Ostrinia furnacalis* (Gunee)	Lepidoptera	Pyralidae	Leaf, stalk, ear	High	+++	9
112.		Sugarcane leaf hopper	*Pyrilla purpusilla* Walker	Homoptera	Lophopidae	Leaf	Low	+	9, 10
113.		Aphid	*Rhopalosiphum maidis* (Fitch)	Homoptera	Aphididae	Leaf, stem, tassel	High	+++	7, 9
114.		Pink borer	*Sesamia inferens* (Walker)	Lepidoptera	Noctuidae	Tiller	Low	+	23
115.		Rice weevil	*Sitophilus oryzae* (Linneaus)	Coleoptera	Curculionidae	Grain	High	+++	3, 20
116.		Angoumois grain moth	*Sitotroga cerealella* (Olivier)	Lepiodoptera	Gelechidae	Rice, paddy	High	+++	3, 20
117.		Hairy caterpillar	*Spilractia obliqua* (Walker)	Lepidoptera	Arctiidae	Leaf	Low	+	7, 9

Sl. No.	Name of plant and plant products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
118.		Fall army worm	*Spodoptera frugiperda* J.E. Smith	Lepidoptera	Noctuidae	Leaf, shoot	High	++	18
119.		Khapra beetle	*Trogoderma granarium* Everts	Coleoptera	Dermestidae	Grain	Low	+	3, 20
120.	Sorghum *(Sorghum bicolor)*	Sorghum shoot fly	*Atherigona soccata* Rondani	Diptera	Muscidae	Tiller	High	++	*13*
121.		Stem borer	*Chilo partellus* (Swinhoe)	Lepidoptera	Pyralidae	Stem, cob, ear	Medium	++	16
122.		Rice meal moth	*Corcyra cephalonica* (Stainton)	Lepiodoptera	Pyralidae	Rice, paddy	High	+++	3, 20
123.		Asian corn borer	*Ostrinia furnacalis* (Gunee)	Lepidoptera	Crambidae	Leaf, stalk, ear	High	+++	9
124.		Pink borer	*Sesamia inferens* (Walker)	Lepidoptera	Noctuidae	Tiller	Low	+	20
125.		Rice weevil	*Sitophilus oryzae* (Linneaus)	Coleoptera	Curculionidae	Grain	High	+++	3, 20
126.		Angoumois grain moth	*Sitotroga cerealella* (Olivier)	Lepiodoptera	Gelechidae	Rice, paddy	High	+++	3, 20
127.		Khapra beetle	*Trogoderma granarium* Everts	Coleoptera	Dermestidae	Grain	Low	+	3, 20
128.	Millets *(Setaria italica)*	Sorghum shoot fly	*Atherigona soccata* Rondani	Diptera	Muscidae	Tiller	High	++	13
129.		Rice meal moth	*Corcyra cephalonica* (Stainton)	Lepiodoptera	Pyralidae	Rice, paddy	High	+++	3, 20
131.		Asian corn borer	*Ostrinia furnacalis* (Gunee)	Lepidoptera	Pyralidae	Leaf, stalk, ear	High	+++	3, 20
132.		Rice weevil	*Sitophilus oryzae* (Linneaus)	Coleoptera	Curculionidae	Grain	High	+++	3, 20
133.		Angoumois grain moth	*Sitotroga cerealella* (Olivier)	Lepiodoptera	Gelechidae	Rice, paddy	High	+++	3, 20
134.		Khapra beetle	*Trogoderma granarium* Everts	Coleoptera	Dermestidae	Grain	Low	+	3, 20

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2.2 Recording Insect and Mite Pests of Pulse Crops

On the basis of information from different authentic sources insect and mite pests of pulse crops in Bangladesh are grouped as lentil, chickpea, mungbean, grasspea, cowpea, blackgram, pigeon pea and field pea pests. Altogether 83 insect and mite pests of pulse crops are listed in Table 2 of which 8, 14, 19, 7, 11, 14, 6 and 4 pests were recorded on lentil, chickpea, mungbean, grasspea, cowpea, blackgram, pigeon pea and field pea respectively. In lentil, status of 4 pests was in the range of medium to high with common to wide distribution in the country. Similarly, for chickpea, mungbean, grasspea, cowpea, blackgram, pigeon pea and field pea number of pests with medium to high status and common to wide distribution were 3, 12, 3, 4, 9, 4 and 3 respectively (Table 2). Plant parts affected include seedling, leaf, stem, twig, inflorescence, bud, flower, pod and seed.

Table 2. Insect and Mite Pests of Pulse Crops

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
01.	Lentil (*Lens calinaris*)	Aphid	*Aphis craccivora* Koch	Homoptera	Aphididae	Twig, flower,pod	High	+++	10
02.		Whitefly	*Bemisia tabaci* (Gennadius)	Homoptera	Aleyrodidae	Twig, flower, pod	Low	+	10
03.		Chinese bruchid	*Callosobruchus chinensis* Linnaeus	Coleoptera	Bruchidae	Seed	High	+++	10
04.		Cowpea bruchid	*Callosobruchus maculatus* Fabricius	Coleoptera	Bruchidae	Seed	High	+++	10

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
05.		Pod borer	*Helicoverpa armigera (*Hübner)	Lepidoptera	Noctuidae	Pod, seed	Medium	++	10
06.		Thrips	*Megalurothrips distalis* (Karny)	Thysanoptera	Thripidae	Leaf, bud, flower	Low	+	10
07.		Green stink bug	*Nezara viridula* Linneaus	Hemiptera	Pentatomidae	Leaf, shoot, pod	Low	+	10
08.		Red flour beetle	*Tribolium castaneum* (Herbst)	Coleoptera	Tenebrionidae	Seed	Low	+	10
09.	Chickpea (*Cicer arietinum*)	Black cut worm	*Agrotis ipsilon* (Hufnagel)	Lepidoptera	Noctuidae	Seedling	Low	+	2, 10
10.		Aphid	*Aphis craccivora* Koch	Homoptera	Aphididae	twig, flower, pod	Low	+	2
11.		Whitefly	*Bemisia tabaci* (Gennadius)	Homoptera	Aleyrodidae	twig, flower, pod	Low	+	2
12.		Chinese bruchid	*Callosobruchus chinensis* Linnaeus	Coleoptera	Bruchidae	Seed	High	+++	2, 10
13.		Cowpea weevil	*Callosobruchus maculatus* Fabricius	Coleoptera	Bruchidae	Seed	High	+++	2, 10
14.		Rice meal moth	*Corcyra cephalonica* (Stainton)	Lepidoptera	Pyralidae	Seed	Low	+	4, 5
15.		Gram blue butterfly	*Euchrysops cnejus* (Fabricius)	Lepidoptera	Lycaenidae	Twig, flower, pod	Low	+	6, 10, 11
16.		Pod borer	*Helicoverpa armigera (*Hübner)	Lepidoptera	Noctuidae	Pod, seed	High	+++	2, 6, 10, 11, 12
17.		Bean pod borer	*Maruca testulalis* Geyer	Lepidoptera	Crambidae	Flower, pod, seed	Low	+	6, 10, 11
18.		Green stink bug	*Nezara viridula* Linn.	Hemiptera	Pentatomidae	Shoot, pod	Low	+	10
19.		Green semilooper	*Plusia signata* Fabricius	Lepidoptera	Noctuidae	Foliage, pod	Low	+	2
20.		Lesser grain borer	*Rhyzopertha dominica* (Fabricius)	Coleoptera	Bostrichidae	Seed	Low	+	5
21.		Rice weevil	*Sitophilus oryzae* (Linnaeus)	Coleoptera	Curculionidae	Seed	Low	+	4, 5

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
22.		Common cutworm	*Spodoptera liturua* (Fabricius)	Lepidoptera	Noctuidae	Seedling	Low	+	10
23.	Mungbean (*Vigna radiata*)	Aphid	*Aphis craccivora* Koch	Homoptera	Aphididae	Foliage, transmit virus disease	High	+++	1, 10, 12
24.		Whitefly	*Bemisia tabaci* (Gennadius)	Homoptera	Aleyrodidae	Twig, flower, pod	High	+++	1, 10, 12
25.		Chinese bruchid	*Callosobruchus chinensis* Linnaeus	Coleoptera	Bruchidae	Seed	High	+++	1, 5,10
26.		Cowpea bruchid	*Callosobruchus maculatus* Fabricius	Coleoptera	Bruchidae	Seed	High	+++	1, 5,10
27.		Green jassid	*Empoasca kerri* Pruthi	Homoptera	Jassid	Shoot, pod	Medium	++	10
28.		Gram blue butterfly	*Euchrysops cnejus* (Fabricius)	Lepidoptera	Lycaenidae	Twig, flower, pod	High	+++	1, 10
29.		Pod borer	*Helicoverpa armigera (*Hübner)	Lepidoptera	Noctuidae	Pod, seed	High	+++	1, 10, 14
30.		Bean pod borer	*Maruca testulalis* Geyer	Lepidoptera	Crambidae	Flower, pod, seed	High	+++	1, 10
31.		Thrips	*Megalurothrips distalis* (Karny)	Thysanoptera	Thripidae	Leaf, flower	High	+++	7, 10, 13, 16
32.		Bean flower thrips	*Megalurothrips usitatus* (Bagnall)	Thysanoptera	Thripidae	Leaf, flower	High	+++	1, 10, 13
33.		White spotted leaf beetle	*Monolepta signata* Olivier	Coleoptera	Chrysomelidae	Leaf	Low	+	10
34.		Green stink bug	*Nezara viridula* Linneaus	Hemiptera	Pentatomidae	Shoot, pod	Low	+	10
		Stem fly	*Ophiomyia phaseoli* Tryon	Diptera	Agromyzidae	Seedling, stem	High	+++	1, 10, 12
36.		Crucifer flea beetle	*Phyllotreta cruciferae* (Goeze)	Coleoptera	Chrysomelidae	Leaf	Low	+	10
37.		Stripped flea beetle	*Phyllotreta striolata* Fabricius	Coleoptera	Chrysomelidae	Leaf	Low	+	1, 10,12

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
38.		Lesser grain borer	*Rhyzopertha dominica* (Fabricius)	Coleoptera	Bostrichidae	Seed	Low	+	4, 5
39.		Rice weevil	*Sitophilus oryzae* (Linnaeus)	Coleoptera	Curculionidae	Seed	Low	+	4, 5
40.		Hairy caterpillar	*Spilarctia obliqua (*Walker)	Lepidoptera	Arctiidae	Leaf, shoot, flower	High	+++	1, 10
41.		Melon thrips	*Thrips palmi* Karny	Thysanoptera	Thripidae	Leaf, flower	Low	+	8, 9, 15
42.	Grasspea (*Lathyrus sativus*)	Aphid	*Aphis craccivora* Koch	Homoptera	Aphididae	Twig, flower,pod	High	+++	1, 10
43.		Chinese bruchid	*Callosobruchus chinensis* Linnaeus	Coleoptera	Bruchidae	Seed	High	+++	5, 10
		Cowpea weevil/ Cowpea bruchid	*Callosobruchus maculatus* Fabricius	Coleoptera	Bruchidae	Seed	High	+++	5, 10
		Pod borer	*Helicoverpa armigera (*Hübner)	Lepidoptera:	Noctuidae	Pod, seed	Low	+	10
44.		Bean pod borer	*Maruca testulalis* Geyer	Lepidoptera:	Crambidae	Flower, pod, seed	Low	+	10
45.		Thrips	*Megalurothrips distalis* (Karny)	Thysanoptera	Thripidae	Shoot, flower	Low	+	10
46.		Green stink bug	*Nezara viridula* Linn.	Hemiptera	Pentatomidae	Shoot , pod	Low	+	10
47.	Cowpea (*Vigna unguiculata*)	Aphid	*Aphis craccivora* Koch	Homoptera:	Aphididae	Twig, flower, pod	Low	+	10
48.		Chinese bruchid	*Callosobruchus chinensis* Linnaeus	Coleoptera	Bruchidae	Seed	High	+++	5, 10
49.		Cowpea weevil/ Cowpea bruchid	*Callosobruchus maculatus* Fabricius	Coleoptera	Bruchidae	Grain	High	+++	5, 10
50		Rice meal moth	*Corcyra cephalonica* (Stainton)	Lepidoptera	Pyralidae	Seed	Low	+	5
51.		Green jassid	*Empoasca kerri* Pruthi	Homoptera	Jassid	Shoot, pod	High	+++	10
52.		Galerucid beetle	*Madurasia obscurella* Jacoby	Coleoptera	Chrysomelidae	Leaf	Low	+	10

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
53.		Bean pod borer	*Maruca testulalis* Geyer	Lepidoptera	Crambidae	Flower, pod, seed	High	+++	10
54.		Thrips	*Megalurothrips distalis* (Karny)	Thysanoptera	Thripidae	Leaf, flower	Low	+	10
55.		Green stink bug	*Nezara viridula* Linneaus	Hemiptera	Pentatomidae	Shoot, pod	Low	+	10
56.		Lesser grain borer	*Rhyzopertha dominica* (Fabricius)	Coleoptera	Bostrichidae	Seed	Low	+	5, 10
57.		Rice weevil	*Sitophilus oryzae* (Linnaeus)	Coleoptera	C urculionidae	Seed	Low	+	5, 10
58.	Blackgram (*Vigna mungo*)	Aphid	*Aphis craccivora* Koch	Homoptera:	Aphididae	Twig, flower, pod	High	+++	10
59.		Whtiefly	*Bemisia tabaci* (Gennadius)	Homoptera	Aleyrodidae	Leaf, transmit virus disease	High	+++	10
60.		Chinese bruchid	*Callosobruchus chinensis* Linnaeus	Coleoptera	Bruchidae	Seed	High	+++	5, 10
		Cowpea weevil/ Cowpea bruchid	*Callosobruchus maculatus* Fabricius	Coleoptera	Bruchidae	Grain	High	+++	5, 10
61.		Hairy caterpillar	*Diacrisia obliqua* (Walker)	Lepidoptrea	Arctiidae	Leaf	High	+++	10
62.		Green jassid	*Empoasca kerri* Pruthi	Homoptera	Jassidae	Leaf	Low	+	10
63.		Gram blue butterfly	*Euchrysops cnejus* (Fabricius)	Lepidoptera	Lycaenidae	Pod, seed	Low	+	10
64.		Pod borer	*Helicoverpa armigera (*Hübner)	Lepidoptera	Noctuidae	Pod, seed	Low	+	3
65.		Galeruchid beetle	*Madurasia obscurella* Jacoby	Coleoptera	Chrysomelidae	Leaf	Low	+	10
.66.		Bean pod borer	*Maruca testulalis* Geyer	Lepidoptera	Crambidae	Pod, seed	High	+++	10
67.		Monolepta beetle	*Monolepta signata* Olivier	Coleoptera	Chrysomelidae	Leaf	Low	+	10
68.		Bean stem fly	*Ophiomyia phaseoli* Tryon	Diptera	Agromygidae	Seedling stem	High	+++	3
69.		Crucifer flea beetle	*Phyllotreta cruciferae* (Goeze)	Colepotera	Chrysomelidae	Leaf	High	+++	10

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
70.		Stripped flea beetle	*Phyllotreta striolata* Fabricius	Colepotera	Chrysomelidae	Leaf	High	+++	10
72.	Pigeon pea (*Cajanus cajan*)	Chinese bruchid	*Callosobruchus chinensis* Linnaeus	Coleoptera	Bruchidae	Seed	High	+++	4, 5, 10
73.		Cowpea weevil/ Cowpea bruchid	*Callosobruchus maculatus* Fabricius	Coleoptera	Bruchidae	Grain	High	+++	4, 5, 10
74.		Pod borer	*Euchrysops cnejus* (Fabricius)	Lepidoptera	Lycaenidae	Pod, seed	Low	+	10
75.		Pod borer	*Helicoverpa armigera (*Hübner)	Lepidoptera	Noctuidae	Pod, seed	Low	+	10
76.		Pod borer	*Maruca testulalis* Geyer	Lepidoptera	Crambidae	Pod, seed	High	+++	10
77.		Thrips	*Megalurothrips distalis* (Karny)	Thysanoptera	Thripidae	Leaf, flower	High	+++	10
78.	Field pea (*Pisum sativum*)	Aphid	*Aphis craccivora* Koch	Homoptera:	Aphididae	Twig, flower, pod	High	+++	10
79.		Chinese bruchid	*Callosobruchus chinensis* Linnaeus	Coleoptera	Bruchidae	Seed	High	+++	4, 5, 10
80.		Cowpea weevil/ Cowpea bruchid	*Callosobruchus maculatus* Fabricius	Coleoptera	Bruchidae	Grain	High	+++	4, 5, 10
81.		Pod borer	*Maruca testulalis* Geyer	Lepidoptera	Crambidae	Pod, seed	Low	+	10

2.2.1 References

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2.3 Recording Insect and Mite Pests of Oilseed Crops

Insect and mite pests of 9 different oil seed crops such as mustard, groundnut, sesame, linseed, sunflower, safflower, soybean, niger and castor are included under the pests of oilseed crops. Altogether 125 insect and mite pests of oil seed are listed in Table 3 of which 8, 45, 9, 7, 8, 4, 37, 4 and 3 pests were recorded on mustard, groundnut, sesame, linseed, sunflower, safflower, soybean, niger and castor respectively. In mustard, status of 2 insect pests was in the range of medium to high with common to wide distribution with common to wide distribution in the country. Similarly, for groundnut, sesame, linseed, sunflower and soybean number of pests with medium to high status and common to wide distribution were 12, 3, 1, 4 and 6 respectively (Table 3). None of the pest was recorded as medium to high status and common to wide distribution for safflower, niger and castor. Plant parts affected include seedling, leaf, stem, twig, bud, flower, inflorescence, pod and seed.

Table 3. Insect and Mite Pests of Oilseed Crops

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
01.	Mustard (*Brassica spp.)*	Cutworm	*Agrotis ipsilon* (Hufnagel)	Lepdioptera	Noctuidae	Seedling	Low	+	5, 6, 7
02.		Mustard sawfly	*Athalia proxima* (Klug)	Hymenoptera	Tenthredinidae	Leaf	Low	+	5, 7, 35
03.		Leaf eating caterpillar	*Crocidolomia binotalis* Zeller	Lepidoptera	Pyralidae	Leaf	Low	+	5
04.		Mustard butterfly	*Delias eucharis* (Drury)	Lepdioptera	Pieridae	Leaf	Low	+	5
05.		Mustard aphid	*Lipaphis erysimi* Kaltenbach	Homoptea	Aphidae	Leaf, inflorescence, flower, pod	High	+++	5, 7, 35
06.		Green peach aphid	*Myzus persicae* (Sulzer)	Homoptea	Aphidae	Leaf, inflorescence, flower, pod	Low	+	6, 16
07.		Flea beetle	*Phyllotreta cruciferae* (Goeze)	Coleoptera	Chrysomelidae	Leaf	Low	+	5, 7
08.		Aphid	*Siphocoryne indobrassicae* Das	Homoptea	Aphidae	Leaf, inflorescence, flower, pod	High	+++	5, 7, 35
09.	Groundnut (*Arachis*	Cutworm	*Agrotis ipsilon* (Hufnagel)	Lepidoptera	Noctuidae	Seedling	Low	+	5, 7, 12, 14, 26

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
10.	*hypogaea)*	Leaf roller	*Anarsia ephippias* Meyrick	Lepidoptera	Noctuidae	Leaf	High	+++	2, 6, 10, 12, 13, 18, 27, 28, 35
11.		Aphid	*Aphis craccivora* Koch	Homoptera	Aphididae	Leaf, inflorescence, flower	High	+++	2, 5, 6, 10, 12, 13, 18, 22, 27
12.		Groundnut leaf miner/ Shoot miner	*Aproaerema nerteria* Meyrick	Lepidoptera	Gelechiidae	Leaf	High	+++	12
13.		Groundnut leaf miner/ Shoot miner	*Aproarema modicella* Deventer	Lepidoptera	Gelechiidae	Leaf	High	+++	2, 10, 12, 18, 27, 35
14.		Green grasshopper	*Atractomorpha crenulata* Fabricius	Orthoptera	Acrididae	Leaf	Low	+	6, 12
15.		Ant	*Camponotus* spp.	Hymenoptera	Formicidae	Root, stem	Low	+	12
16.		Dried fruit beetle	*Carpophilus hemipterus* (Linneaus)	Coleoptera	Nitidulidae	Seed	Low	+	15
17.		White leaf hopper	*Cofana spectra* (Distant)	Homoptera	Cicadellidae	Leaf, shoot	Low	+	12, 14
18.		Rice moth	*Corcyra cephalonica* (Stainton)	Lepidoptera	Crambidae	Seed	High	+++	14
19.		Flat grain beetle	*Cryptolestes pusillus* (Schoenherr)	Coleoptera	Laemophloeidae	Seed	Low	+	24
20.		Black weevil	*Cyrtozemia cognata* Marshall	Coleoptera	Curculionidae	Leaf	Low	+	12, 14
21.		Pod sucking bug	*Elasmolemus sordidus* (Fabricius)	Hemiptera	Lygaeidae	Seed	High	+++	10, 13, 18, 27
22.		Jassid	*Empoasca kerri* Purthi	Homoptera	Cicadellidae	Leaf, shoot	Low	+	23
23.		Jassid	*Empoasca terminalis* Distant	Homoptera	Cicadellidae	Leaf, shoot	Low	+	12, 27

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
24.		Almond moth	*Ephestia cautella* (Walker)	Lepidoptera	Crambidae	Seed	Low	+	36
25.		Ear wig	*Euborellia stali* (Dohrn)	Dermaptera	Forficulidae	Root, stem pod	Low	+	12, 14
26.		Cotton thrips	*Frankliniella schultzei* (Trybom)	Thysanoptera	Thripidae	Flower, leaf bud	Low	+	10, 12, 31
27.		Pod borer	*Helicoverpa armigera* (Hübner)	Lepidoptera	Noctuidae	Stem, pod	Low	+	12, 14, 18
28.		White grub	*Holotrichia serrata* (Fabricius)	Coleoptera	Scarabaeidae	Root	Low	+	10, 14, 18, 22, 27
29.		Cigarette beetle	*Lasioderma serricorne* (Fabricius)	Coleoptera	Anobiidae	Seed	Low	+	4
30.		Longheaded flour beetle	*Latheticus oryzae* Waterhouse	Coleoptera	Tenebrionidae	Seed	Low	+	6
31.		Flower thrips	*Megalurothrips distalis (*Karny)	Thysanoptera	Thripidae	Flower	Low	+	12, 14
32.		Termite	*Microtermes obesi* Holmgren	Isoptera	Termitidae	Root, pod	Low	+	12, 27
33.		Leaf beetle	*Monolepta signata* Olivier	Coleoptera	Chrysomelidae	Leaf	Low	+	12, 14
34.		Green stink bug	*Nezara viridula* Linnaeus	Hemiptera	Pentatomidae	Leaf, shoot	Low	+	6, 12, 33
35.		Termite	*Odontotermes obesus* (Rambur)	Isoptera	Termitidae	Root, pod	Low	+	12, 14
36.		Saw-toothed grain beetle	*Oryzaephilus surinamensis* (Linnaeus)	Coleoptera	Silvanidae	Seed	High	+++	12
37.		Hairy caterpillar	*Pericallia ricini* Fabricius	Lepidoptera	Lymentridae	Leaf	Low	+	12, 14
38.		Chili thrips	*Scirtothrips dorsalis* Hood	Thysanoptera	Thripidae	Leaf	Low	+	12, 16, 19

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
39.		Groundnut moth	*Scopula emissaria* (Walker)	Lepidoptera	Geometridae	Leaf	Low	+	10, 12, 18, 35
40.		Rice weevil	*Sitophilus oryzae* (Linnaeus)	Coleoptera:	Curculionidae	Seed	Low	+	14, 30
41.		Stem borer	*Sphenoptera perotetti* Guenee	Coleoptera	Buprestidae	Stem	Low	+	12
42.		Common hairy caterpillar	*Spilarctia obliqua* (Walker)	Lepidoptera	Arctiidae	Leaf	High	+++	5, 10, 12, 28
43.		Hairy caterpillar	*Spilosoma nydia* Butler	Lepidoptera	Arctiidae	Leaf	Low	+	5, 10, 12, 18, 35
44.		Defoliator	*Spodoptera exigua* (Hübner)	Lepidoptera	Noctuidae	Leaf	Low	+	6, 12, 14
45.		Defoliator	*Spodoptera exigua* (Hübner)	Lepidoptera:	Noctuidae	Leaf	High	+++	6, 12, 14
46.		Common cutworm	*Spodoptera litura* Fabricius	Lepidoptera	Noctuidae	Seedling	High	+++	2, 10, 12, 18, 26
47.		Drugstore beetle	*Stegobium paniceum* (Linnaeus)	Coleoptera	Anobiidae	Seed	Low	+	34
48.		Groundnut leaf miner/Shoot miner	*Stomopteryx nerteria* Meyrick	Lepidoptera	Gelechiidae	Leaf	High	+++	12
49.		Two spotted spider mite	*Tetranychus urticae* Koch	Acarina	Tetranychidae	Leaf	Low	+	25
50.		Semilooper	*Thysanoplusia* (*Plusia*) *orichalcea* (Fabricius)	Lepidoptera	Noctuidae	Leaf	Low	+	6, 12, 18, 27, 35
51.		Red flour beetle	*Tribolium castaneum* (Herbst)	Coleoptera	Tenebrionidae	Seed	High	+++	14, 32
52.		Confused flour beetle	*Tribolium confusum* Jacquelin du Val	Coleoptera	Tenebrionidae	Seed	Low	+	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
53.		Khapra beetle	*Trogoderma granarium* Everts	Coleoptera	Dermestidae	Seed	Low	+	4, 8, 19
54.	Sesame (*Sesamum indicum*)	Til Hawk moth	*Acherontia styx* (Westwood)	Lepidoptera	Sphingidae	Leaf	High	+++	5
55.		Til Hawk moth	*Ambulyx substrigillis* Westwood	Lepidoptera	Sphingidae	Leaf	Low	+	5
56.		Leaf roller	*Antigastra catalaunalis* (Duponchel)	Lepidoptera	Pyralidae	Leaf, pod	High	+++	5
57.		Pod bug	*Eusarcocoris ventralis* Walker	Hemiptera	Pentatomidae	Leaf	Low	+	5
58.		Stink bug	*Nezara viridula* (Linneaus)	Hemiptera	Pentatomidae	Leaf	Low	+	5
59.		Hairy caterpillar	*Pericallia ricini* Fabricius	Lepidoptera	Lymentridae	Leaf	Low	+	5
60.		Green semi-looper	*Plusia signata* (Fabricius)	Lepidoptera	Noctuidae	Leaf	Low	+	6
61.		Hairy caterpillar	*Spilarctia obliqua* (Walker)	Lepidoptera	Arctiidae	Leaf	High	+++	5
62.		Defoliator	*Spodoptera exigua* (Hübner)	Lepidoptera	Noctuidae	Leaf	Low	+	5
63.	Linseed (*Linum usitatissimum*)	Cutworm	*Agrotis ipsilon (*Hufnagel)	Lepidoptera	Noctuidae	Seedling	Low	+	5
64.		Whitefly	*Bemisia tabaci* (Gennadius)	Homoptera	Aleyrodidae	Leaf	Low	+	5
65.		Line seed gall midge	*Dasyneura lini* Barnes	Diptera	Cecidomyiidae	Shoot gall	Low	+	5
66.		Pod borer	*Helicoverpa armigera* (Hübner)	Lepidoptera	Noctuidae	Pod	Low	+	5
66.		Hairy caterpillar	*Spilarctia obliqua* (Walker)	Lepidoptera	Arctiidae	Leaf	Low	+	5

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
67.		Leaf eating caterpillar	*Spodoptera exigua* Hubner	Lepidoptera	Noctuidae	Leaf	Low	+	5
68.		Tobacco caterpillar	*Spodoptera litura* Fabricius	Lepidoptera	Noctuidae	Seedling	High	+++	5
69.	Sunflower (*Helianthus annuus)*	Cutworm	*Agrotis* spp.	Lepidoptera	Noctuidae	Seedling	Medium	++	5
70.		Leaf hopper	*Amrasca bigutulla* (Ishida)	Homoptera	Cicadellidae	Leaf	Low	+	5
71.		Aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	Leaf, shoot,head	Low	+	5
72.		Whitefly	*Bemisia tabaci* (Gennadius)	Homoptera	Aleyrodidae	Leaf	Low	+	5
73.		Head borer	*Helicoverpa armigera* (Hübner)	Lepidoptera	Noctuidae	Head	Medium	++	5
74.		Hairy caterpillar	*Spilarctia obliqua* (Walker)	Lepidoptera	Arctiidae	Leaf	Medium	++	5, 35
75.		Tobacco caterpillar	*Spodotera litura (*Fabricius)	Lepidoptera	Noctuidae	Leaf	High	+++	20
76.		Onion thrips	*Thrips tabaci* Lindeman	Thysanoptera	Thripidae	Leaf	Low	+	5
77.	Safflower (*Carthamus tinctorius*)	Safflower fly	*Acanthiophillus helianthi* Rossi	Diptera	Tephritidae	Pod, flower	Low	+	5
78.		Aphid	*Aphis craccivora* Koch	Homoptera	Aphididae	Leaf, stem, flower, pod	Low	+	5, 35
79.		Safflower pod caterpillar	*Helicoverpa armigera* (Hübner)	Lepidoptera	Noctuidae	Pod	Low	+	5
80.		Safflower stem fly	*Melanagromyza obtusa* (Malloch)	Diptera	Agromyzidae	Stem	Low	+	5
81.	Soybean (*Glycine max*)	Black cutworm	*Agrotis ipsilon* (Hufnagel)	Lepidoptera	Noctuidae	Seedling	Low	+	12
82.		Jassid	*Amrasca biguttula biguttula* (Ishida)	Homoptera	Jassidae	Leaf, shoot	Low	+	11, 29

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
83.		Hairy caterpillar	*Anarsia ephippias* (Mullar)	Lepidoptera	Arctiidae	Leaf	Low	+	11
84.		Leaf hopper	*Aphannus sordidus* Fabricius	Homoptera	Jassidae	Leaf, shoot	Low	+	11
85.		Aphid	*Aphis craccivora* (Koch)	Homoptera	Aphididae	Leaf, shoot, flower, pod	Low	+	11, 29
86.		Green grasshopper	*Attractomorpha crenulata* Fabricius	Orthoptera	Acrididae	Leaf	Low	+	11, 29
87.		White fly	*Bemisia tabaci* (Gennadius)	Homoptera	Aleyrodidae	Leaf	High	+++	11, 29
88.		Weevil	*Chaetocnema* sp.	Coleoptera	Culculionidae	Leaf	Low	+	11
89.		Stink bug	*Chrysocoris stolli* Fabricius	Hemiptera	Pentatomidae	Leaf, shoot	Low	+	11
90.		Stink bug	*Coptosoma cribrarium* Fabricius	Hemiptera	Plataspidae	Leaf, shoot	Low	+	5, 11
91.		Black weevil	*Cyrtozemia cognate* Marsall	Coleoptera	Culculionidae	Leaf	Low	+	11
92.		Green stink bug	*Dolycoris indicus* Stal	Hemiptera	Pentatomidae	Leaf, shoot	Low	+	11
93.		Red cotton bug	*Dysdercus cingulatus* Fabricius	Hemiptera	Pyrrhocoridae	Flower, pod	Low	+	11
94.		Jassid	*Empoasca* sp.	Homoptera	Jassidae	Leaf, shoot	Low	+	11
95.		Epilachna beetle	*Epilachna dodecastigma (Wied*)	Coleoptera	Cocconellidae	Leaf	Low	+	5, 11, 29
96.		Pod bug	*Eusarcocoris* sp.	Hemiptera	Pentatomidae	Leaf, shoot	Low	+	11
97.		Thrips	*Frankliniella schultzei* (Trybom)	Thysanoptera	Thripidae	Leaf, flower	Low	+	11, 29
98.		Pod borer	*Helicoverpa armigera* (Hubner)	Lepidoptera	Noctuidae	Pod	High	+++	11, 29

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
99.		Leaf roller	*Lamprosema indicata* Fabricius	Lepidoptera	Pyralidae	Leaf	High	+++	5, 11, 29
100.		Coreid bug	*Leptocorisa* spp.	Hemiptera	Coreidae	Leaf, shoot	Low	+	11
101.		Shoot fly	*Melanagromyza obtusa* (Malloch)	Diptera	Agromyzidae	Shoot	Low	+	11
102.		Leaf beetle	*Monolepta signata* Olivier	Coleoptera	Chysomelidae	Leaf	Low	+	11, 29
103.		Grey weevil	*Myllocerus discolor* Bohemann	Coleoptera	Culculionidae	Leaf	Low	+	11, 29
104.		Green stink bug	*Nezara viridula* Linneaus	Hemiptera	Pentatomidae	Leaf, shoot	Low	+	11, 29
105.		Girdle beetle	*Oberia brevis* Swed	Coleoptera	Chysomelidae	Leaf	Low	+	11
106.		Stem fly	*Ophiomyia phaseoli* (Tryon)	Diptera	Agromyzidae	Stem	High	+++	5, 11, 29
107.		Leaf beetle	*Oulema* sp.	Coleoptera	Chysomelidae	Leaf	Low	+	11
108.		Longhorn grass hopper	*Phaneroptera gracilli* Burmeister	Orthoptera	Tettigoniidae	Leaf eater	Low	+	11, 29
109.		Semilooper	*Plusia orichalcea* (Fabricius)	Lepidoptera	Noctuidae	Leaf	Low	+	11, 29
110.		Mealy bug	*Pseudococcus corymbatlus* Green	Homoptera	Coccidae	Leaf, shoot, stem, pod	Low	+	11, 29
111.		Mealy bug	*Pseudococcus filamentosus* (Cockerell)	Homoptera	Pseudococcidae	Leaf, shoot, stem, pod	Low	+	11, 29
112.		Coreid bug	*Riptortus pedestris* Fabricius	Hemiptera	Coreidae	Leaf, shoot	Low	+	11
113.		Hairy caterpillar	*Spilarctia obliqua* (Walker)	Lepidoptera	Arctiidae	Leaf	High	+++	11, 29, 35
114.		Common cutworm	*Spodoptera exigua* Fabricius	Lepidoptera	Noctuidae	Leaf	Low	+	11

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
115.		Common cutworm	*Spodoptera litura* Fabricius	Lepidoptera	Noctuidae	Leaf	High	+++	11, 29
116.		Leaf miner	*Stomopteryx* spp.	Lepidoptera	Gelechiidae	Leaf	Low	+	11, 29
117.		Weevil	*Tenymecus indicus* Faust	Coleoptera	Culculionidae	Leaf	Low	+	11
118.	Niger (*Guizotia abyssinica*)	Niger black aphid	*Dactynotus earthami* (Das)	Homoptera	Aphididae	Leaf, pod	Low	+	5, 35
119.		Niger weevil	*Lixus brachyrrhinus* Bohemann	Coleoptera	Curculionidae	Stem, pod	Low	+	5
120.		Niger semilooper	*Plusia orichlcea* Fabricius	Lepidoptera	Noctuidae	Leaf, shoot	Low	+	5
121.		Leaf eating caterpillar	*Prospalta capensis* (Guenee)	Lepidoptera	Noctuidae	Leaf	Low	+	5
122.	Castor *(Ricinus communis)*	Castor butterfly	*Ergolis ariadne* Johnson	Lepidoptera	Nymphalidae	Leaf	Low	+	5, 9, 35
123.		Castor semilooper	*Ophiusa melicerta* (Drury)	Lepidoptera	Noctuidae	Leaf	Low	+	4, 35
124.		Castor hairy caterpillar	*Pericallia recini* Fabricius	Lepidoptera:	Arctiidae	Leaf	Low	+	5, 35

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2.4 Recording Insect and Mite Pests of Fibre Crops

Insect and mite pests of 6 different fiber crops such as jute, kenaf, mesta, cotton, silk cotton and Burma shimul are included under the pests of fiber crops. Altogether 76 insect and mite pests of oil seed are listed in Table 4 of which 19, 4, 4, 31, 13 and 5 pests were recorded on jute, kenaf, mesta, cotton, silk cotton and Burma shimul respectively. In jute, status of 5 pests was in the range of medium to high with common to wide distribution with common to wide distribution in the country. Similarly, for kenaf, mesta, cotton, silk cotton and Burma shimul number of pests with medium to high status and common to wide distribution were 2, 2, 13, 8 and 1 respectively (Table 4). Plant parts affected include seedling, leaf, stem, twig, bud, flower, inflorescence, boll and seed.

Table 4. Insect and Mite Pests of Fibre Crops

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
01.	Jute (*Chorchorus* spp.)	Jute semilooper	*Anomis sabulifera* Guenee	Lepidoptera	Noctuidae	Leaf	Medium	++	2, 5, 8, 10
02.		Jute aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	Leaf, stem, flower	Low	+	2, 5, 8
03.		Jute stem weevil	*Apion corchori* Marshall	Coleoptera	Curculeonidae	Stem	Medium	+++	2, 5, 8, 10
04.		Field cricket	*Brachytrypes portenosus* Lichtenstein	Orthoptera	Gryllidae	Seedling	Low	+	2, 5, 8, 10
05.		Pod borer	*Earias cupreoviridis* Walker	Lepidoptera	Nolidae	Pod	Low	+	2, 5, 8
06.		Mealybug	*Ferisia pseudococcus* (Signoret)	Homoptera	Pseudococcidae	Leaf, petiole, stem	Low	+	2, 5, 8
07.		Leaf beetle	*Luperomorpha vittata* Duvivier	Coleoptera	Chrysomelidae	Leaf	Low	+	2, 5, 8
08.		Termite	*Microtermes obesi* Holmgren	Isoptera	Termitidae	Fiber in storage	Low	+	2, 5, 8
09.		Jute stem girdler	*Nupsera bicolor* (Dutta)	Coleoptera	Cerambycidae	Stem	Low	+	2, 5, 8
10.		Termite	*Odontotermes obesus* (Rambur)	Isoptera	Termitidae	Fiber in storage	Low	+	2, 5, 8

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
11.		Hooded hopper	*Otinotus elongates* Distant	Homoptera	Membracidae	Stem	Low	+	2, 5
12.		Black hairy caterpillar	*Pericallia ricini* Fabricius	Lepidoptera	Erebidae	Leaf	Low	+	2, 5, 8
13.		Jute yellow mite	*Pollyphagotarsonemus latus* Banks	Acarina	Tarsonemidae	Leaf	High	+++	2, 5, 8,
14.		Jute stick insect	*Scopula emmissaria* Walker	Lepidoptera	Pyralidae	Leaf	Low	+	2, 5, 8, 10
15.		Jute hairy caterpillar	*Spilosoma obliqua* Walker	Lepidoptera	Arctiidae	Leaf	High	+++	2, 5, 8, 10
16.		Indigo caterpillar	*Spodoptera exigua* (Hübner)	Lepidoptera	Noctuidae	Leaf	Low	+	2, 5, 8, 10
17.		Cutworm	*Spodoptera litura* (Fabricius)	Lepidoptera	Noctuidae	Seedling	High	+++	1, 2, 5, 8, 10
18.		Jute red mite	*Tetranychus bioculatus* (Wood-Mason)	Acarina	Tetranychidae	Leaf	Low	+	2, 5, 8
19.		Leaf miner	*Trachys pacifica* Kerr	Coleoptera	Buprestidae	Leaf	Low	+	2, 5, 8,10
20.	Kenaf (*Hibiscus cannabinus*)	Spiral borer	*Agrilus acutus* Thumb	Coleoptera	Buprestidae	Stem	High	+++	8
21.		Kenaf beetle	*Nisotra orbiculata* (Motsch)	Coleoptera	Curculionidae	Leaf	Low	+	8
22.		Mealy bug	*Pseudococcus virgatus* Cockrell	Hemiptera	Coccidae	Leaf, stem, flower, fruit	High	+++	2, 5, 8
23.		Mexican bean Weevil	*Zabrotes subfasciatus* (Boheman)	Coleoptera	Bruchidae	Leaf	Low	+	2, 5, 8
24.	Mesta (*Hibiscus sabdariffa*)	Spiral borer	*Agrilus acutus* Thumb	Coleoptera	Buprestidae	Stem	High	+++	2, 5, 8
25.		Kenaf beetle	*Nisotra orbiculata* (Motsch)	Coleoptera	Curculionidae	Leaf	Low	+	2, 5, 8
26.		Mealy bug	*Pseudococcus virgatus* Cockrell	Hemiptera	Coccidae	Leaf, stem, flower, fruit	High	+++	2, 5, 8

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
27.		Mexican bean Weevil	*Zabrotes subfasciatus* (Boheman)	Coleopter	Bruchidae	Leaf	Low	+	2, 5, 8
28.	Cotton (*Gossypium spp.*)	Black cutworm	*Agrotis ipsilon* (Hufnagel)	Lepidoptera	Pyralidae	Seedling	Low	+	2, 6
29.		Spiraling whitefly	*Aleurodicus dispersus Russell*	Homoptera	Aleyroridae	Leaf	Low	+	10
30.		Indian cotton jassid	*Amrasca biguttula biguttula* Ishida	Homoptera	Cicadellidae	Foliage, virus vector	High	+++	2, 10
31.		Green semilooper	*Anomis flava* (Fabricius)	Lepidoptera	Noctuidae	Leaf, shoot, flower, boll	Low	+	2
32.		Cotton aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	Leaf, shoot, flower, boll	High	+++	2, 10
33.		Cotton whitefly	*Bemisia tabaci* (Gennadius)	Homoptera	Aleyroridae	Foliage, virus vector	High	+++	2, 10
34.		Field cricket	*Brachytrupes portentosus* (Lichtenstein)	Orthoptera	Gryllidae	Seedling	Low	+	1, 2
35.		Black ant	*Camponotus compressus* Fabricius	Hymenoptera	Formicidae	Leaf	Low	+	10
36.		Red cotton bug	*Dysdercus cingulatus* (Fabricius)	Hemiptera	Pyrrhocoridae	Boll, lint	Medium	++	1, 2, 10
37.		Spiny bollworm	*Earias insulana (*Boisduval)	Lepidoptera	Noctuidae	Stem, boll	Medium	+++	2, 10
38.		Spotted bollworm	*Earias vittella* (Fabricius)	Lepidoptera	Noctuidae	Stem, boll	Medium	+++	2, 10
39.		Tailed mealybug	*Ferrisiana virgata* (Cockerell)	Homoptera	Pseudococcidae	Leaf, stem, flower, boll	Low	+	2, 3, 10
40.		American bollworm	*Helicoverpa armigera (*Hubner)	Lepidoptera	Noctuidae	Boll	High	+++	2, 7

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
41.		Termite	*Microtermes obesi* Holmgren	Isoptera	Termitidae	Root	Low	+	1
42.		Blister beetle	*Mylabris pustulata* Thunberg	Coleoptera	Meloidae	Flower	Low	+	10
43.		Leaf eating weevil	*Mylloceros discolor* Boheman	Coleoptera	Curculionidae	Leaf	Low	+	2
44.		Green stink bug	*Nezara viridula* (Linnaeus)	Hemiptera	Pentatomidae	Boll	Low	+	1, 2
45.		Termite	*Odontotermes obesus* (Rambur)	Isoptera	Termitidae	Root	Low	+	1, 2
46.		Grasshopper	*Oxya chinensis* (Thunberg)	Orthoptera	Acrididae	Foliage	Low	+	1
47.		Dusky cotton bug/ Cotton seed bug	*Oxycarenus laetus* Kirby	Hemiptera	Oxycarenidae	Seed , lint	Low	+	1, 3 , 10
48.		Pink bollworm	*Pectinophora gossypiella* (Saunders)	Lepidoptera	Gelechidae	Flower, boll	Medium	++	2, 10
49.		Pink mealybug	*Phenacoccus hirsutus Green*	Homoptera	Pseudococcidae	Leaf, stem, flower, boll	Low	+	3, 7, 10
50.		Cotton flea beetle	*Phyllotreta* spp.	Colepoptera	Chrysomelidae	Leaf	Low	+	2
51.		Cotton boll thrips	*Scirtothrips dorsalis* Hood	Thysanoptera	Thripidae	Boll	Low	+	2, 3, 10
52.		Hairy caterpillar	*Spilarctia obliqua* Walker	Lepidoptera	Arctiidae	Leaf	Low	+	2
53.		Armyworm	*Spodoptera litura* (Fabricius)	Lepidoptera	Noctuidae	Leaf	High	+++	2, 3, 10
54.		Leaf roller	*Sylepta derogata* (Fabricius)	Lepidoptera	Crambidae	Leaf	Medium	++	2
55.		Cotton semilooper	*Tarache notabilis* (Walker)	Lepidoptera	Noctuidae	Leaf	Medium	++	2

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
56.		Red spider mite	*Tetranychus urticae* Koch	Acari	Tetranychidae	Leaf	High	+++	2, 9, 10
57.		Onion thrips	*Thrips palmi* Karny	Thysanoptera	Thripidae	Leaf, flower	Low	+	2, 6
58.		Cotton thrips	*Thrips tabaci* Linndeman	Thysanoptera	Thripidae	Leaf, flower	Medium	++	2, 6
59.	Shimul/ Silk cotton *(Bombax ceiba)*	Shoot weevil	*Alcidodes affaber* Aurivillius	Coleoptera	Curculiniodae	Shoot	Low	+	4
60.		Leaf roller	*Archips micaceanus* Walker	Lepidoptera	Tortricidae	Leaf	Medium	++	4
61.		Stem borer	*Batocera rufomaculata* De Geer	Colepoptera	Cerambycidae	Stem	High	+++	4
62.		Nolid moth	*Carea angulata* Fabricius	Lepidoptera	Nolidae	Leaf	Low	+	4
63.		Defoliator	*Donda ornata* Moore	Lepidoptera	Noctuidae	Leaf	Low	+	4
64.		Powder post beetle	*Dinoderus brevis* Horn	Colepoptera	Bostrychidae	Dry wood	Medium	++	4
65.		Bamboo borer	*Dinoderus minutus* Fabricius	Colepoptera	Bostrychidae	Dry wood	Medium	++	4
66.		Red cotton bug	*Dysdercus cingulatus* Fabricius	Hemiptera	Pyrrhocoridae	Leaf, flower, fruit	High	+++	4
67.		Lesser auger beetle	*Heterobostrychus aecualis* Waterhouse	Colepoptera	Bostrychidae	Dry wood	Medium	++	4
68.		Black looper / black inch worm	*Hyposidra talaca* Walker	Lepidoptera	Geometridae	Leaf	Low	+	4
69.		Pinhole borer	*Platypus solidus* Walker	Coleoptera	Platypodidae	Fallen wood	Medium	++	4
70.		Psyllid bug	*Psylla isitis* Buckton	Homoptera	Psyllidae	Leaf	Low	+	4
71.		Bark and Ambrosia Beetle	*Xyleborus interjectus* Blandford	Coleoptera	Scolytidae	Fallen wood	Medium	++	4

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
72.	Burma shimul *(Ceiba pentandra)*	Pod borer	*Araecerus fasciculatus* De Geer	Coleoptera	Anthribidae	Pod, seed	High	+++	4
73.		Stem borer	*Batocera rufomaculata* De Geer	Colepoptera	Cerambycidae	Stem	Low	+	4
74.		Bagworm	*Cryptothelea variegata* Snellen	Lepidoptera	Psychidae	Leaf	Low	+	4
75.		Mealybug	*Planococcus citri* (Risso)	Homoptera	Pseudococcidae	Leaf, bud	Low	+	4
76.		Leaf roller	*Sylepta derogata* Fabricius	Lepidoptera	Pyrallidae	Leaf	Low	+	4

2.4.1 References

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2.5 Recording Insect and Mite Pests of Sugar Crops

Insect and mite pests of 5 different sugar crops such as sugarcane, sugar beet, date palm, palmyra palm and golpata are included under the pests of fiber crops. Altogether 69 insect and mite pests of sugarcrops are listed in Table 5 of which 38, 7, 12, 9 and 3 pests were recorded on sugarcane, sugar beet, date palm, palmyra palm and golpata respectively. In sugarcane, status of 15 pests was in the range of medium to high with common to wide distribution in the country. Similarly, for sugar beet, date palm, palmyra palm and golpata number of pests with medium to high status and common to wide distribution were 4, 4, 2 and 1 respectively (Table 5). Plant parts affected include seedling, leaf, stem, twig, stem, crown, inflorescence and root.

Table 5. Insect and Mite Pests of Sugar Crops

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
01.	Sugarcane (*Saccharum officinarum*)	Shield bug	*Agonoscelis nubila* (Fabricius)	Hemiptrera	Pentatomidae	Leaf	Low	+	6
03.		White fly	*Aleurolobus barodensis* (Maskell)	Homoptera	Aleurodidae	Leaf	Low	+	5, 6
04.		Black beetle	*Allisonotum impressicolle* Arrow	Coleoptera	Scarabaeidae	Seedling	Medium	+	5, 6
05.		White grub	*Anomala* sp.	Coleoptera	Scarabaeidae	Root	Medium	+	1, 5, 6
06.		Grass hopper	*Aularches miliaris* Linneaus	Orhtoptera	Acrididae	Leaf	Medium	++	6
07.		Thrips	*Baliothrips* serrate (Kabus)	Thysanoptera	Thripidae	Leaf	Low	+	5, 6
08.		White grub	*Brahmina* sp.	Coleoptera	Scarabaeidae	Root	Medium	+	5, 6
09.		Woolly aphis	*Ceratovacuna lanigera* (Zehntner)	Homoptera	Aphididae	Leaf	Medium	++	5, 6, 9

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
10.		Internode borer	*Chilo auricilius* Dudgeon	Lepidoptera	Crambidae	Stem	Low	+	5, 6, 9
11.		Early shoot borer	*Chilo infuscatellus* Snellen	Lepidoptera	Crambidae	Stem	High	+++	5, 6, 9
12.		Stem borer	*Chilo tumidicostalis* Hampson	Lepidoptera	Crambidae	Stem	High	+++	1, 5, 6, 9
13.		Spittle bug	*Clovia* sp.	Homoptera	Aphrophoridae	Leaf	Low	+	6
14.		Hispa	*Dorcathispa cuspidata* Maulik	Coleoptera	Chrysomelidae	Leaf	Low	+	6
15.		Leaf miner	*Downesia tarsata* Baly	Coleptera	Chrysomelidae	Leaf	Low	+	6
16.		Root Stock borer	*Emmalocera depressella* Swinhoe	Lepidoptera	Crambidae	Root, Stem	High	+++	1, 5, 6, 9
17.		Black leaf hopper	*Eoeurysa flavocapitata* Muir	Homoptera	Delphacidae	Leaf	Medium	++	5, 6, 9
18.		Root aphid (Ground pearl)	*Geoica lucifuga* (Zehntner)	Homoptera	Aphididae	Leaf	Low	+	3, 6
19.		Click bettle	*Heteroderes lenis* Candeze	Coleoptera	Elateridae	Leaf	Medium	++	6
20.		White grub	*Holotrichia* sp.	Coleoptera	Scarabaeidae	Root	Medium	+	5, 6
22.		Scale insect	*Icerya* sp.	Homoptera	Margorodidae	Leaf	Low	+	6
23.		Aphid	*Longiunguis sacchari* (Zehnt.)	Homoptera	Aphididae	Leaf	Low	+	6, 9
24.		Leaf roller	*Marasmia suspicalis* Walker	Lepidoptera	Crambidae	Leaf	Low	+	6
25.		Scale insect	*Melanaspis glomerata* (Green)	Homoptera	Diaspididae	Stem	Medium	++	5, 6
26.		Termite	*Microtermes obesi* Holmergen	Isoptera	Termitidae	Stem	High	++	5, 6
28.		Leaf cutting weevil	*Myllocerus discolour* Bohemann	Coleoptera	Curculionidae	Leaf	Low	+	6

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
29.		Leaf eating caterpillar	*Mythimna separata* Walk	Lepidoptera	Noctuidae	Leaf	Low	+	5, 6
30.		Termite	*Odontotermes parvidens* Holmgren	Isoptera	Termitidae	Stem	High	++	5, 6, 9
31.		Red mite	*Oligonychus indicus* Hirst	Acarina	Tetranychidae	Leaf	Low	+	5, 6
32.		Dynastid beetle	*Pentodon bengalens* Arrow	Coleoptera	Scarabaeidae	Leaf	Low	+	6
33.		Proutista leaf hopper	*Proutista moesta (*Westwood)	Homoptera	Derbidae	Leaf	Low	+	6
34.		Pyrilla leaf hopper hopper	*Pyrilla perpusilla pusana* Dist.	Homoptera	Lophopidae	Leaf	Medium	++	1, 5, 6, 9
35.		Zebra hopper	*Ricania zebra* (Distant)	Homoptera	Ricanidae	Leaf	Low	+	6
36.		Mealybug	*Sacharicoccus sachari* (Cockerell)	Homoptera	Pseudococcidae	Leaf	Low	+	1, 5, 6
37.		Mite (White)	*Schizotetranychus andropogoni* (Hirst)	Acarina	Tetranychidae	Leaf	Low	+	5, 6
38.		Top shoot borer	*Scirpophaga excerptalis* Walker	Lepidoptera	Crambidae	Stem	High	+++	1, 5, 6
39.		Pink borer	*Sesamia inferens* Walker	Lepidoptera	Noctuidae	Stem	High	+++	5, 6, 9
40.		Leaf cutting weevil	*Tanymecus hispidus* Marshall	Coleoptera	Curculionidae	Leaf	Low	+	6
41.		Leaf cutting weevil	*Tanymecus sciurus* Oliver	Coleoptera	Curculionidae	Leaf	Low	+	5, 6
42.	Sugar beet (*Beta vulgaris*)	Sugar beet cutworm	*Agrotis ipsilon* (Hufnagel)	Lepidoptera	Noctuidae	Seedling	Medium	++	1, 2, 9
43.		Black bean aphid	*Aphis fabae* Scopoli	Homoptera	Aphididae	Leaf	Medium	++	3
44.		Web worm	*Loxostege sticticalis*	Lepidoptera		Leaf	Low	+	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
45.		Sugar beet Grasshopper	*Melanoplus* spp.	Orthoptera	Acrididae	Leaf	Low	+	3
46.		Jute hairy caterpillar	*Spilarctia obliqua* (Walker)	Lepidoptera	Arctiidae	Leaf	Low	+	2, 3
47.		Tobacco caterpillar	*Spodoptera litura* Fabricius	Lepidoptera	Noctuidae	Leaf, Beet	High	+++	1, 2, 7, 8, 9
48.		Spider mite	*Tetranychus urticae* Koch	Acarina	Tetranychidae	Leaf	Low	+	8, 10
49.	Date palm/ Khejur (*Phoenix dactylifera*)	Whitefly	*Aleurocanthus bambusae* (Peal)	Homoptera	Aleyrodidae	Leaf	Low	+	4
50.		Cosmet moth	Anatrachyntis (*Pyroderces) philocarpa* Meyrick	Lepidoptera	Cosmopterigidae	Fallen fruit	Minor	+	4
51.		Date stone beetle	*Coccotrypes dactyliperda* Fabricius	Coleoptera	Scolytidae	Seed	High	++	4
52.		Army ant	*Dorylus orientalis* Westwood	Hymenoptera	Formicidae	Seed, seedling	High	++	4
53.			*Ephestia cautella* Walker	Lepidoptera	Pyralidae	Leaf	Minor	+	4
54.		Black tea thrips	*Heliothrips haemorrhoidalis* Bouche	Thysanoptera	Thripidae	Leaf	Minor	+	4
55.		Thrips	*Heliothrips indicus* Bagnall	Thysanoptera	Thripidae	Flower	Minor	+	4
56.		Rhinoceros beetle	*Oryctes rhinoceros* Linneaus	Coleoptera	Dynastidae	Shoot	High	+++	4
57.		Parlatoria date scale	*Parlatoria blanchardi* Targioni	Homoptera	Diaspididae	Leaf, fruit	Minor	+	4
58.		Red palm weevil	*Rhynchophorus ferrugineus* Olivier	Coleoptera	Cucurlionidae	Crown, stem, seedling	High	+++	4

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
59.		Ant	*Solenopsis geminata* Fabricius	Hymenoptera	Formicidae	Seed, seedling	Minor	+	4
60.		Oriental palm bob	*Suastus gremius* Fabricius	Lepidoptera	Hesperiidae	Leaf	Minor	+	4
61.	Palmyra palm /Tal (*Borassaus flabellifer*)	Rhinoceros beetle	*Oryctes rhinoceros* Linneaus	Coleoptera	Dynastidae	Shoot	High	+++	4
62.		Nettle caterpillar / Blue-striped nettle grub	*Parasa lepida* Cramer	Lepidoptera	Limacodidae	Leaf	Low	+	4
63.		Scale insect	*Phenacaspis (Chionaspis) dilatata* Cockerell & Cooley	Homoptera	Diaspididae	Leaf, leaf sheath	Low	+	4
64.		Long-tailed mealybug	*Pseudococcus adonidum* Linneaus	Homoptera	Pseudococcidae	Leaf, shoot, fruit	Low	+	4
65.		Moth	*Pyroderces (Labdia) dilatata* Meyrick	Lepidoptera	Cosmopterigidae	Leaf, flower	Low	+	4
66.		Red palm weevil	*Rhynchophorus ferrugineus* Olivier	Coleoptera	Cucurlionidae	Crown, stem, seedling	High	+++	4
67.		Ant	*Solenopsis geminata* Fabricius	Hymenoptera	Formicidae	Seed, seedling	Minor	+	4
68.		Oriental palm bob	*Suastus gremius* Fabricius	Lepidoptera	Hesperiidae	Leaf	Minor	+	4
69.		Fruit beetle	*Thamnurgides indicus* Eggers	Coleoptera	Scolytidae	Fruit	Minor	+	4
70.	Golpata (*Nypa fruticans*)	Rhinoceros beetle	*Oryctes rhinoceros* Linneaus	Coleoptera	Dynastidae	Root	High	+++	4
71.		Moth	*Tirathaba leucotephras* Meyrick	Lepidoptera	Pyralidae	Flower	Low	+	4
72.		Bark beetle	*Xyleborus incurvus* Eggers	Coleoptera	Scolytidae	Fallen wood	Low	+	4

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2.6 Recording Insect and Mite Pests of Tuber Crops

Insect and mite pests of 4 different tuber crops such as potato, sweet potato, aroids and yam are included under the pests of tuber crops. Altogether 39 insect and mite pests of tuber crops are listed in Table 6 of which 9 pests were high with common to wide distribution in the country. Plant parts affected include seedling, root, leaf, stem, twig, bud, inflorescence, flower and fruit.

Table 6. Insect and Mite Pests of Tuber Crops

Sl. No.	Name of plant and plant products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
1.	Potato *(Solanum tuberosum)*	Black cutworm	*Agrotis ipsilon* (Hufnagel)	Lepidoptera	Noctuidae	Seedling	High	+++	5, 7, 9, 12, 14
2.		Leafhopper	*Amrasca devastans* (Distant)	Homoptera	Cicadellidae	Leaf, shoot	High	+++	5, 7, 9, 12, 14

Sl. No.	Name of plant and plant products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
3.		Aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	Leaf, shoot, flower	Low	+	9, 12
4.		Fly	*Atherigona excise* Thomas	Diptera	Muscidae		Low	+	9, 12
5.		Whitefly	*Bemisia tabaci* (Gennadius)	Homoptera	Aleyrodidae	Leaf	Low	+	9, 12
6.		Field cricket	*Brachytrypes portentosus* Lichtenstein	Orthoptera	Gryllidae	Seedling	Low	+	9, 12
7.		Hairy caterpillar	*Dasychira mendosa* Hubner	Lepidoptera	Lymantriidae	Leaf	Low	+	9, 12
8.		Small red ant	*Dorylus orientalis* Westwood	Hymenoptera	Formicidae	Folage	Low	+	5, 7, 9, 12
9.		Epilachna Beetle	*Epilachna dodecastigma* (Wiedemann)	Coleoptera	Coccinellidae	Leaf	Low	+	5, 7, 9, 12
10.		Epilachna Beetle	*Epilachna vigintioctopunctata* (Fabricius)	Coleoptera	Coccinellidae	Leaf	Low	+	5, 7, 9, 12
11.		White mite	*Hemitarsonemus latus* Banks	Acarina	Tetranychidae	Leaf	Low	+	9, 12
12.		Aphid	*Macrosiphum euphorbiae* (Thomas)	Homoptera	Aphididae	Leaf, shoot, flower	Low	+	9, 12
13.		Leaf beetle	*Monolepta orientalis* (Jacoby)	Coleoptera	Chrysomelidae	Leaf	Low	+	9, 12
14.		Leaf beetle	*Monolepta signata* Olivier	Coleoptera	Chrysomelidae	Leaf	Low	+	5, 7, 9, 12
15.		Green peach aphid	*Myzus persicae* (Sulzer)	Homoptera	Aphididae	Leaf, shoot, flower	High	+++	9, 12
16.		Black ant	*Pheidologeton diversus* (Jerdon)	Hymenoptera	Formicidae	Foliage	Low	+	5, 7, 9, 12
17.		Potato tuber moth	*Phthorimaea operculella* (Zeller)	Lepidoptera	Gelechiidae	Tuber	High	+++	5, 7, 9, 12

Sl. No.	Name of plant and plant products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
18.		Mealy bug	*Pseudococcus nipae* Maskell	Homoptera	Pseudococcidae	Leaf, shoot, stem	Low	+	5, 7, 9, 12
19.		Jute hairy caterpillar	*Spilarctia obliqua* (Walker)	Lepidoptera	Arctiidae	Leaf	Low	+	9, 12
20.	Sweet potato *(Ipomoea batatus)*	Tortoise beetle	*Aspidomorpha dorsata* Fabricius	Coleoptera	Chrysomelidae	Leaf	Low	+	7, 9,11
21.		Sweet potato weevil	*Blosyrus asellus* (Olivier)	Coleoptera	Curculionidae	Leaf, root	High	+++	7, 9,11
22.		Sweet potato beetle	*Carphurus* sp.	Coleoptera	Melachiidae	Leaf	Low	+	7, 9,11
23.		Sweet potato weevil	*Cyclas formicarius* (Fabricius)	Coleoptera	Curculionidae	Leaf, root	High	+++	7, 9,11
24.		Black hairy caterpillar	*Estigmene chinensis* Hope	Lepidoptera	Arctiidae	Leaf	Low	+	9,11
25.		Sweet potato leaf caterpillar	*Euchromia polymena* Linnaeus	Lepidoptera	Syntomidae	Leaf	Low	+	9,11
26.		Sweet potato hopper	*Exitianus indicus* Distant	Homoptera	Cicadellidae	Leaf	Low	+	7, 9,11
27.		Horn worm	*Herse convolvuli* (Linnaeus)	Lepidoptera	Sphingidae	Leaf	Low	+	7, 9,11
28.		Sweet potato weevil	*Manophyas* sp.	Coleoptera	Curculionidae	Leaf, root	High	+++	7, 9,11
29.		Tortoise beetle	*Metriona circumdata* Herbst	Coleoptera	Chrysomelidae	Leaf	Low	+	7, 9,11
30.		Sweet potato bug	*Oliarus lodgarti* Distant	Hemiptera	Cixiidae	Leaf, shoot	Low	+	7, 9,11
31.		Sweet potato vine borer	*Omphisa anastomosalis* (Guenee)	Lepidoptera	Pyralidae	Vine	Low	+	9,11
32.		Sweet potato hairy caterpillar	*Pericallia recini* (Fabricius)	Lepidoptera	Arctiidae	Leaf	Low	+	7, 9,11

Sl. No.	Name of plant and plant products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
33.		Jute hairy caterpillar	*Spilarctia obliqua* (Walker)	Lepidoptera	Arctiidae	Leaf	Low	+	9,11
34.	Aroids (*Colocasia esculenta, C. antiquorun*)	Leafhopper	*Amrasca* sp.	Homoptera	Cicadellidae	Leaf	Low	+	12
35.		Aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	Leaf, stem	Low	+	12
36.		Whitefly	*Bemisia tabaci* (Gennadius)	Homoptera	Aleyrodidae	Leaf, stem	Low	+	12
37.		Taro horn worm	*Hippotion celerio* (Linnaeus)	Lepidoptera	Noctuidae	Leaf	Low	+	12
38.		Red spider mite	*Tetranychus* sp.	Acarina	Tetranycidae	Leaf	High	+++	12, 14
39.	Yam *(Dioscorea alata)*	Leaf and bulbil feeder	*Lilioceris impressa* (Fabricius)	Coleoptera	Chrysomelidae	Leaf, bulbil	High	+++	12

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2.7 Recording Insect and Mite Pests of Vegetable Crops

Insect and mite pests of 13 different vegetable crops such as brinjal, cabbage, cauliflower, knokhol, radish, turnip, lady's finger, tomato, cucurbits, bean, kangkong, lettuce and amaranthus are included under the pests of vegetable crops. Altogether 192 insect and mite pests of vegetable crops are listed in Table 7 of which 62 pests were in the range of medium to high with common to wide distribution in the country. Plant parts affected include seedling, root, leaf, stem, twig, bud, inflorescence, flower and fruit.

Table 7. Insect and Mite Pests of Vegetable Crops

Sl. No.	Name of plant and plant products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
1.	Brinjal *(Solanum melongena)*	Black cutworm	*Agrotis ipsilon* (Hufnagel)	Lepidoptera	Noctuidae	Seedling	Medium	++	5, 6, 7, 9, 12
2.		Leafhopper / Jassid	*Amrasca devastans* (Distant)	Homoptera	Cicadellidae	Leaf, shoot	High	+++	5, 6, 7, 9, 12
3.		Jassid	*Amrasca biguttula biguttula* Ishida	Homoptera	Cicadellidae	Leaf, shoot	High	+++	16
4.		Leaf roller	*Antoba olevacea* (Walker)	Lepidoptera	Noctuidae	Leaf	Medium	++	5, 6, 7, 9, 12, 16
5.		Aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	Leaf, shoot, flower, fruit	Medium	++	5, 6, 7, 9, 12, 16
6.		Grasshopper	*Atractomorpha psittacine* DeHaan	Orthoptera	Acrididae	Leaf	Low	+	5, 6, 7, 9, 12
7.		Red pumpkin beetle	*Aulacophora foveicollis* (Lucas)	Coleoptera	Chrysomelidae	Leaf	Low	+	16
8.		Whitefly	*Bemisia tabaci* (Gennadius)	Homoptera	Aleyrodidae	Leaf, stem	Low	+	16
9.		Field cricket	*Brachytrypes portentosus* Lichtenstein	Orthoptera	Gryllidae	Seedling	High	+++	5, 6, 7, 9, 12,16
10.		Black ant	*Camponotus compressus* Fabricius	Hymenoptera	Formicidae	Leaf, shoot, flower, fruit	Low	+	5, 6, 7, 9, 12
11.		Mealy bug	*Centrococcus insolitus* (Green)	Homoptera	Pseudococcidae	Leaf, shoot, flower, fruit	Medium	++	5, 6, 7, 9, 12

Sl. No.	Name of plant and plant products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
12.		Brown grasshopper	*Crotogonus* sp.	Orthoptera	Acrididae	Leaf	Low	+	5, 6, 7, 9, 12
13.		Leaf feeder	*Cryptothrips acultа* Linnaeus	Lepidoptera	Noctuidae	Leaf	Low	+	5, 6, 7, 9, 12
14.		Epilachna Beetle	*Epilachna dodecastigma* (Wiedemann)	Coleoptera	Coccinellidae	Leaf	Medium	++	5, 6, 7, 9, 12, 16
15.		Epilachna Beetle	*Epilachna vigintioctopunctata* (Fabricius)	Coleoptera	Coccinellidae	Leaf	Medium	++	5, 6, 7, 9, 12, 16
16.		Leaf feeder	*Euproctis virguncula* Walker	Lepidoptera	Lymantriidae	Leaf	Low	+	5, 6, 7, 9, 12
17.		Stem borer	*Euzophera perticella* Ragonot	Lepidoptera	Pyralidae	Stem	Low	+	12
18.		Mole cricket	*Gryllotalpa africana* Palisot de Beauvois	Orthoptera	Gryllotalpidae	Root	Low	+	16
19.		Shoot and Fruit Borer	*Leucinodes orbonalis* Guenee	Lepidoptera	Pyralidae	Shoot, fruit	High	+++	5, 6, 7, 9, 12, 16
20.		Vegetable leaf miner	*Liriomyza sativae* Blanchard	Diptera	Agromyzidae	Leaf	Medium	++	18, 19
21.		Leaf beetle	*Luperomorpha birmanica* (Jacoby)	Coleoptera	Chrysomelidae	Leaf	Low	+	5, 6, 7, 9, 12
22.		Leaf beetle	*Luperomorpha vittata* Duvivier	Coleoptera	Chrysomelidae	Leaf	Low	+	5, 6, 7, 9, 12
23.		Leaf beetle	*Monolepta signata* (Olivier)	Coleoptera	Chrysomelidae	Leaf	Low	+	7, 9, 12, 16
24.		Leafhopper	*Nephotettix bipunctatus* Fabricius	Homoptera	Cicadellidae	Leaf	Low	+	6, 7, 9, 12
25.		Green stink bug	*Nezara viridula* (Linnaeus)	Hemiptera	Pentatomidae	Leaf	Low	+	16
26.		Leafhopper	*Nirvana* sp.	Homoptera	Cicadellidae	Leaf	Low	+	5, 6, 7, 9, 12, 16

Sl. No.	Name of plant and plant products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
27.		Grasshopper	*Orthacris sp.*	Orthoptera	Acrididae	Leaf	Low	+	5, 6, 7, 9, 12
28.		Hooded hopper	*Oxyrhachis taranda* (Fabricius)	Homoptera	Membracidae	Leaf, shoot	Low	+	5, 6, 7, 9, 12
29.		White mite	*Polyphagotarsonemus latus* Banks	Acarina	Tarsonemidae	Leaf	Low	+	9
30.		Hairy caterpillar	*Selepa celtis* Moore	Lepidoptera	Noctuidae	Leaf	High		5, 6, 7, 9, 12
31.		Brown ant	*Tetramorium guineense* (Fabricius)	Hymenoptera	Formicidae	Stem	Medium	++	6,7, 9, 12
32.		Red spider mite	*Tetranychus* sp. (unidentified)	Acarina	Tetranycidae	Leaf	Low	+	7, 9, 12, 13
33.		Lace wing bug	*Urentius hystricellus* (Richter)	Hemiptera	Tingidae	Leaf	Low	+	7, 9, 12
34.		Lace wing bug	*Urentius sentis* Distant	Hemiptera	Tingidae	Leaf	Low	+	7, 9, 12
35.	Cabbage *(Brassica oleracea var. capitata)*	Black cutworm	*Agrotis ipsilon* (Hufnagel)	Lepidoptera	Noctuidae	Seedling	Medium	++	7,9, 10, 12
36.		Common cutworm	*Spodoptera litura* (Fabricius)	Lepidoptera	Noctuidae	Leaf	Low	+	9, 10, 12
37.		Diamond back moth	*Plutella xylostella* (Linnaeus)	Lepidoptera	Plutellidae	Leaf	High	+++	8, 9, 10, 12
38.		Semilooper	*Plusia orichalcea* (Fabricius)	Lepidoptera	Noctuidae	Leaf	Low	+	9, 10, 12
39.		Aphid	*Lipaphis erysimi* (Kaltenbach)	Homoptera	Aphididae	Leaf	Low	+	9, 10, 12
40.		Butterfly	*Pieris brassicae* (Linnaeus)	Lepidoptera	Pieridae	Leaf	Low	+	9, 10, 12
41.		Butterfly	*Pieris canidia* (Sparman)	Lepidoptera	Pieridae	Leaf	High	+++	9, 10, 12
42.		Butterfly	*Pieris hecabe* Linnaeus	Lepidoptera	Pieridae	Leaf	Low	+	9, 10, 12
43.		Butterfly	*Prioneris sita* Linnaeus	Lepidoptera	Pieridae	Leaf	Low	+	9, 10, 12
44.		Leaf beetle	*Lema coromendaliana* Fabricius	Coleoptera	Chrysomelidae	Leaf	Low	+	9, 10, 12

Sl. No.	Name of plant and plant products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
45.		Leaf beetle	*Haltica cyanea* Weber	Coleoptera	Chrysomelidae	Leaf	Low	+	9, 10, 12
46.		Fly	*Sciara rufithorax* Wulp	Diptera	Sciaridae	Leaf	Low	+	9, 10
47.		Cabbage borer	*Hellula undalis* (Fabricius)	Lepidoptera	Pyralidae	Leaf	Low	+	9, 10
48.		Aphid	*Brevicoryne brassicae* (Linnaeus)	Homoptera	Aphididae	Leaf	Low	+	9, 10
49.		Mustard caterpillar	*Crocidolomia binotalis* Zeller	Lepidoptera	Pyralidae	Leaf	Low	+	9, 10, 12
50.		Bug	*Murgantia histrionica* (Hahn)	Hemiptera	Pentatomidae	Leaf	Low	+	7, 9, 10, 12
51.		Epilachna beetle	*Epilachna dodecastigma* (Wiedemann)	Coleoptera	Coccinellidae	Leaf	Low	+	9, 10, 12
52.		Leafhopper	*Nephotettix bipunctatus* Fabricius	Homoptera	Cicadellidae	Leaf	High	+++	9, 10, 12
53.		Grasshopper	*Atractomorpha crenulata* Fabricius	Orthoptera	Acrididae	Leaf	Low	+	9, 10, 12
54.		Leaf miner	*Phytomyza horticola* Goureau	Diptera	Agromyzidae	Leaf	High	+++	9, 10, 12
55.		Flea beetle	*Phyllotreta cruciferae* (Goeze)	Coleoptera	Crysomelidae	Leaf	High	+++	9, 10, 12
56.		Fly	*Sciara rufithorax* Wulp	Diptera	Sciaridae	Leaf	Medium	++	7,9, 12
57.	Cauliflower *(Brassica oleracea* var. *botrytis)*	Black cutworm	*Agrotis ipsilon* (Hufnagel)	Lepidoptera	Noctuidae	Seedling	Medium	++	7, 9, 12
58.		Aphid	*Lipaphis erysimi* (Kaltenbach)	Homoptera	Aphididae	Leaf	Medium	++	7,9, 12
59.		Aphid	*Lipaphis pseudobrassicae* (Davis)	Homoptera	Aphididae	Leaf	Low	+	7,9, 12
60.		Butterfly	*Pieris brassicicae* (Linnaeus)	Lepidoptera	Pieridae	Leaf	Low	+	7,9, 12
61.		Butterfly	*Pieris canidia* (Sparman)	Lepidoptera	Pieridae	Leaf	Low	+	7,9, 12
62.		Butterfly	*Pieris hecabe* Linnaeus	Lepidoptera	Pieridae	Leaf	Low	+	7,9, 12

Sl. No.	Name of plant and plant products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
63.		Diamond back moth	*Plutella xylostella* (Linnaeus)	Lepidoptera	Noctuidae	Leaf	High		7,9, 12
64.		Fly	*Sciara rufithorax* Wulp	Diptera	Sciaridae	Leaf	Medium	++	7,9, 12
65.		Common cutworm	*Spodoptera litura* (Fabricius)	Lepidoptera	Noctuidae	Leaf	Medium	++	7,9, 12
66.	Knol khol *(Brassica oleracea)*	Black cutworm	*Agrotis ipsilon* (Hufnagel)	Lepidoptera	Noctuidae	Seedling	Medium	++	7, 9, 12
67.		Mustard caterpillar	*Crocidolomia binotalis* Zeller	Lepidoptera	Pyralidae	Leaf	High	+++	7, 9, 12
68.		Aphid	*Lipaphis erysimi* (Kaltenbach)	Homoptera	Aphididae	Leaf	High	+++	7, 9, 12
69.		Aphid	*Lipaphis pseudobrassicae* (Davis)	Homoptera	Aphididae	Leaf	High	+++	7, 9, 12
70.		Beetle	*Phyllotreta chotanica* Duvivier	Coleoptera	Chrysomelidae	Leaf	Low	+	9, 12
71.		Butterfly	*Pieris brassicae* (Linnaeus)	Lepidoptera	Pieridae	Leaf	Low	+	7, 9, 12
72.		Diamond back moth	*Plutella xylostella* (Linnaeus)	Lepidoptera	Plutellidae	Leaf	Low	+	7, 9, 12
73.		Common cutworm	*Spodoptera litura* (Fabricius)	Lepidoptera	Noctuidae	Leaf	High	+++	7, 9, 12
74.	Radish *(Raphanus sativus)*	Bug	*Eurydema pulchrum* Westwood	Hemiptera	Pentatomidae	Leaf	Low	+	9,12
75.		Leaf beetle	*Haltica cyania* Weber	Coleoptera	Chrysomelidae	Leaf	Low	+	9,12
76.		Leaf beetle	*Phyllotreta brassicae* Alam	Coleoptera	Chrysomelidae	Leaf	Low	+	9,12
77.		Leaf beetle	*Phyllotreta* sp.	Coleoptera	Chrysomelidae	Leaf	Low	+	9,12
78.		Diamond back moth	*Plutella xylostella* (Linnaeus)	Lepidoptera	Plutellidae	Leaf	High	+++	9,12
79.		Common cutworm	*Spodoptera litura* (Fabricius)	Lepidoptera	Noctuidae	Leaf	High	+++	9,12

Sl. No.	Name of plant and plant products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
80.		Aphid	*Lipaphis pseudobrassicae* (Davis)	Homoptera	Aphididae	Leaf, shoot	High	+++	9,12
81.	Turnip *(Brassica rapa* subsp. *rapa)*	Leaf beetle	*Halticacyania* Weber	Coleoptera	Chrysomelidae	Leaf	Low	+	9,12
82.		Aphid	*Lipaphis erysimi* (Kaltenbach)	Homoptera	Aphididae	Leaf	High	+++	7, 9,12
83.		Aphid	*Lipaphis pseudobrassicae* (Davis)	Homoptera	Aphididae	Leaf, shoot	High	+++	7, 9,12
84.		Diamond back moth	*Plutella xylostella* (Linnaeus)	Lepidoptera	Plutellidae	Leaf	Low	+	7, 9,12
85.	Lady's finger *(Adelmoschus esculentus)*	Leaf hopper	*Amrasca devastans* (Distant)	Homoptera	Cicadellidae	Leaf	High	+	7, 9,12
86.		Aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	Leaf, shoot, flower	High	+++	7, 9,12
87.		Shoot borer	*Atmetonychus peregrinus* Olivier	Coleoptera	Curculionidae	Shoot	High	+++	9,12
88.		Whitefly	*Bemisia tabaci* (Gennadius)	Homoptera	Aleyrodidae	Leaf	High	+++	7, 9,12
89.		Pentatomid bug	*Dolycoris indicus* Stal	Hemiptera	Pentatomidae	Leaf, shoot	Low	+	7, 9,12
90.		Red cotton bug	*Dysdercus cingulatus* (Fabricius)	Hemiptera	Pyrrhocoridae	Leaf, shoot, fruit	High	+++	7, 9,12
91.		Shoot and fruit borer	*Earias vittella* (Fabricius)	Lepidoptera	Noctuidae	Shoot, fruit	High	+++	7, 9,12
92.		Leaf beetle	*Formiconus antiguus* Kerr	Coleoptera	Anthicidae	Leaf	Low	+	9,12
93.		Leaf feeding beetle	*Heminodes indicus* Jacoby	Coleoptera	Eumolpidae	Leaf	Low	+	9,12
94.		Mite	*Lasioselus* sp.	Acarina	Aceosejidae	Leaf	Low	+	9,12
95.		Leaf feeding beetle	*Melanephthalma distinguenda* (Kaltenbach)	Coleoptera	Lathridiidae	Leaf	Low	+	7, 9,12
96.		Leaf feeding beetle	*Monolepta orientalis* (Jacoby)	Coleoptera	Chrysomelidae	Leaf	Low	+	9,12
97.		Root feeder	*Myllocerus 11-pustulatus* Faust	Coleoptera	Curculionidae	Root	Low	+	12

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98.		Leaf beetle	*Pachneophorus bretinghami* Baly	Coleoptera	Chrysomelidae	Leaf	Low	+	12
99.		Lygaeid bug	*Paromius exiguous* (Distant)	Hemiptera	Lygaeidae	Leaf	Low	+	7, 9,12
100.		Spittle bug	*Ptyelus nebulosus* Fabricius	Homoptera	Cercopidae	Shoot	Low	+	12
101.		Spittle bug	*Rhopalus macropictus* Distant	Homoptera	Cercopidae	Shoot	Low	+	12
102.		Leaf roller	*Syllepta derogata* (Fabricius)	Lepidoptera	Pyralidae	Leaf	High	+++	7, 9,12
103.		Leaf roller	*Syllepta* sp.	Lepidoptera	Pyralidae	Leaf	Low	+	12
104.	Tomato *(Lycopersicon esculentum* L.*)*	Leafhopper /Jassid	*Amrasca devastans* (Distant)	Homoptera	Cicadellidae	Leaf, shoot	High	+++	7, 9,12
105.		Aphid	*Aphis craccivora* Koch	Homoptera	Aphididae	Leaf, shoot, flower	High	+++	7, 9,12
106.		Fruit fly	*Dacus cucurbitae* (Coquillett)	Diptera	Tephritidae	Fruit	Low	+	7, 9,12
107.		Epilachna beetle	*Epilachna dodecastigma* (Fabricius)	Coleoptera	Coccinellidae	Leaf	High	+++	7, 9,12
108.		Epilachna beetle	*Epilachna vigintioctopunctata* (Wiedemann)	Coleoptera	Coccinellidae	Leaf	High	+++	7, 9,12
109.		Aphid	*Geoica lucifugas* (Zehntner)	Homoptera	Aphididae	Leaf, shoot	Low	+	12
110.		Fruit borer	*Helicoverp armigera* (Hubner)	Lepidoptera	Noctuidae	Fruit	High	+++	7, 9,12
111.		Vegetable leaf miner	*Liriomyza sativae* Blanchard	Diptera	Agromyzidae	Leaf	Medium	++	18, 19
112.		Mealy bug	*Pseudococcus virgatus* (Cockerell)	Homoptera	Pseudococcidae	Leaf, shoot, stem	Low	+	9, 12

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113.		Aphid	*Rhopalosiphum maidis* (Fitch)	Homoptera	Aphididae	Leaf, shoot, flower	Low	+	12
114.		Aphid	*Rhopalosiphum rufiabdominalis* (Sasaki)	Homoptera	Aphididae	Leaf, shoot, flower	Low	+	12
115.		Aphid	*Schizaphis minuta* (Fitch)	Homoptera	Aphididae	Leaf, shoot, flower	Low	+	12
116.		Common cutworm	*Spodoptera litura* (Fabricius)	Lepidoptera	Noctuidae	Leaf	High	+++	7, 9,12
117.		Aphid	*Tetraneura hirsuta* (Baker)	Homoptera	Aphididae	Leaf, shoot, flower	Low	+	12
118.		Aphid	*Tetraneura nigriabdominalis* (Sasaki)	Homoptera	Aphididae	Leaf, shoot, flower	Low	+	12
119.		Tomato leaf miner	*Tuta absoluta* (Meyrick)	Lepidoptyera	Gelechiidae	Leaf	Low	+	20
120.	Cucurbits (Cucurbita spp.)	Bug	*Agonoscelis nubila* Fabricius	Hemiptera	Pentatomidae	Leaf, shoot	Low	+	12
121.		Aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	Leaf, shoot, flower	Low	+	12
122.		Shoot borer	*Apomecyna neglecta* Pascoe	Coleoptera	Cerambycidae	Stem	Low	+	12
123.		Vine boring beetle	*Apomecyna saltator* Fabricius	Lepidoptera	Lamiidae	Vine	Low	+	12
124.		Pentatomid bug	*Aspongopus brunneus* Thunberg	Hemiptera	Pentatomidae	Leaf, shoot	Low	+	12
125.		Pentatomid bug	*Aspongopus janus* Fabricius	Hemiptera	Pentatomidae	Leaf, shoot	Low	+	12
126.		Pentatomid bug	*Aspongopus* sp.	Hemiptera	Pentatomidae	Leaf, shoot	Low	+	12
127.		Pumpkin beetle	*Aulacophora abdominalis* Fabricius	Coleoptera	Chrysomelidae	Leaf	High	+++	12
128.		Pumpkin beetle	*Aulacophora foveicollis* (Lucas)	Coleoptera	Chrysomelidae	Leaf	High	+++	12

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129.		Pumpkin beetle	*Aulacophora frontalis* Baly	Coleoptera	Chrysomelidae	Leaf	Low	+	12
130.		Fruit fly	*Bactrocera hochii* (Zia).	Diptera	Tephritidae	Fruit	Low	+	17
131.		Fruit fly	*Bactrocera caudata* (Fabricius)	Diptera	Tephritidae	Fruit	Low	+	3, 12, 17
132.		Fruit fly	*Bactrocera cucurbitae* (Fabricius)	Diptera	Tephritidae	Fruit	High	+++	3, 12, 17
133.		Fruit fly	*Bactrocera latifrons* (Hendel)	Diptera	Tephritidae	Fruit	Low	+	12, 17
134.		Fruit fly	*Bactrocera tau* (Walker)	Diptera	Tephritidae	Fruit	Low	+	3, 12, 17
135.		Flower beetle	*Carpophilus cylindricus* Murzini	Coleoptera	Nitidulidae	Flower	Low	+	12
136.		Fruit fly	*Dacus longicornis* (Wiedemann)	Diptera	Tephritidae	Fruit	Low	+	17
137.		Fruit fly	*Dacus ciliatus* (Loew)	Diptera	Tephritidae	Fruit	Low	+	12,15, 18
138.		Fruit fly	*Dacus divresa* (Coquillett)	Diptera	Tephritidae	Fruit	Low	+	12, 15,18
139.		Pumpkin caterpillar	*Diaphania indica* (Saunders)	Lepidoptera	Pyralidae	Leaf, flower, fruit	Low	+	12
140.		Epilachna beetle	*Epilachna dodecastigma* (Wiedemann)	Coleoptera	Coccinellidae	Leaf	High	+++	2,9,12
141.		Epilachna beetle	*Epilachna septima* Dieke	Coleoptera	Coccinellidae	Leaf	Low	+	2,9,12
142.		Epilachna beetle	*Epilachna sparsa* (Herbst)	Coleoptera	Coccinellidae	Leaf	Low	+	2,9,12
143.		Epilachna beetle	*Epilachna varivestis* Mulsant	Coleoptera	Coccinellidae	Leaf	Low	+	2,9,12
144.		Epilachna beetle	*Epilachna vigintioctopunctata* (Fabricius)	Coleoptera	Coccinellidae	Leaf	High	+++	2,9,12
145.		Leaf hopper	*Exitianus indicus* (Distant)	Homoptera	Cicadellidae	Leaf, shoot	Low	+	12
146.		Leafhopper	*Exitianus* sp.	Homoptera	Cicadellidae	Leaf, shoot	Low	+	12
147.		Skipper	*Gegines gullatus* Wulp	Lepidoptera	Hesperiidae	Leaf	Low	+	12
148.		Stem fly	*Lasioptera falcata* Felt	Diptera	Ceceidomyiidae	Stem	Low	+	12

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149.		Hooded hopper	*Leptocentrus taurus* (Fabricius)	Homioptera	Membracidae	Shoot, stem	Low	+	12
150.		Coreid bug	*Leptoglossus australis* (Fabricius)	Hemiptera	Coreidae	Leaf, shoot	Low	+	12
151.		Vegetable leaf miner	*Liriomyza sativae* Blanchard	Diptera	Agromyzidae	Leaf	Medium	++	18, 19
152.		Shoot borer	*Melittia indica* Butler	Lepidoptera	Sesiidae	Shoot	Low	+	12
153.		Mirid bug	*Nesidiocoris* sp.	Hemiptera	Miridae	Leaf, shoot	Low	+	12
154.		Ant	*Phedologeton diversus* (Jerdon)	Hymenoptera	Formicidae	Leaf, shoot	Low	+	12
155.		Flea beetle	*Phyllotreta chotanica* Duvivier	Coleoptera	Chrysomelidae	Leaf	Low	+	12
156.		Fly	*Sciara rufithorax* Wulp	Diptera	Sciaridae	Seedling	High	+++	9, 12
157.		Mite	*Tetranychus* sp.	Acarina	Tetranychidae	Leaf	Low	+	9, 12
158.		Thrips	*Thrips flavidus* Bagnall	Thysanoptera	Thripidae	Leaf	Low	+	12
159.	Beans *(Phaseolus vulgaris)*	Pod borer	*Adisura atkinsoni* Moore	Lepidoptera	Noctuidae	Pod	Low	+	12
160.		Pea stem fly	*Agromyza* sp.	Diptera	Agromyzidae	Stem	Low	+	12
161.		Shoot weevil	*Alcides collaris* Pascoe	Coleoptera	Curculionidae	Shoot	Low	+	12
162.		Moth	*Amata pasalis* Fabricius	Lepidoptera	Syntomidae	Leaf	Low	+	12
163.		Aphid	*Aphis craccivora* Koch	Homoptera	Aphididae	Leaf, shoot, flower	High	+++	7, 9,12
164.		Aphid	*Aphis medicaginis* Koch	Homoptera	Aphididae	Leaf, shoot, flower	High	+++	1, 9, 12
165.		Leaf weevil	*Blosyrus oniscus* Olivier	Coleoptera	Curculionidae	Leaf	Low	+	12
166.		Stem fly	*Celyphus obtectus* Dalman	Diptera	Celyohidae	Stem	Low	+	9,12
167.		Leaf beetle	*Colposcelis kanarensis* Jacoby	Coleoptera	Chrysomelidae	Leaf	Low	+	9,12
168.		Bug	*Coptosoma cribarium* (Fabricius)	Hemiptera	Pentatomidae	Leaf, shoot	High	+++	9,12

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169.		Leaf miner	*Cosmopteryx* sp.	Lepidoptera	Cosmoptrygidae	Leaf	High	+++	9,12
170.		Flower and pod borer	*Euchrysops cnejus* (Fabricius)	Lepidoptera	Lycaenidae	Flower, pod	Low	+	12
171.		Country bean leaf paster	*Hedylepta indicata* (Fabricius)	Lepidoptera	Pyralidae	Leaf	Low	+	12
172.		Flower and pod borer	*Helicoverpa armigera* (Hubner)	Lepidoptera	Noctuidae	Flower, pod	Low	+	12
173.		Hooded hopper	*Leptocentrus taurus* (Fabricius)	Homoptera	Membracidae	Shoot	Low	+	9,12
174.		Vegetable leaf miner	*Liriomyza sativae* Blanchard	Diptera	Agromyzidae	Leaf	Medium	++	18, 19
175.		Flower and pod borer	*Maruca vitrata* (Geyer)	Lepidoptera	Pyralidae	Flower, pod	High	+++	7, 9,12
176.		Bean fly	*Ophiomyia phaseoli* (Tryon)	Diptera	Agromyzidae	Stem of seedling	Low	+	9,12
177.		Green semilooper	*Plusia orichalcea* (Fabricius)	Lepidoptera	Noctuidae	Leaf	Low	+	7, 9,12
178.		Cowpea bug	*Riptorus fuscus* (Fabricius)	Hemiptera	Alydidae	Pod	Low	+	12
179.		Shoot borer	*Sagra carbunculus* Hope	Coleoptera	Chrysomelidae	Shoot	Low	+	12
180.		Shoot borer	*Sagrafe morata* (Drury)	Coleoptera	Chrysomelidae	Shoot	Low	+	12
181.	Kangkong *(Ipomoea aquatica)*	Vine borer	*Omphisa anastomosalis* (Guenee)	Lepidoptera	Pyralidae	Vine	Low	+	12
182.	Lettuce *(Lactuca sativa)*	Leaf beetle	*Haltica cyania* Weber	Coleoptera	Chrysomelidae	Leaf	Low	+	5
183.		Aphid	*Lipaphis erysimi* (Kaltenbach)	Homoptera	Aphididae	Leaf, shoot	High	+++	5
184.	Amaranthus *(Amaranthus cruentus)*	Thrips	*Aeolothrips collaris* Priesner	Thysanoptera	Aelothripidae	Leaf, shoot	Low	+	4, 6, 7, 9, 12
185.		Leaf twisting weevil	*Apoderus tranquebaricus* Fabricius	Coleoptera	Curculionidae	Leaf	Low	+	4, 6, 7, 9, 12

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186.		Bug	*Cletus pugnator* (Fabricius)	Hemiptera	Coreidae	Leaf, shoot	Low	+	4, 6, 7, 9, 12
187.		Thrips	*Frankliniella intonsa* (Trybom)	Thysanoptera	Thripidae	Leaf	Low	+	4, 6, 7, 9, 12
188.		Leaf roller	*Hymenia fascialis* Cramer	Lepidoptera	Pyralidae	Leaf	High	+++	4, 6, 7, 9, 12
189.		Leaf roller	*Hymenia recurvalis* Fabricius	Lepidoptera	Pyralidae	Leaf	Low	+	4, 6, 7, 9, 12
190.		Leaf eating weevil	*Hypolixus truncatulus* (Fabricius)	Coleoptera	Curculionidae	Leaf	Low	+	4, 6, 7, 9, 12
191.		Shoot boring weevil	*Lixus brachyrhinus* Boheman	Coleoptera	Curculionidae	Shoot	Low	+	4, 6, 7, 9, 12
192.		Lygaeid bug	*Nysius inconspicuous* Distant	Hemiptera	Lygaeidae	Shoot	Low	+	4, 6, 7, 9, 12

2.7.1 References

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2.8 Recording Insect and Mite Pests of Fruit Crops

Insect and mite pests of 28 different fruit crops are included under the pests of fruit crops. Altogether 313 insect and mite pests of fruit crops are listed in Table 8 of which 108 pests were in the range of medium to high with common to wide distribution in the country. Plant parts affected include seedling, leaf, stem, twig, bud, flower, inflorescence, fruits and seed.

Table 8. Insect and Mite Pests of Fruit Crops

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
01.	Mango (*Mangifera indica*)	Mango eriophyid mite	*Aceria mangiferae* Sayed	Acarina	Eriophyidae	Leaf, fruit	Low	+	5
02.		Leaf miner	*Acrocercops cathedraea* Meyrick	Lepidoptera	Lithocolletidae	Leaf	Low	+	9
03.		Shoot weevil	*Alcidodes frenatus* Faust	Coleoptera	Corculionidae	Young shoot	High	+++	3, 9
04.		Leaf gall insect	*Amradiplosis amraemyia* Rao	Diptera	Cecidomyidae	Leaf	Low	+	9
05.		Leaf gall insect	*Amradiplosis echinogalliperda* Mani	Diptera	Cecidomyidae	Leaf	Low	+	9
06.		Leaf feeding beetle	*Anomala bengalensis* Blanchard	Coleoptera	Scarabaeidae	Leaf and root	Low	+	9
07.		Leaf gall	*Apsylla cistellata* Buckton	Homoptera	Psyllidae	Leaf	Medium	++	3, 9
08.		Leaf webber	*Archips micaceanus* Walker	Lepidoptera	Tortricidae	Leaf	Medium	++	9
09.		Inflorescence weeber	*Autoba angulifera* Moore	Lepidoptera	Noctuidae	Inflorescence, flower	Medium	++	9
10.		Wood borer	*Basitropis nitidicutis* Jekel	Coleoptera	Anthribidae	Dead wood	Low	+	9
11.		Oriental fruit fly	*Bactrocera dorsalis* Fabricius	Diptera	Tephritidae	Fruit	High	+++	3, 9,14
12.		Peach fruit fly	*Bactrocera zonata* (Saunders)	Diptera	Tephritidae	Fruit	Medium	++	9, 14
13.		Long horn beetle	*Batocera rubus* (Linnaeus)	Coleoptera	Cerambycidae	Bark and sapwood	High	+++	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
14.		Long horn beetle	*Batocera rufumaculata* De Geer	Coleoptera	Cerambycidae	Bark and sapwood	High	+++	9
15.		Jewel beetle	*Belionota prasina* Thunberg	Coleoptera	Buprestidae	Dead wood	Low	+	9
16.		Defoliator	*Cricula trifenestrata* Helfer	Lepidoptera	Saturniidae	Leaf	High	++	3, 9
17.		Hairy tussock moth	*Dasychira mendosa* Hubner	Lepidoptera	Lymantriidae	Leaf	Low	+	9
18.		Leaf cutting weevil	*Deporaus marginatus* Pascoe	Coleoptera	Curculionidae	Leaf	High	+++	9
19.		Yellow peach moth/ Fruit borer	*Dichocrocis punctiferalis* Guenee	Lepidoptera	Pyralidae	Stem, shoot, leaf, fruit, seed, bud	Low	+	9
20.		Giant mealybug	*Drosicha mangifearae* Green	Hemiptera	Monophlebidae	Leaf , twig, shoot	Locally High	++	9
21.		Inflorescence midge	*Erosomyia mangiferae* Felt	Diptera	Cecidomyiidae	Inflorescence, young fruit	Low	+	7
22.		Yellow tail tussock moth	*Euproctis scintillans* Walker	Lepidoptera	Lymantriidae	Leaf	Low	+	9
23.		Oriental wood borer	*Heterobostrychus aequalis* Waterhouse	Coleoptera	Bostrychidae	Dry wood	High	+++	9
24.		Leaf folder	*Hypatima spathota* Meyrick	Lepidoptera	Gelechiidae	Leaf	Medium	++	9
25.		Scale insect	*Icerya aegyptiaca* Douglas	Homoptera	Margarodidae	Leaf , branch and stem	Low	+	9
26.		Mango hopper	*Idiocerus atkinsoni* Lethierry	Homoptera	Cicadellidae	Inflorescence	High	+++	3, 9
27.		Mango hopper	*Idioscospus clypealis* Lethierry	Homoptera	Cicadellidae	Inflorescence	Low	+	3, 9
28.		Bark eating caterpillar	*Indarbela tetraonis* Moore	Lepidoptera	Indarbelidae	Stem and bark	Low	+	9
29.		Wood borer	*Lyctus brunneus* Stephens	Coleoptera	Botrychidae	Dead wood	Medium	++	9

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
30.		Leaf webber	*Macalla carbonifera* Meyrick	Lepidoptera	Pyralidae	Leaf	Medium	++	9
31.		Leaf beetle	*Monolepta orientalis* Jacoby	Coleoptera	Chrysomelidae	Inflorescence	Low	+	9
32.		Grey weevil	*Myllocerus discolor* Boheman	Coleoptera	Curculionidae	Leaf , shoot, inflorescence	Low	+	9
33.		Termite	*Odontotermes brunneus* Hagen	Isoptera	Termitidae	Wood	Low	+	9
34.		Long horn beetle	*Olenecamptus bilobus* Fabricius	Coleoptera	Cerambycidae	Dead wood	Low	+	9
35.		Wood borer	*Platypus solidus* Walker	Coleoptera	Platypodidae	Sapwood of fallen wood	High	+++	9
36.		Scale insect	*Rastrococcus iceryoides* Green	Hemiptera	Pseudococcidae	Fruit and fruit stalk	Low	+	9
37.		Thrips	*Rhipiphorothrips cruentatus* Hood	Thysanoptera	Thripidae	Leaf	Low	+	9
38.		Powder post beetle	*Sinoxylon anale* Lesne	Coleoptera	Bostrychidae	Sap wood of dead wood	High	+++	9
39.		Mango fruit weevil	*Sternochaetus mangiferae* (Fabricius)	Coleoptera	Curculionidae	Pulp	High	+++	3, 9
40.		Mango stone weevil	*Sternochaetus frigidus* (Fabricius)	Coleoptera	Curculionidae	Pulp, seed	Low	+	9
41.		Tortricid moth	*Strepsicrates rhothia* Meyrick	Lepidoptera	Tortricidae	Leaf	Low	+	9
42.		Aphid	*Toxoptera odinae* van der Goot	Homoptera	Aphididae	Inflorescence, tender shoot, branch	Low	+	9
43.		Ambrosia beetle	*Xyleborus perforans* Wollaston	Coleoptera	Scolytidae	Sapwood of fallen wood	High	+++	9
44.		Ambrosia beetle	*Xyleborus perforans* Wollaston	Coleoptera	Scolytidae	Sapwood of fallen wood	High	+++	9
45.	Citrus (*Citrus* spp.)	Citrus blackfly	*Aleurocanthus woglumi* Ashby	Homoptera:	Aleyrodidae	Leaf	Low	+	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
46.		Citrus red scale	*Aonidiella aurantii* Maskell	Homoptera	Coccidae	Leaf, stem, fruit	Low	+	3, 16
47.		Citrus yellow scale	*Aonidiella citrina* Coquillett	Homoptera	Coccidae	Leaf, stem, fruit	Low	+	3, 16
48.		Oriental fruit fly	*Bactrocera dorsalis* Hendel	Diptera	Tephritidae	Fruit	High	+++	3, 14
49.		Orange spined bug	*Biprorulus bibax* Breddin	Hemiptera	Pentatomidae	Fruit	High	++	16
50.		Citrus stem borer	*Chelidonium cinctum* Guerin-Meneville	Coleoptera	Cerambycidae	Stem	Low	+	3, 14
51.		Orange trunk borer	*Chloridolum alcmene* Thomson	Coleoptera	Cerambycidae	Stem	Low	+	3, 14
52.		Citrus whitefly	*Dialeurodes citri* Ashmead	Homoptera	Aleyrodidae	Leaf	Low	+	12
53.		Asian citrus psyllid	*Diaphorina citri* Kuwayana	Homoptera	Psyllidae	Leaf	Low	+	3, 16
54.		Striped mealybug	*Ferrisia virgata* (Cockerell)	Homoptera	Pseudococcidae	Stem, leaf, fruit	Medium	++	16,18
55.		Flower thrips	*Frankliniella schultzei* Trybom	Thysanoptera	Thripidae	Flower	Low	+	3, 16
56.		Bark and stem borer/ Bark eating caterpillar	*Indarbela quadrinotata* (Walker)	Lepidoptera	Metarbelidae	Bark	Low	+	9
57.		Termite	*Odontotermes obesus* Rambur	Termitidae	Isoptera	Stem , root	Low	+	3, 16
58.		Fruit sucking moth	*Othreis* spp.	Noctuidae	Lepidoptera	Fruit	High	++	6, 8
59.		Lemon butterfly	*Papilio demoleus* Lnneaus	Lepidoptera	Papilionidae	Leaf	High	+++	3, 16
60.		Swallowtail butterfly	*Papilio polytes* Lnneaus	Lepidoptera	Papilionidae	Leaf	Low	+	3, 16
61.		Citrus leaf miner	*Phyllocnistis citrella* Stainton	Lepidoptera:	Gracilleridae	Leaf	High	+++	3, 12
62.		Citrus mealybug	*Plannococcus citri* Risso	Homoptera	Pseudococcidae	Leaf, shoot, flower, fruit	Low	+	17

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
63.		Citrus leaf roller	*Psorosticha zizyphi* Stainton	(Lepidoptera:	Oecophoridae	Leaf	Low	+	16
64.		Citrus bug	*Rhynchocoris humeralis* Thunberg	Hemiptera	Pentatomidae	Fruit	Low	+	3, 16
65.		Citrus thrips	*Scirtothrips dorsalis* Hood	Thysanoptera	Thripidae	Leaf, flower, young fruit	Low	+	12, 16
66.		Citrus red mite	*Tetranychus* sp.	Acarina	Tetranychidae	Leaf, fruit	Low	+	3, 16
67.		Black citrus aphid	*Toxoptera aurantii* Boyer de Fonscolambe	Homoptera:	Aphididae	Leaf, shoot, flower, fruit	High	+++	3
68.	Guava (*Psidium guajava*)	Guava trunk borer	*Aeolesthes holosericea* Fabricius	Coleoptera	Cerambycidae	Dead wood	Low	+	3, 9, 16
69.		Spiraling whitefly	*Aleurodicus dispersus* Russell	Homoptera	Aleyrodidae	Leaf, twig, fruit	High	+++	9
70.		Red scale	*Aonidiella aurantii* Maskell	Homoptera	Diaspidiade	Leaf and stem	Low	+	9
71.		Oriental scale	*Aonidiella orientalis* Newstead	Homoptera	Diaspididae	Leaf and stem	Low	+	9
72.		Aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	Leaf and stem	Low	+	3, 9, 16
73.		Leaf webber	*Archips micaceanus* Walker	Lepidoptera	Tortricidae	Fruit and leaf	Low	+	9
74.		Coconut scale	*Aspidiotus destructor* Signoret	Homoptera	Diaspididae	Leaf and stem	Low	+	9
75.		Jewel beetle	*Belionota prasina* Thumberg	Coleoptera	Buprestidae	Dead stem	Low	+	9
76.		Oriental fruit fly	*Bactrocera dorsalis* Fabricius	Diptera	Tephritidae	Fruit	High	+++	3, 9, 14
77.		Fruit fly	*Bactrocera tau* Walker	Diptera	Tephritidae	Fruit	Medium	++	2, 14
78.		Peach fruit fly	*Bactrocera zonnata* (Saunders)	Diptera	Tephritidae	Fruit	Medium	++	9, 12, 14
79.		Guava scale	*Chloropulvinaria psidii* Maskell	Homoptera	Coccidae	Leaf and branch	Low	+	3, 9, 16
80.		Bagworm	*Cryptothelea crameri* Westwood	Lepidoptera	Psychidae	Twig shoot bud	Low	+	9

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
81.		Tussock moth	*Dasychira grotei* Moore	Lepidoptera	Lymantriidae	Leaf	Low	+	9
82.		Yellow peach moth/ Fruit borer	*Dichocrocis punctiferalis* Guenee	Lepidoptera	Pyralidae	Fruit	Low	+	9
83.		Bug	*Disphinctus humeralis* Walker	Hemiptera	Capsidae	Young leaf	Low	+	9
84.		Tussock moth	*Euproctis fraterna* Moore	Lepidoptera	Lymantriidae	Leaf	Low	+	9
85.		Striped mealybug	*Ferrisia virgata* (Cockerell)	Homoptera	Pseudococcidae	Stem, leaf, fruit	Medium	++	18
86.		Termite	*Glyptotermes dilatatus* Popoff	Isoptera	Kalotermitidae	Heart wood	Low	+	9
87.		Mosquito bug	*Helopeltis antonii* Signoret	Hemiptera	Capsidae	Twig and fruit	High	+	9
88.		Tortrix moth	*Homona coffearia* Nietner	Lepidoptera	Tortricidae	Leaf	Low	+	9
89.		Black looper	*Hyposidra talaca* Walker	Lepidoptera	Geometridae	Leaf	Low	+	9
90.		Scale insect	*Icerya aegyptiaca* Douglas	Homoptera	Margarodidae	Leaf branch stem	Low	+	9
91.		Bark eating caterpillar	*Indarbela tetraonis* Moore	Lepidoptera	Indarbelidae	Stem and bark	Low	+	9
92.		Gypsy moth	*Lymantria mathura* Moore	Lepidoptera	Lymantriidae	Leaf	Low	+	9
93.		Fruit borer	*Microcolona leucosticta* Meyrick	Lepidoptera	Cosmopterygidae	Fruit	Low	+	9
94.		Grey weevil	*Myllocerus discolor* Boheman	Coleoptera	Curculionidae	Leaf , shoot, inflorescence	Low	+	3, 9, 16
95.		Hopper	*Oxyrachis mangiferana* Distant	Homoptera	Membracidae	Shoot, branch, stem	Low	+	9
96.		Cluster caterpillar	*Spodoptera litura* Fabricius	Lepidoptera	Noctuidae	Leaf	Low	+	9
97.		Scale insect	*Pulvinaria maxima* Green	Homoptera	Coccidae	Leaf and branch	Low	+	9
98.		Wood borer	*Schistoceros anobioides* Waterhouse	Coleoptera	Bostrychidae	Dead sap wood	Low	+	9

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
99.		Red banded thrips	*Selenothrips rubrocinctus* Giard	Thysanoptera	Thripidae	Leaf and shoot	Low	+	9
100.		Fruit borer	*Virachola isocrates* Fabricius	Lepidoptera	Lycaenidae	Fruit, seed	High	+++	1, 3, 9, 13
101.		Ambrosia beetle	*Xyleborus fornicates* Eichhoff	Coleoptera	Scolytidae	Fallen wood	Low	+	9
102.	Jackfruit (*Artocarpus heterphyllus*)	Trunk borer	*Aporiona germari* Linneaus	Coleoptera	Cerambycidae		Low	+	9, 16
103.		Bark borer	*Batocera rufomaculata* (De Geer)	Coleoptera	Cerambycidae	Bark, wood	High	+++	9
104.		Spittle bug	*Cosmoscaria relata* (Distant)	Hemiptera	Cercopidae	Young shoot	Low	+	9
105.		The shoot borer	*Diaphorina caesalis* (Walker)	Lepidoptera	Pyrilididae	Fruit	Medium	+++	1, 13
106.		Giant mealybug	*Drosicha mangiferae* Green	Homoptera	Monophlebidae	Shoot, stem, inflorescence, fruit	Low but locally high	++	9
107.		Striped mealybug	*Ferrisia virgata* (Cockerell)	Homoptera	Pseudococcidae	Stem, leaf, fruit	Medium	++	16, 18
108.		The jack fruit aphid	*Greenidea artocarpi* (Westwood)	Hemiptera	Aphididae	Leaf, shoot	Low	+	9
109.		Bark and stem borer/ Bark eating caterpillar	*Indarbela quadrinotata* (Walker)	Lepidoptera	Indarbelidae/ Cossidae	Stem	Low	+	9
110.		Scale insect	*Icerya aegyptiaca* (Douglas)	Hemiptera	Coccidae	Leaf, shoot, branch	Low	+	9
111.		Wood borer	*Lyctus brunneus* Stephens	Coleoptera	Botrychidae	Dead wood	Medium	++	9
112.		Bud weevil	*Ochyromera artocarpi* (Marshall)	Coleoptera	Curculionidae	Bud	Low	+	16
113.		Wood borer	*Platypus solidus* Walker	Coleoptera	Platypodidae	Sapwood of fallen wood	High	+++	9
114.		Leaf webber	*Perina nuda* (Fabricius)	Lepidoptera	Lymantriidae	Leaf	Medium	++	9

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
115.		Aphid	*Toxoptera aurantii* Boyer de Fonscolambe	Homoptera:	Aphididae	Leaf, shoot, flower, fruit	Low	+	3, 9
116.		Ambrosia beetle	*Xyleborus interjectus* Blandford	Coleoptera	Scolytidae	Sapwood of fallen wood	Low	+	9
117.	Litchi (*Litchi chinensis*)	Leaf curl mite	*Aceria litchi* (Keiger)	Acarina	Eriophyidae	Leaf, inflorescence, fruit	High	+++	1, 9, 13, 16
118.		Leaf miner	*Acrocerocops hierocosma* Meyrick	Lepiodptera	Lithocolletidae	Leaf	Low	+	9, 16
119.		Trunk borer	*Aporin germari* Linneaus	Coleoptera	Cerambycidae	Wood	High	+++	3, 12
120.		Fruit borer	*Argyroploce illepedia* (Butler)	Lepidoptera	Eucosmidae	Leaf	Low	+	3, 13, 16
121.		F*ruit borer*	*Conopomorpha sinensis* Bradley	Lepidoptera	Gracillariidae	Fruit	High	+++	1
122.		Defoliator	*Cricula trifenestrata* Helfer	Lepidoptera	Saturniidae	Leaf	Low	+	1, 9
123.		Bagworm	*Cryptothelea crameri* Westwood	Lepidoptera	Psychidae	Twig, shoot bud	Low	+	9
124.		Jewel bug	*Chrysocoris stollii* (Wolff)	Hemiptera	Scutelleridae	Leaf, shoot, fruit	High	++	3, 16
125.		Stem borer	*Indarbela tetraonis* Moore	Lepidoptera	Inderbelidae	Bark	Low	+	1, 3, 9
126.		Gypsy moth	*Lymantria nigra* Moore	Lepidoptera	Lymantriidae / Erebidae	Leaf	Low	+	9
127.		Hairy caterpillar	*Selepa celtis* Moore	Lepidopera	Nolidae	Leaf	Low	+	9
128.		*Litchi* stink *bug*	*Tessaratoma javanica* (Thunberg)	Hemiptera	Tessaratomidae	Fruit	Medium	++	13
129.		Aphid	*Toxoptera aurantii* (B&F)	Hemiptera	Aphididae	Twig shoot bud	Low	+	8
130.		Trunk borer	*Zeuzera coffeae* Nietner	Lepiodptera	Cossidae	Stem, twig	Low	+	9, 16
131.	Banana (*Musa* spp.)	Spotted grasshopper	*Aularches miliaris* (Linneaus)	Orthoptera	Acrididae	Leaf	Low	+	3, 16
132.		Stem weevil	*Cosmopolites sordidus* (Germar)	Coleoptera	Curculionidae	Stem, peudostem	Low	+	3, 13, 16

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
133.		Stem borer	*Odoiporus longicollis* Olivier	Coleoptera	Curculionidae	Stem, peudostem	Low	+	3, 8, 16
134.		Leaf and fruit beetle	*Nodostoma viridipennis* Motschulsky	Coleoptera	Chrysomelidae	Young leaf, fruit	High	+++	1, 3, 13, 16
135.		Scale insect	*Lecanium discrepans* Green	Coccidae	Homoptera	Leaf	Low	+	16
136.	Coconut (*Cocos nucifera*)	Scale insect	*Aonidiella orientalis* Newstead	Diaspididae	Homoptera	Leaf	Low	+	9
137.		Scale insect	*Aspidiotus destructor* Signoret	Diaspididae	Homoptera	Leaf	Low	+	9, 16
138.		Spotted grasshopper	*Aularches miliaris* (Linneaus)	Orthoptera	Acrididae	Leaf	Low	+	9, 16
139.		Army ant	*Dorylus orientalis* Westwood	Hymenoptera	Formicidae	Seedling	Low	+	9
140.		Eriyophid mite	*Eriyophyes guerreronis* Keifer	Acarina	Eriophyidae	Young fruit	High	+++	1, 13
141.		Leaf miner	*Nephantis serinopa* Meyrick	Lepidoptera	Xyloryctidae	Leaf	High	+++	9, 16
142.		Termite	*Odontotermes obesus* Rambur	Isoptera	Termitidae	Seedling and young shoot	High	+++	9
143.		Rhinoceros beetle	*Oryctes rhinoceros* Linneaus	Coleoptera	Dynastidae	Leaf, shoot	High	+++	1, 3, 9, 13, 16
144.		Slug caterpillar	*Parsa lepida (Cramer)*	Lepiodptera	Limacodidae	Leaf	Low	+	9
145.		Red palm weevil	*Rhynchophorus ferrugineus* Olivier	Coleoptera	Curculionidae	Crwon	High	+++	3, 9
146.		Tropical fire ant	*Solenopsis geminata* Fabricius	Hymenoptera	Formicidae	Seedling leaf and bud	Low	+	9
147.		Bark beetle	*Xyleborus perforans* Wollaston	Coleoptera	Scolytidae	Stem and fallen wood	High	+++	9
148.	Pineapple (*Ananas comosus*)	Pineapple mealybug	*Dysmicoccus brevipes* (Cockerell)	Homoptera	Pseudococcidae	Leaf, fruit	High	+++	3, 16
149.		Slug caterpillar	*Parsa lepida (Cramer)*	Lepiodptera	Limacodidae	Leaf	Low	+	9
150.		Thrips	*Thripis tabaci* (Lindermann)	Thysanoptera	Thripidae	Leaf	Low	+	8

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
151.	Papaya (*Carica papaya*)	Spiraling whitefly	*Aleurodicus dispersus* Russell	Homoptera	Aleyrodidae	Leaf	Medium	++	8
152.		Scale insect	*Aspidiotus destructor* Signoret	Diaspididae	Homoptera	Leaf	Low	+	9, 16
153.		Oriental fruit fly	*Bactrocera dorsalis* Fabricius	Diptera	Trypetidae	Fruit	High	+++	3, 9, 14
154.		Striped mealybug	*Ferrisia virgata* (Cockerell)	Homoptera	Pseudococcidae	Stem, leaf, fruit	Medium	++	16, 18
155.		Aphid	*Myzus persicae* (Sulzer)	Homoptera	Aphididae	Leaf, flower, fruit	Low	+	3, 9
156.		Papaya mealybug	*Paracoccus marginatus* Williams & Granara de Willink	Homoptera	Pseudococcidae	Leaf, flower, fruit	High	+++	15
157.		Red spider mite	*Tetranychus urticae* Koch	Acari	Tetranychidae	Leaf	Medium	++	8
158.	Ber (*Zizyphus* spp.)	Scale insect	*Aonidiella orientalis* Newstead	Homoptera	Diaspididae	Leaf	Low	+	8
159.		Ber tube spittle bug	*Aphrophora saratogensis* (Fitch)	Homoptera	Aphrophoridae	Flower	Medium	+++	13
160.		Fruit fly	*Carpomya vesuviana* Costa	Diptera	Tephritidae	Fruit	High	+++	3, 9, 16
161.		Defoliator	*Cricula trifenestrata* Helfer	Lepidoptera	Saturniidae	Leaf	Low	+	3, 9
162.		Tussock moth	*Dasychira mendosa* Hubner	Lepidopera	Lymantriidae	Leaf	Low	+	3, 9
163.		Tussock moth	*Euproctis fraterna* (Moore)	Lepidopera	Lymantriidae	Leaf	Low	+	3, 9
164.		Grey weevil	*Myllocerus discolor* Boheman	Coleoptera	Curculionidae	Leaf, shoot	Low	+	3, 9
165.		Termite	*Odontotermes obesus* Rambur	Isoptera	Termitidae	Seedling and young shoot	High	+++	3
166.		Auger beetle	*Sinoxylon anale* Lesne	Coleoptera	Bostrychidae	Wood	High	+++	9
167.		Nut weevil	*Xanthochelus supercilosus* (Gyllenhal)	Coleoptera	Curculionidae	Seed	Low	+	13

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
168.	Pomegranate (*Punica granatum*)	Scale insect	*Aonidiella aurantii* Maskell	Homoptera	Coccidae	Leaf, stem, fruit	Low	+	3, 9,16
169.		Fruit borer	*Araecerus intangens Walker*	Coleoptera:	Anthribidae	Fruit	Low	+	9
170.		Fruit fly	*Bactrocera zonata* (Saunders)	Diptera	Tephritidae	Fruit	Medium	++	9, 14
171.		Fruit borer	*Dichocrocis punctiferalis* (Guenee)	Lepidoptera	Crambidae	Leaf	Medium	++	9
172.		Tussock moth	*Euproctis fraterna* (Moore)	Lepidopera	Lymantriidae	Leaf	Low	+	9
173.		Scale insect	*Icerya aegyptiaca* (Douglas)	Hemiptera	Coccidae	Leaf, shoot, branch	Low	+	9
174.		Bark eating caterpillar	*Indarbela tetraonis* Moore	Lepidoptera	Indarbelidae	Stem and bark	Low	+	9
175.		White weevil	*Myllocerus undecimpustulatus* Marshall	Coleoptera	Curculionidae	Leaf , shoot, inflorescence	Low	+	9
176.		Slug caterpillar	*Parsa lepida (Cramer)*	Lepiodptera	Limacodidae	Leaf	Low	+	9
177.		Fruit borer	*Virachola isocrates* Fabricius	Lepidoptera	Lycaenidae	Fruit, seed	High	+++	1,3, 9, 13
178.	Hog plum (*Spondias mangifera*)	Stem borer	*Batocera rufomaculata* De Geer	Coleoptera	Cerambycidae	Wood	Low	+	9
179.		Defoliator	*Cricula trifenestrata* Helfer	Lepidoptera	Saturniidae	Leaf	Low	+	9
180.		Scale insect	*Icerya aegyptiaca* (Douglas)	Hemiptera	Coccidae	Leaf, shoot, branch	Low	+	9
181.		Powder-post beetle	*Lyctus africanus* Lesne	Coleoptera	Bostrychidae	Sapwood	High	+++	9
182.		Stem borer	*Platypus indicus* Strohmeyer	Coleoptera	Platypodidae	Wood	High	+++	9
183.		Hog plum beetle	*Podontia 14-punctata* Linneaus	Coleoptera	Chrysomelidae	Leaf	High	+++	1,3, 9,13
184.		Defoliator	*Selepa celtis Moore*	Lepidoptera	Noctuidae	Leaf	Low	+	9
185.		Bark beetle	*Xyleborus interjectus* Blandford	Coleoptera	Scolytidae	Fallen wood	High	+++	9

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
186.		Bark beetle	*Xyleborus perforans* Wollaston	Coleoptera	Scolytidae	Wood	High	+++	9
187.	Sapota (*Achras zapota*)	Citrus blackfly	*Aleurocanthus woglumi* Ashby	Homoptera:	Aleyrodidae	Leaf	Low	+	3, 9
188.		Oriental fruit fly	*Bactrocera dorsalis* Fabricius	Diptera	Tephritidae	Fruit	Low	+	3, 9, 14
189.		Scale insect	*Chloropulvinaria psidii* Maskell	Homoptera	Coccidae	Leaf and branch	Low	+	3, 9, 14
190.		Scale insect	*Coccus indicus* Green	Homoptera	Coccidae	Leaf and branch	Low	+	9
191.		Hopper	*Idioscospus clypealis* Lethierry	Homoptera	Cicadellidae	Inflorescence	High	+++	3, 9
192.		Chiku moth	*Nephopteryx eugraphella* Ragonot	Lepidoptera	Crambidae	Foligage, flower bud, young fruit	High	+++	9
193.		Fruit borer	*Virachola isocrates* Fabricius	Lepidoptera	Lycaenidae	Fruit, seed	High	+++	3, 9
194.	Wood apple (*Aegle mamelos*)	Scale insect	*Aonidiella orientalis* Newstead	Homoptera	Diaspididae	Leaf	Low	+	9
195.		Chrysomelid beetle	*Clitea picta* Baly	Coleoptera	Chrysomelidae	Leaf , shoot, young fruit	High	+++	9
196.		Scale insect	*Coccus viridis* Green	Homoptera	Homoptera	Leaf , shoot, branch	Low	+	9
197.		Fruit and seed borer	*Cryptophlebia illepida* (Butler)	Lepidoptera	Tortricidae	Fruit, seed	High	+++	9
198.		Fruit borer	*Euzophera plumbeifascialla* Haworth	Lepidoptera	Crambidae	Fruit	High	+++	3, 9
199.		Grey weevil	*Myllocerus discolor* Boheman	Coleoptera	Curculionidae	Leaf , shoot, inflorescence	Low	+	9
200.		Lemon butterfly	*Papilio demoleus* Linneaus	Lepidoptera	Papilionidae	Leaf	Low	+	9
201.		Leaf roller	*Psorosticha zizyphi* (Stainton)	Lepidoptera	Oecophoridae	Leaf	Low	+	9

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
202.		Auger beetle	*Sinoxylon crassum* Lesne	Coleoptera	Bostrychidae	Sapwood	High	+++	9
203.		Bark beetle	*Xyleborus similis* Ferrari	Coleoptera	Scolytidae	Fallen wood	Low	+	9
204.	Cashew nut (*Anacardium occidentale*)	Scale insect	*Aonidiella orientalis* Newstead	Homoptera	Diaspididae	Leaf	Low	+	9
205.		Meal moth	*Corcyra cephalonica* (Stainton)	Lepidoptera	Crambidae	Dry fruit	High	+++	9
206.		Defoliator	*Cricula trifenestrata* Helfer	Lepidoptera	Saturniidae	Leaf	Low	+	9
207.		Tea mosquito bug	*Helopeltis antonii* Signoret	Hemiptera	Capsidae	Young shoot	High	+++	9
208.		Bark eating caterpillar	*Indarbela tetraonis* Moore	Lepidoptera	Indarbelidae	Stem and bark	Low	+	9
209.		Grey weevil	*Myllocerus discolor* Boheman	Coleoptera	Curculionidae	Leaf , shoot, inflorescence	Low	+	9
210.		Saw toothed grain beetle	*Oryzaephilus surinamensis (Linneaus)*	Coleoptera	Silvanidae	Dry fruit	High	+++	9
211.		Slug caterpillar	*Parsa lepida (Cramer)*	Lepiodptera	Limacodidae	Leaf	Low	+	9
212.	Carambola (*Averrhoa carambola)*	Flower moth	*Diacrotricha fasciola* (Zeller)	Lepiodptera	Pterophoridae	Flower	Low	+	9
213.		Long horn beetle	*Stromatium barbatum* (*Fabricius)*	Coleoptera	Cerambycidae	Dry wood	Low	+	9
214.	Lotkon (*Baccaurea ramiflora*)	Leaf weevil	*Apoderus* sp.	Coleoptera	Curculionidae	Leaf	Low	+	9
215.		Defoliator	*Cyclosia papilionaris* Drury	Lepiodptera	Zygaenidae	Leaf	Low	+	9
216.	Elephant apple (*Dillenia indica)*	Leaf roller	*Archips micaceanus* (*Walker*)	Lepidopera	Tortricidae	Leaf	Low	+	9
217.		Atlas moth	*Attacus atlas* Linneaus	Lepiodptera	Saturniidae	Leaf	Low	+	9
218.		Fruit borer	*Dichocrocis evaxalis* Walker	Lepidoptera	Pyralidae	Fallen fruit	Low	+	9
219.		Yellow peach moth/ Fruit borer	*Dichocrocis punctiferalis* Guenee	Lepidoptera	Pyralidae	Fruit	Low	+	9

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
220.	River ebony/ Deshi gab (*Diospyros malabarica*)	Leaf miner	*Acrocercops ustula* Stainton	Lepidoptera	Lithocolledidae	leaf	Low	+	9
221.		Weevil	*Myllocerus setulifer* Desbrochers	Coleoptera	Curculionidae	leaf	Low	+	9
222.		Long horn beetle	*Stromatium barbatum* Fabricius	Coleoptera	Cerambycidae	wood	low	+	9
223.	Velvet apple/ Belati gab (*Diospyros blancoi*)	Leaf eating caterpillar	*Catopsilia crocale* Cramer	Lepidoptera	Pieridae	leaf	Low	+	9, 10
224.		Defoliator	*Metanastria hyrtaca* Cramer	Lepidoptera	Lasiocampidae	Leaf	Low	+	9
225.		Tussock moth	*Orgyia postica* Walker	Lepidoptera	Lymantriidae	leaf	Low	+	9
226.	Olive / Jalpai (*Olea europea*)	Wood borer	*Agrilus elaeocarpi* Thery	Coleoptera	Buprestidae	Sap wood of dead wood	Low	+	9
227.		Leaf roller	*Argyroploce tonica* Meyrick	Lepidoptera	Torticidae	Young leaf	Low	+	9
228.		Wood and fruit borer	*Coccotrypes ealeocarpi* Beeson	Coleoptera	Scolytidae	Wood and fruit	Low	+	9
229.		Defoliator	*Horaga viola* Moore	Lepidoptera	Lycaenidae	Leaf	Low	+	9
230.		Sap sucker	*Pinnaspis scrobicularum* Green	Homoptera	Diaspitididae	Sap	Low	+	9
231.		Wood borer	*Platypus furcatus* Blandford	Coleoptera	Platypodidae	Fallen wood	Low	+	9
232.		Wood borer	*Stromatium barbatum* Fabricius	Coleoptera	Cerambycidae	Dry wood	Low	+	9
233.		Fruit borer	*Thamnurgides indicus*	Coleoptera	Scolitidae	Fruit	Low	+	9
234.		Wood borer	*Xylothrips flavipes* (Illiger)	Coleoptera	Bostrychidae	Sap wood of dead wood	Low	+	9
235.	Monkey apple / Kathbel (*Limonia acidissima*)	Scale insect	*Aonidiella citrina* Coquillett	Homoptera	Diaspididae	Leaf twig branch and fruit	Low	+	9
236.		Fruit and seed borer	*Cryptophlebia illepida* Butler	Lepidoptera	Tortricidae	Pulp of fruit, seed	High		9
237.		Wood borer	*Demonax limoniae* Gardner	Coleoptera	Cerambycidae	Dead wood	Low	+	9

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
238.		Defoliator	*Euproctis fraterana* Moore	Lepidoptera	Lymantriidae	Leaf	High		9
239.		Fruit borer	*Euzophera plumbeifascialla* Haworth	Lepidoptera	Crambidae	Fruit	High	+++	3, 9
240.		Mealybug	*Ferrisiana virgata* Cockerell	Homoptera	Pseudococcidae	Leaf shoot and fruit	Low	+	9
241.		Fruit borer	*Heteroghaphis bengalella* Rag	Lepidoptera	Crambidae	Fruit	Low	+	9
242.		Lac insect	*Kerria lacca* Kerr	Homoptera	Lacciferidae	Stem and leaves	Low	+	9
243.		Defoliator	*Narosa confersa* Walker	Lepidoptera	Limacodidae	Leaf	Low	+	9
244.		Defoliator	*Papilio demoleus* Linnaeus	Lepidoptera	Papilionidae	Leaf	Low	+	9
245.		Defoliator	*Parasa lepida* Cramer	Lepidoptera	Limacodidae	Leaf	Low	+	9
246.		Wood borer	*Stromatium barbatum* Fabricius	Coleoptera	Cerambycidae	Dry wood	Low	+	9
247.		Fruit borer	*Virachola Isocrates* Fabricius	Lepidoptera	Lycaeniade	Fruit, seed	High	+++	9
248.	Indian blackberry / Kalo jam *(Syzygium cumini)*	Leaf miner	*Acrocerocops telestis* Meyrick	Lepiodptera	Lithocolletidae	Leaf	Low	+	9
249.		Leaf roller	*Agrotera basinotata* Hampson	Lepidoptera	Crambidae	Leaf	High	+++	9
250.		Leaf webber	*Archips micaceanus* Walker	Lepidoptera	Tortricidae	Leaf	High	+++	9
251.		Fruit borer	*Balaninus c-album* Fabricius	Coleoptera	Curculionidae	Fruit	High	+++	3, 9
252.		Wood borer	*Basitropis nitidicutis* Jekel	Coleoptera	Anthribidae	Dead wood	Low	+	9
253.		Wood borer	*Crossotarsus saundersi* Chapuis	Coleoptera	Platypodidae	Sapwood	High	+++	9
254.		Long horn beetle	*Batocera rufumaculata* De Geer	Coleoptera	Cerambycidae	Bark and sapwood	High	+	9
255.		Bagworm	*Cryptothelea crameri* Westwood	Lepidoptera	Psychidae	Leaf, shoot, bud, & make bag	Low	+	9

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
256.		Giant mealybug	*Drosicha mangifearae* Green	Hemiptera	Monophlebidae	Leaf , twig, shoot	Low but locally high	+	9
257.		Bark eating caterpillar	*Indarbela quadrinotata* Walker	Lepidoptera	Indarbelidae	Stem and bark	Low	+	9
258.		Thrips	*Leewenia karnyiana* Priesner	Thysanoptera	Phalaeothripidae	Leaf	Low	+	16
259.		Pink gypsy moth	*Lymantria mathura* Moore	Lepidopera	Erebidae	Leaf, inflorescence, bark of shoot	Low	+	9
260.		Hairy caterpillar	*Selepa celtis* Moore	Lepidopera	Nolidae	Leaf	Low	+	9
261.		Auger beetle	*Sinoxylon anale* Lesne	Coleoptera	Bostrychidae	Sapwoood of dead wood	High	+++	9
262.		Seed weevil	*Sitophilus rugicollis* Casey	Coleoptera	Curculionidae	Seed	High	+++	9
263.		Fruit borer	*Thamnurgides indicus* Eggers	Coleoptera	Scolytidae	Fruit	High	+++	9
264.		Leaf gall	*Trioza jambolanae* Crawford	Homoptera	Psyllidae	Leaf	Low	+	9
265.		Bark beetle	*Xyleborus bicolor* Blandford	Coleoptera	Scolytidae	Fallen wood	High	+++	9
266.	Tamarind (*Tamarindus indica*)	Scale insect	*Aonidiella orientalis* Newstead	Homoptera	Diaspidiodae	Fruit	Low	+	9
267.		Seed borer	*Calandra linearis* Herbst	Coleoptera	Curculionidae	Dry seed	High	+++	9
268.		Seed borer	*Caryedon gonagra* Fabricius	Coleoptera	Bruchidae	Dry seed	High	+++	9
269.		Fruit and seed borer	*Cryptophlebia illepida* Butler	Lepidoptera	Tortricidae	Seed	Low	+	9
270.		Bagworm	*Cryptothelea crameri* Westwood	Lepidoptera	Psychidae	Twig shoot bud	Low	+	9
271.		Fruit and seed borer	*Ephestia sp.*	Lepidoptera	Crambidae	Seed	High	+++	9
272.		Defoliator	*Euproctis scintillans* Walker	Lepidoptera	Lymantriidae	Leaf	Low	+	9

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
273.		Pod sucker	*Hemiberlesia lataniae* Signoret	Hemiptera	Diaspididae	Pod	Low	+	9
274.		Cigarette beetle	*Lasioderma serricorne* Fabricius	Coleoptera	Anobiidae	Seed	High	+++	9
275.		Sap sucker	*Oxyrhachis tarandus* Fabricius	Hemiptera	Membracidae	Petiole shoot branch	Low	+	9
276.		Fruit sucker	*Saissetia oleae* Bernard	Hemiptera	Cocciade	Fruit and fruit stalk	Low	+	9
277.		Hairy caterpillar	*Selepa celtis* Moore	Lepidoptera	Noctuidae	Leaf	Low	+	9
278.		Red flower beetle	*Tribolium castaneum* Herbst	Coleoptera	Tenebrionidae	Seed	High	+++	9
279.		Fruit borer	*Virachola isocrates* Fabricius	Lepidoptera	Lycaenidae	Fruit, seed	Low	+	9
280.	Dewa / Bon Kanthal (*Artocarpus lacucha*)	Wood borer	*Basitropis nitidicutis* Jekel	Coleoptera	Anthribidae	Sapwood of dead wood	Low	+	9
281.		Wood borer	*Beliona prasina* Thunberg	Coleoptera	Buprestidae	Sapwood of dead wood	Low	+	9
282.		Wood borer	*Crossotarsus squamulatus* Chapuis	Coleoptera	Platypodidae	Sapwood	High	+++	9
283.		Wood borer	*Stromatium barbatum* Fabricius	Coleoptera	Cerambycidae	Dry wood	Low	+	9
284.		Bark beetle	*Xyleborus interjectus* Blandford	Coleoptera	Scolytidae	Fallen wood	High	+++	9
285.	Watermelon / Melon (*Citrullus lanatus, Cucumis melo*)	Black cutworm	*Agrotis ipsilon* (Hufnagel)	Lepidoptera	Noctuidae	Seedling	Medium	++	3,4
		Aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	Leaf and stem	Low	+	3, 4
286.		Pumpkin beetle	*Aulacophora abdominalis* Fabricius	Coleoptera	Chrysomelidae	Leaf	High	+++	11
287.		Pumpkin beetle	*Aulacophora foveicollis* (Lucas)	Coleoptera	Chrysomelidae	Leaf	High	+++	11
288.		Fruit fly	*Bactrocera cucurbitae* (Coquillett)	Diptera	Tephritidae	Fruit	High	+++	14
289.		Fruit fly	*Bactrocera latifrons* (Hendel)	Diptera	Tephritidae	Fruit	Low	+	14
290.		Fruit fly	*Dacus ciliatus* (Loew)	Diptera	Tephritidae	Fruit	Low	+	14

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
291.		Epilachna beetle	*Epilachna dodecastigma* (Wiedemann)	Coleoptera	Coccinellidae	Leaf	High	+++	4
292.		Aphid	*Myzus persicae* (Sulzer)	Homoptera	Aphididae	Leaf, flower, fruit	Low	+	3, 4, 11
293.	Amloki (*Phyllanthus emblica*)	Wood borer	*Anthaxia phyllanthi* Obenberger	Coleoptera	Buprestidae	Dead wood	Low	+	9
294.		Gall insect	*Asphondylia phyllanthi* Felt	Diptera	Cecidomyiidae	Leaf, shoot	Low	+	9
295.		Wood borer	*Crossotarsus saundersi* Chapuis	Coleoptera	Platypodidae	Fallen wood	High	+++	9
296.		Tussock moth	*Dasychira mendosa* Hübner	Lepidopera	Erebidae	Leaf	Low	+	9
297.		Tussock moths	*Euproctis fraterna Moore*	Lepidopera	Erebidae	Leaf	Low	+	9
298.		Castor hairy caterpillar	*Euproctis lunata Walker*	Lepidopera	Erebidae	Leaf	Low	+	9
299.		Bark eating caterpillar	*Indarbela quadrinotata* Walker	Lepiodptera	Inderbelidae	Stem, bark	Low	+	9
300.		Powder-post beetle	*Lyctus africanus* Lesne	Coleoptera	Bostrychidae	Sapwood of dead wood	High	+++	9
301.		Powder-post beetle	*Minthea rugicollis* (Walker)	Coleoptera	Bostrychidae	Sapwood of dead wood	High	+++	9
302.		Defoliator	*Parallelia crameri* Moore	Lepiodptera	Noctuidae	Leaf	Low	+	9
303.		Defoliator	*Selepa celtis* Moore	Lepiodptera	Noctuidae	Leaf	Low	+	9
304.		Auger beetle	*Sinoxylon atratum* Lesne	Coleoptera	Bostrychidae	Sapwoood	High	+++	9
305.		Bark beetle	*Xyleborus laticollis* Blandford	Coleoptera	Scolytidae	Fallen wood	Low	+	9
306		Wood borer	*Xylodectes ornatus* Lesne	Coleoptera	Bostrychidae	Sapwoood	Low	+	9
307.		Red coffee borer / coffee carpenter	*Zeuzera coffeae* Nietner	Lepiodptera	Cossidae	Stem, twig	Low	+	9

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
308.	Karonda *(Carissa caracdas)*	Castor semilooper	*Achaea janata* (Linneaus)	Lepidoptera	Noctuidae	Leaf	Low	+	19
309.		Fruit fly	*Bactrocera dorsalis* (Hendel)	Diptera	Tephritidae	Fruit	High	+++	14, 19
310.		Caterpillar	*Euploea core* (Cramer)	Lepiodptera	Nymphalidae	Leaf	Low	+	10, 19
311.		Tussock caterpillar	*Euproctis* sp	Lepiodptera	Lymantriiidae	Leaf	Low	+	9, 19
312.		Ants	*Oecophylla smaragdina* Fabricius	Hymenoptera	Formicidae	Leaf	Low	+	19
313.		Tussock moth	*Olene mendosa* Hübner	Lepidoptera	Erebidae	Leaf	Low	+	19

2.8.1 References

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2.9 Recording Insect and Mite Pests of Spices Crops

Insect and mite pests of 15 different spices crops are included under this category. Altogether 75 insect and mite pests of spices crops are listed in Table 9 of which 46 pests were in the range of medium to high with common to wide distribution in the country. Plant parts affected include seedling, leaf, stem, twig, bud, bulb, flower, inflorescence, fruits and seed.

Table 9. Insect and Mite Pests of Spices Crops

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
01.	Onion (*Allium cepa*)	Cut worm	*Agrotis ipsilon* (Hufnagel)	Lepidoptera	Noctuidae	Seedling	Medium	++	1, 2, 4, 10, 12
02.		Onion fly	*Delia antiqua Meigen*	Diptera	Anthomyiidae	Bulb, leaf	Low	+	1
03.		Dry bulb mite	*Eriophyes tulipae* Keifer	Prostigmata	Eriophyidae	Bulb, leaf	Medium	++	11
05.		Leaf miner	*Liriomyza sativae* Blanchard	Diptera	Agromyzidae	Leaf	Medium	++	4, 7, 8
06.		Potato aphid	*Myzus persicae* (Sulzer)	Homoptera	Aphididae	leaf	Low	+	9
07.		Beet army worm	*Spodoptera exigua* (Hubner)	Lepiodptera	Noctuidae	Leaf	Medium	++	11
08.		Onion thrips	*Thrips tabaci* Lindeman	Thysanoptera	Thripidae	Leaf, shoot	High	+++	1, 10
		Storage mite	*Tyrophagus* sp.	Prostigmata	Acaridae	Bulb	Low	+	4
09.	Garlic (*Allium sativum*)	Cut worm	*Agrotis ipsilon* (Hufnagel)	Lepidoptera	Noctuidae	Seedling	Medium	++	1, 2, 4, 10, 12
10.		Dry bulb mite	*Eriophyes tulipae* Keifer	Prostigmata	Eriophyidae	Bulb, leaf	Medium	++	11
11.		Leaf miner	*Liriomyza sativae* Blanchard	Diptera	Agromyzidae	Leaf	Medium	++	4
12.		Potato aphid	*Myzus persicae* (Sulz.)	Homoptera	Aphididae	leaf	Low	+	4, 9
13.		Bulb mite	*Rhizoglyphus* sp.	Prostigmata	Acaridae	Bulb	Low	+	4
14.		Beet army worm	*Spodoptera exigua* (Hubner)	Lepiodptera	Noctuidae	Leaf	Medium	++	11

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
15.		Onion thrips	*Thrips tabaci* Lindeman	Thysanoptera	Thripidae	Leaf	High	+++	1, 11
16.	Chili (*Capsicum frutescens*)	Cut worm	*Agrotis ipsilon* (Hufnagel)	Lepidoptera	Noctuidae	Seedling	Medium	++	1
17.		Aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	leaf	High	+++	1, 11, 13
18.		Black ant	*Componotus compressus* Fabricius	Hymenoptera	Formicidae	Root	Low	+	4 11, 13
19.		Fruit borer	*Helicoverpa armigera* (Hubner)	Lepiodptera	Noctuidae	Fruit	Medium	++	
20.		Leaf miner	*Liriomyza sativae* Blanchard	Diptera	Agromyzidae	Leaf	Medium	++	4, 7, 8
21.		Potato aphid	*Myzus persicae* (Sulz.)	Homoptera	Aphididae	leaf	High	+++	1, 11, 13
22.		Yellow mite	*Polyphagotarsonemus latus (*Banks)	Prostigmata	Tarsonemidae	Leaf	High	+++	11, 13
23.		Chilli thrips	*Scirtothrips dorsalis* Hood	Thysanoptera	Thripidae	Leaf, fruit	Low	+	11, 13
24.		Army worm	*Spodoptera exigua* (Hubner)	Lepiodptera	Noctuidae	foliage, leaf	Low	+	11
25.		Prodenia caterpillar	*Spodoptera litura* Fabricius	Lepiodptera	Noctuidae	Leaf	Medium	++	4
26.		Two spotted spider mite	*Tetranychus urticae* Koch	Prostigmata	Tetranychidae	Leaf	Low	+	4
27.	Capsicum (*Capsicum* spp.)	Cut worm	*Agrotis ipsilon* (Hufnagel)	Lepidoptera	Noctuidae	Seedling	Medium	++	11
28.		Cotton aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	leaf	High	+++	1, 11, 13
29.		Fruit borer	*Helicoverpa armigera* (Hubner)	Lepiodptera	Noctuidae	Fruit	Medium	++	11
30.		Potato aphid	*Myzus persicae* (Sulz.)	Homoptera	Aphididae	leaf	High	+++	1, 11, 13
31.		Yellow mite	*Polyphagotarsonemus latus (*Banks)	Prostigmata	Tarsonemidae	Leaf	High	+++	11,13
32.		Chilli thrips	*Scirtothrips dorsalis* Hood	Thysanoptera	Thripidae	Leaf, fruit	Low	+	11,13

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
33.		Two spotted spider mite	*Tetranychus urticae* Koch	Prostigmata	Tetranychidae	Leaf	Medium	++	4, 13
34.		Onion thrips	*Thrips tabaci* Lindeman	Thysanoptera	Thripidae	Leaf, flower	Medium	++	1
35.	Ginger (*Zingiber officinale*)	Shoot fly	*Chalcidomyia atricornis* Malloch	Diptera	Chloropidae	Shoot, rhizome	Medium	++	9, 13
36.		Shoot fly	*Formosina flavipes* Malloch	Diptera	Chloropidae	Shoot, rhizome	Medium	++	9, 13
37.		Rhizome fly	*Mimegralla coerubifrons* Malloch	Diptera	Micropezidae	Rhizome	Medium	++	2, 9, 13
39.		Skipper Butterfly	*Udaspes folus* Cramer	Lepidoptera	Hesperiidae	Leaf	Medium	++	2, 6, 9
40.	Termeric (*Curcuma domestica*)	Rhizome scale	*Aspidiotus hartii* Cockrell	Homoptera	Diaspididae	Rhizome	Low	+	9
41.		Shoot fly	*Chalcidomyia atricornis* Malloch	Diptera	Chloropidae	Shoot, rhizome	Medium	++	9, 13
42.		Shoot borer	*Dichocrocis punctiferalis* Guenee	Lepidoptera	Crambidae	Leaf	Low	+	4
43.		Shoot fly	*Formosina flavipes* Malloch	Diptera	Chloropidae	Shoot, rhizome	Medium	++	9, 13
44.		Rhizome fly	*Mimegralla coerubifrons* Malloch	Diptera	Micropezidae	Rhizome	Medium	++	2, 9, 13
45.		Thrips	*Panchaetothrips indicus* Bagnall	Thysanoptera	Thripidae	Leaf	Low	+	2
		Hairy caterpillar	*Spilarctia obliqua* Walker	Lepidoptera	Arctiidae	Leaf	Low	+	9
46.		Skipper Butterfly	*Udaspes folus* Cramer	Lepidoptera	Hesperiidae	Leaf	Medium	++	2, 9
47.	Coriander (*Coriandrum sativum)*	Cut worm	*Agrotis ipsilon*(Hufnagel)	Lepidoptera	Noctuidae	Seedling	Medium	++	4
48.		Aphids	*Cavariella aegopodii* (Scopoli)	Homoptera	Aphididae	Leaf, stem	Low	+	13

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
49.		Army worm	*Pseudaletia unipuncta* (Haworth)	Lepidoptera	Noctuidae	Leaf	Low	+	12
50.		Drug store beetle	*Stegobium paniceum* (Linneaus)	Coleoptera	Anobidae	Seed	High	+++	3
51.	Black pepper (*Piper nigrum)*	Lace bug	*Diconocoris hewetti* (Distant)	Hemiptera	Tingidae	Inflorescence, young berry	Medium	++	2
52.		Striped mealybug	*Ferrisia virgata* (Cockerell)	Homoptera	Pseudococcidae	Stem, leaf, fruit	Medium	++	12, 15
53.		Citrus mealybug	*Plannococcus citri* Risso	Homoptera	Pseudococcidae	Leaf, shoot, flower, fruit	Low	+	14
54.	Cinnamon (*Cinnamomum verum)*	Gall mite	*Aceria doctersi* (Nalepa)	Acarina	Eriophyidae	Leaf, stem	Low	+	5
55.		Atlas moth	*Attacus atlas* Linneaus	Lepidoptera	Saturnidae	Leaf defoliator	Low	+	5
56.		Butterfly	*Chilasa clytia* Linneaus	Lepidoptera	Papilioniidae	Leaf feeder	High	+++	5
57.		Button beetle	*Coccotrypes dactyliperda* Fabricius	Coleoptera	Scolytidae	Seed borer	Medium	++	5
58.		Brown / hairy tussock moth	*Dasychira mendosa* Hubner	Lepidoptera	Lymantridae	Leaf feeder	Medium	++	5
59.		Gall insect	*Pauropsylla depressa* Crawford	Homoptera	Psyllidae	Shoot / leaf gall	Low	+	5
60.		Leaf miner	*Phyllocnistis chrysophthalma* Meyrick	Lepidoptera	Gracillariidae	Leaf miner	Low	+	5
61.		Leaf roller	*Platypeplus aprobola* Meyrick	Lepidoptera	Tortricidae	Leaf, flower	Low	+	5
62.		Seed borer	*Thamnurgides cinnamomi* Eggers	Coleoptera	Scolytidae	Seed	Medium	++	5
63.		Coffee carpenter/ Coffee red borer	*Zeuzera coffeae* Neitner	Lepidoptera	Cossidae	Stem borer	Low	+	5

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
64.	Tejpata *Cinnamomum tamala*	Leaf gall	*Pauropsylla* sp.	Homoptera	Psyllidae	Leaf	Low	+	5
65.		Long horn beetle	*Stromatium barbatum* Fabricius	Coleoptera	Cerambycidae	Wood	Low	+	5
66.	Clove (*Syzygium aromaticum)*	Scale insect	*Aspidiotus destructor* Signoret	Homoptera	Diaspididae	Leaf	Low	+	5
67.		Fruit fly	*Bactrocera dorsalis* (Hendel)	Diptera	Tephritidae	foliage	Medium	++	5
68.		Soft scale	*Ceroplastes floridensis* Comstock	Homoptera	Coccidae	Leaf	Low	+	5
69.	Fennel (*Foeniculum vulgare)*	Cut worm	*Agrotis ipsilon* (Hufnagel)	Lepidoptera	Noctuidae	Seedling	Low	+	4
70.		Aphids	*Cavariella aegopodii* (Scopoli)	Homoptera	Aphididae	Leaf, stem	Low	+	4
71.		Army worm	*Pseudaletia unipuncta* (Haworth)	Lepidoptera	Noctuidae	Leaf	Low	+	4, 12
72.	Black cumin (*Nigella sativa*)	Aphid	*Aphis craccivora* Koch	Homoptera	Aphididae	Leaf, stem. flower	Medium	++	4
73.	Cumin (*Cuminum cyminum*)	Aphid	*Aphis craccivora* Koch	Homoptera	Aphididae	Leaf, stem. flower	Medium	++	4
74.		Aphid	*Myzus persicae* (Sulzer)	Homoptera	Aphididae	Leaf, stem. flower	Medium	++	4
75.	Tejpata / Indian bay leaf (*Cinnamomum tmala*)	Gall insect	*Pauropsylla tuberculata* Crawford	Homoptera	Psyllidae	Shoot / leaf gall	Low	+	5
76.		Wood borer	*Stromatium barbatum* (Fabricius)	Coleoptera	Cerambycidae	Dry wood	Low	+	5
77.	Fenugreek (*Trigonella foenumgraecum)*	Aphid	*Aphis craccivora* Koch	Homoptera	Aphididae	Leaf, stem. flower	Medium	++	4

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2.10 Recording Insect and Mite Pests of Flower and Ornamental Plants

Insect and mite pests of 21 different flower and ornamental plants are included under the pests of flower crops. Altogether 87 insect and mite pests of flower and ornamental plants are listed in Table 10 of which 70 pests were in the range of medium to high with common to wide distribution in the country. Plant parts affected include seedling, leaf, stem, twig, bud, flower, inflorescence, fruits and seed.

Table 10. Insect and Mite Pests of Flower and Ornamental Plants

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
01.	Marigold (*Tagetes* spp.)	Aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	Leaf, shoot, bud, flower	High	+++	1, 3
02.		Hairy caterpillar	*Diacrisia obliqua* (Walker)	Lepidoptera	Erebidae	Leaf	Medium	+++	7
03.		Defoliator	*Helicoverpa armigera* (Hübner)	Lepidoptera	Noctuidae	Flower bud, flower	Medium	++	7
04.		Leaf miner	*Liriomyza sativae* Blanchard	Diptera	Agromyzidae	Leaf	Medium	++	7
05.		Aphid	*Myzus persicae* (Sulzer)	Homoptera	Aphididae	Leaf, shoot, bud, flower	High	+++	7
06.		Two-spotted mite	*Tetranychus urticae* Koch	Acari	Tetranychidae	Leaf	High	+++	7
07.	Rose (*Rosa* sp.)	Aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	Leaf, shoot, bud, flower	Medium	+++	1, 3, 9
08.		Chafer beetle	*Adoretus serratipes* Arrow	Coleoptera	Scarabaeidae	Leaf, flower	Medium	+++	7
09.		Scale insect	*Aonidiella aurantii* (Maskell)	Homoptera	Coccidae	Leaf, stem, fruit	Low	+	4, 7, 8
10.		Leaf roller	*Archips oporana* (Linnaeus)	Lepidoptera	Trotricidae	Leaf	Low	+	5
11.		Scale insect	*Aspidiotus destructor* Signoret	Homoptera	Diaspididae	Leaf, stem, branch	Low	+	4 , 7
12.		Hairy caterpillar	*Diacrisia obliqua* (Walker)	Lepidoptera	Erebidae	Leaf	Medium	+++	7

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
13.		Hairy caterpillar	*Euproctis lunata* Walker	Lepidoptera	Lymantriidae	Leaf	Low	+	1, 3
14.		Defoliator	*Helicoverpa armigera* (Hübner)	Lepidoptera	Noctuidae	Flower bud, flower	Medium	++	7
15.		Thrips	*Frankliniella occidentalis* (Pergande)	Thysanoptera	Thripidae	Leaf, flower bud, petal	High	+++	7
16.		Leaf miner	*Liriomyza sativae* Blanchard	Diptera	Agromyzidae	Leaf	Medium	++	7
17.		Aphid	*Macrosiphum rosaeformis* Das	Homoptera	Aphididae	Leaf, shoot, bud, flower	High	+++	7
18.		Aphid	*Myzus persicae* (Sulzer)	Homoptera	Aphididae	Leaf, shoot, bud, flower	High	+++	7
19.		Two-spotted mite	*Tetranychus urticae* Koch	Acari	Tetranychidae	Leaf	High	+++	7, 9
20.		Weevil	*Myllocerus richardi*	Coleoptera	Curculionidae	Flower bud, petal	Medium	++	7
21.	Orchid *(Dendrobhium* spp.*)*	Scale insect	*Aspidiotus destructor* Signoret	Homoptera	Diaspididae	Leaf, stem, branch	Low	+	4, 7
22.		Aphid	*Macrosiphum rosaeformis* Das	Homoptera	Aphididae	Leaf, shoot, bud, flower	High	+++	7
23.		Aphid	*Myzus persicae* (Sulzer)	Homoptera	Aphididae	Leaf, shoot, bud, flower	High	+++	7
24.		Mealybug	*Planococcus* sp.	Homoptera	Pseudococcidae	Flowers and leaves	Medium	++	7
25.		Mealybug	*Pseudococcus* sp.	Homoptera	Pseudococcidae	Flowers and leaves	Medium	++	7
26.		Thrips	*Frankliniella occidentalis* (Pergande)	Thysanoptera	Thripidae	Leaf, flower bud, petal	High	+++	7
27.		Two-spotted mite	*Tetranychus urticae* Koch	Acari	Tetranychidae	Leaf	High	+++	7

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
28.	Chinese rose / Joba (*Hibiscus rosa chinensis*)	Chafer beetle	*Adoretus serratipes* Arrow	Coleoptera	Scarabaeidae	Leaf	Medium	+++	7, 9
29.		Aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	Leaf, shoot, bud, flower	High	+++	3
30.		Whitefly	*Bemisia tabaci* (Gennadius)	Homoptera	Aleyrodidae	Leaf	Low	+	3
31.		Hairy caterpillar	*Diacrisia obliqua* (Walker)	Lepidoptera	Erebidae	Leaf	Medium	+++	7
32.		Hairy caterpillar	*Euproctis lunata* Walker	Lepidoptera	Lymantridae	Leaf	Low	+	3, 4
33.		Scale insect	*Icerya aegyptiaca* Douglas	Homoptera	Margarodidae	Leaf branch stem	Low	+	3, 4
34.		Leaf beetle	*Monolepta signata* (Olivier)	Coleoptera	Chrysomelidae	Leaf	Low	+	2, 3
35.		Scale insect	*Toxoptera aurantii* (Boyer de Fonscolombe)	Homoptera	Aphididae	Leaf, shoot, flower, fruit	High	+++	1
36.	Jasmine *(Murraya sp.)*	Aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	Leaf, shoot, bud, flower	High	+++	1, 3
37.		Hairy caterpillar	*Diacrisia obliqua* (Walker)	Lepidoptera	Erebidae	Leaf	Medium	++	7
38.		Thrips	*Frankliniella occidentalis* (Pergande)	Thysanoptera	Thripidae	Leaf, flower bud, petal	High	+++	3, 4
39.		Budworm	*Hendecasis duplifascialis Hampson*	Lepidooptera	Pyraustidae	Flower bud	Medium	++	3
40.		Jasmine thrips	*Thrips orientalis* Bagnall	Thysanoptera	Thripidae	Leaf, flower bud, petal	Medium	++	3
41.	Gladiolus (*Gladiolus hortulanus*)	Aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	Leaf, shoot, bud, flower	High	+++	1, 3
42.		Thrips	*Frankliniella occidentalis* (Pergande)	Thysanoptera	Thripidae	Leaf, flower bud, petal	High	+++	7

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
43.		Aphid	*Macrosiphum euphorbiae* (Thomas)	Homoptera	Aphididae	Leaf, flower bud, petal	High	+++	5
44.		Thrips	*Thrips simplex* (Morison)	Thysanoptera	Thripidae	Leaf, flower bud, petal	Medium	++	5
45.	Gerbera *(Gerbera jamesonii)*	Hairy caterpillar	*Diacrisia obliqua* (Walker)	Lepidoptera	Erebidae	Leaf	Low	+	7
46.		Thrips	*Frankliniella occidentalis* (Pergande)	Thysanoptera	Thripidae	Leaf, flower bud, petal	High	+++	7
47.		Defoliator	*Helicoverpa armigera* (Hübner)	Lepidoptera	Noctuidae	Flower bud, flower	Low	+	7
48.		Leaf miner	*Liriomyza sativae* Blanchard	Diptera	Agromyzidae	Leaf	Medium	++	7
49.	Tuberose (*Polianthes tuberosa*)	Aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	Leaf, shoot, bud, flower	Medium	++	1, 3
50.		Thrips	*Frankliniella occidentalis* (Pergande)	Thysanoptera	Thripidae	Leaf, flower bud, petal	High	+++	7
51.	Chrysanthemum (*Chrysanthemum sinense)*	Hairy caterpillar	*Diacrisia obliqua* (Walker)	Lepidoptera	Erebidae	Leaf	Medium	++	7
52.		Ear wig	*Forficula* sp.	Dermaptera	Forficulidae	Flower petal	Medium	++	5
53.		Thrips	*Frankliniella occidentalis* (Pergande)	Thysanoptera	Thripidae	Leaf, flower bud, petal	High	+++	7
54.		Defoliator	*Helicoverpa armigera* (Hübner)	Lepidoptera	Noctuidae	Flower bud, flower	Low	+	7
55.		Leaf miner	*Liriomyza sativae* Blanchard	Diptera	Agromyzidae	Leaf	Medium	++	7
56.		Aphid	*Macrosiphum rosaeformis* Das	Homoptera	Aphididae	Leaf, shoot, bud, flower	High	+++	7
57.		Aphid	*Myzus persicae* (Sulzer)	Homoptera	Aphididae	Leaf, shoot, bud, flower	High	+++	7
58.		Two-spotted mite	*Tetranychus urticae* Koch	Acari	Tetranychidae	Leaf	High	+++	7

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
59.	Zinnia (*Zinnia elegans*	Aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	Leaf, shoot, bud, flower	Medium	++	1, 3
60.		Hairy caterpillar	*Diacrisia obliqua* (Walker)	Lepidoptera	Erebidae	Leaf	Low	+	7
61.		Tarnished plant bug	*Lygus ragulipennis* Poppius	Hemiptera	Miridae	Leaf, stem, floer	Medium	++	5
62.		Aphid	*Myzus persicae* (Sulzer)	Homoptera	Aphididae	Leaf, shoot, bud, flower	High	+++	7
63.		Two-spotted mite	*Tetranychus urticae* Koch	Acari	Tetranychidae	Leaf	High	+++	7
64.	Dahlia (*Dahlia* sp.)	Aphid	*Aphis fabae* Scopoli	Homoptera	Aphididae	Leaf, shoot	High	+++	5
65.		Leaf caterpillar	*Nymphula responsalis* Walker	Lepidoptera	Nymphalidae	Leaf, Flower	Low	+	1, 5, 6, 8
66.		Leaf caterpillar	*Phlogophora meticulosa* (Linnaeus)	Lepidoptera	Noctuidae	Leaf, Flower	Low	+	5, 8
67.		Flower caterpillar	*Progonia partonalis* Walker	Lepidoptera	Noctuidae	Flower	Low	+	5, 8
68.		Two-spotted mite	*Tetranychus urticae* Koch	Acari	Tetranychidae	Leaf	High	+++	7
69.	Lily *(Lilium longiflo rum)*	Aphid	*Dysaphis tulipae* (Boyer de Fonscolombe)	Homoptera	Aphididae	Bulb	Medium	++	5
70.		Lili beetle	*Lilioceris lilii* (Scopoli)	Coleoptera	Chrysomelidae	Leaf	Medium	++	5
71.		Tobacco caterpillar	*Spodoptera litura* Hubner	Lepidotpera	Noctuidae	Leaf	Low	+	3
72.	Carnation *(Dianthus* spp*.)*	Aphid	*Myzus persicae* (Sulzer)	Homoptera	Aphididae	Leaf, shoot, bud, flower	Medium	++	5
73.									5
74.	Madhabilata *(Hiptage* spp*.)*	Spiraling whitefly	*Aleurodicus disperses* Russell	Homoptera	Aleyrodidae	Leaf	Medium	++	5
75.		Mealybug	*Planococcus* sp.	Homoptera	Pseudococcidae	Flowers and leaves	Medium	+++	7

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
76.		Mealybug	*Pseudococcus* sp.	Homoptera	Pseudococcidae	Flowers and leaves	Medium	+++	7
77.	Aster *(Aster* spp.*)*	Tarnished plant bug	*Lygus ragulipennis* Poppius	Hemiptera	Miridae	Leaf, stem, flower bud	Medium	++	5
78.		Aphid	*Macrosiphum euphorbiae* (Thomas)	Homoptera	Aphididae	Leaf, flower bud, petal	High	+++	5
79.	Croton / Patabahar *(Codiaeum* spp.*)*	Mealybug	*Planococcus* sp.	Homoptera	Pseudococcidae	Flowers and leaves	Medium	+++	7
80.		Mealybug	*Pseudococcus* sp.	Homoptera	Pseudococcidae	Flowers and leaves	Medium	+++	7
81.	Snapdragon *(Antirrhinum* sp.*)*	Aphid	*Macrosiphum euphorbiae* (Thomas)	Homoptera	Aphididae	Leaf, flower bud, petal	High	+++	5
82.		Aphid	*Myzus persicae* (Sulzer)	Homoptera	Aphididae	Leaf, shoot, bud, flower	Medium	++	5
83.	Ixora *(Ixora* spp.*)*	Mealybug	*Planococcus* sp.	Homoptera	Pseudococcidae	Flowers and leaves	Medium	+++	7
84.		Mealybug	*Pseudococcus* sp.	Homoptera	Pseudococcidae	Flowers and leaves	Medium	+++	7
85.	Camellia *(Camellia* spp.*)*	Weevil	*Otiorrhynchus sulcatus* (Fabricius)	Coleoptera	Cuculionidae	Shoot, bud	Medium	+++	5
86.	Gardenia *(Gardenia* spp*)*	Mealybug	*Planococcus* sp.	Homoptera	Pseudococcidae	Flowers and leaves	Medium	+++	7
87.		Mealybug	*Pseudococcus* sp.	Homoptera	Pseudococcidae	Flowers and leaves	Medium	+++	7
88.	Delphinium *(Delphinium* spp.*)*	Delphinium moth	*Polychrisia moneta* (Fabricius)	Lepidoptera	Noctuidae	Leaf, bud, flower	Medium	+++	5

2.10.1 References

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2.11 Recording Insect and Mite Pests of Forest trees

Insect and mite pests of 52 different forest trees are included under the pests of forest trees. Altogether 546 insect and mite pests of forest trees are listed in Table 11 of which 255 pests were in the range of medium to high `with common to wide distribution in the country. Plant parts affected include seedling, root, leaf, stem, twig, bud, flower, inflorescence, fruits and seed.

Table 11. Insect and Mite Pests of Forest trees

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
01.	Australian acacia (Akashmoni *Acacia auriculiformis)*	Scarab beetle	*Adoretus bimarginatus* Ohaus	Coleoptera	Scaraebidae	Leaf, root	High	++	3
02.		Red cotton bug	*Dysdercus cingulatus* Fabricius	Hemiptera	Pyrrhocoridae	Leaf, shoot	Low	+	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
03.		Bark eating caterpillar	*Indarbela quadrinotata* Walker	Lepiodptera	Inderbelidae	Stem, bark	Low	+	3
04.		Lac insect	*Kerria lacca* Kerr	Homoptera	Lacciferidae	Stem	Low	+	3
05.		Tussock moth	*Orgyia turbata* Butler	Lepiodptera	Lymantridae	Leaf	Low	+	3
06.		Auger beetle	*Sinoxylon anale* Lesne	Coleoptera	Bostrychidae	Wood	High	+++	3
07.		Auger beetle	*Sinoxylon crassum* Lesne	Coleoptera	Bostrychidae	Sapwood	High	+++	3
08.		Bark beetle	*Xyleborus* sp.	Coleoptera	Scolytidae	Wood	Low	+	3
09.		Red coffee borer / coffee carpenter	*Zeuzera coffeae* Nietner	Lepiodptera	Cossidae	Stem, twig	Low	+	3
10.	Cutch tree (Khair) *(Acacia catechu)*	Metallic wood boring beetle	*Acmaeodera aurifera* Laporte & Gory	Coleoptera	Buprestidae	Branch, root	Low	+	3
11.		Stem borer	*Batocera rufomaculata* De Geer	Coleoptera	Cerambycidae	Wood	Low	+	3 , 8
12.		Seed borer	*Bruchus bilineatopygus* Pic	Coleoptera	Bruchidae	Seed	High	+++	3
13.		Scale insect	*Coccus elongatus* Signoret	Homoptera	Coccodae	Leaf, shoot	Low	+	3
14.		Ghoon	*Heterobostrychus hematipennis* Lesne	Coleoptera	Bostrychidae	Wood	High	+++	3
15.		Bark eating caterpillar	*Indarbela quadrinotata* Walker	Lepiodptera	Inderbelidae	Stem, bark	Low	+	3
16.		Lac insect	*Kerria lacca* Kerr	Homoptera	Lacciferidae	Stem	Low	+	3
17.		Weevil	*Mylleocerus catechu* Marshall	Coleoptera	Coleoptera	Foliage, roots	Low	+	3
18.		Stem borer	*Platypus solidus* Walker	Coleoptera	Platypodidae	Wood	High	+++	3
19.		Auger beetle	*Sinoxylon anale* Lesne	Coleoptera	Bostrychidae	Wood	Low	+	3
20.		Bark beetle	*Xyleborus* sp.	Coleoptera	Scolytidae	Wood	Low	+	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
21.	Babla (*Acacia nilotica)*	Metallic wood boring beetle	*Acmaeodera aurifera* Laporte & Gory	Coleoptera	Buprestidae	Branch, root	Low	+	3
22.		Babul scale	*Anomalococcus indicus Ramakrishna Ayyar*	Homoptera	Lecanodiaspididae	Twig, branch	High	+++	3
23.		Stem borer	*Batocera rufomaculata* De Geer	Coleoptera	Cerambycidae	Wood	Low	+	3 , 8
24.		Weevil	*Bruchidius* sp.	Coleoptera	Bruchidae	Pod, seed	High	+++	3
25.		Bean weevil	*Caryedon gonagra Fbricius*	Coleoptera	Bruchidae	Seed	High	+++	3
27.		Macadamia nut borer / Litchi borer	*Cryptophlebia illepida* (Butler)	Lepidoptera	Tortricidae	Pod	Low	+	3
28.		Lac insect	*Kerria lacca* Kerr	Homoptera	Lacciferidae	Stem	High	+++	3
29.		Auger beetle	*Sinoxylon anale* Lesne	Coleoptera	Bostrychidae	Wood	High	+++	3
30.		Metallic wood boring beetle	*Sternocera sternocornis* Linneaus	Coleoptera	Buprestidae	Leaf, young shoot, bark	Low	+	3
31.		Bark beetle	*Xyleborus noxius* Sampson	Coleoptera	Scolytidae	Wood	High	+++	3
32.	Black siris (Kalo Korol) *(Albizia lebbeck)*	Aphid	*Aphis craccivora* Koch	Homotera	Aphididae	Leaf, shoot	Low	+	3
33.		Stem borer	*Batocera rufomaculata* De Geer	Coleoptera	Cerambycidae	Wood	Low	+	3, 8
34.		Weevil	*Bruchidius uberatus* Fabricius	Coleoptera	Bruchidae	Pod, seed	High	+++	3
35.		Weevil	*Bruchus piosrum* Linneaus	Coleoptera	Bruchidae	Pod, seed	High	+++	3
36.		Weevil	*Caryedon gonagra Fabricius*	Coleoptera	Bruchidae	Seed	High	+++	3
37.		Scale insect	*Coccus elongatus* Signoret	Homoptera	Coccodae	Leaf, shoot	Low	+	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
38.		Wood borer	*Crossotarsus saundersi* Chapuis	Coleoptera	Platypodidae	Sapwood	High	+++	3
39.		Giant mealybug	*Drosicha mangiferae (*Green)	Homoptera	Monophlebidae	Shoot, twig	Low	+	3
40.		Bark eating caterpillar	*Indarbela quadrinotata* Walker	Lepiodptera	Inderbelidae	Stem, bark	Low	+	3
41.		Powder-post beetle	*Lyctus africanus* Lesne	Coleoptera	Bostrychidae	Sapwood	High	+++	3
42.		Stem borer	*Platypus solidus* Walker	Coleoptera	Platypodidae	Wood	High	+++	3
43.		Defoliator	*Rhesala imparata* Walker	Lepidopera	Noctuidae	Leaf	High	+++	3
44.		Auger beetle	*Sinoxylon anale* Lesne	Coleoptera	Bostrychidae	Wood	High	+++	3
45.		Thrips	*Thrips flavus* Schrank	Thysanoptera	Thripidae	Tender leaf, shoot	Low	+	3
46.		Bark beetle	*Xyleborus interjectus* Blandford	Coleoptera	Scolytidae	Wood	High	+++	3
47.	White siris (Sil Korol) *(Albizia procera)*	Leaf roller	*Archips micaceanus* (*Walker*)	Lepidopera	Tortricidae	Leaf	High	+++	3
48.		Giant looper	*Ascotis selenaria* (Denis & Schiffermüller)	Lepidopera	Geometridae	Leaf	Low	+	3
49.		Weevil	*Bruchidius uberatus* Fabricius	Coleoptera	Bruchidae	Pod, seed	High	+++	3
50.		Leaf eating caterpillar	*Catopsilia crocale* Cramer	Lepidopera	Pieridae	Leaf	Medium	++	3, 4
51.		Wood borer	*Crossotarsus saundersi* Chapuis	Coleoptera	Platypodidae	Sapwood	High	+++	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
52.		Pierid butterfly	*Eurema hecabe* Linneaus	Lepidopera	Pieridae	Leaf	Medium	++	3, 4
53.		Bark eating caterpillar	*Indarbela quadrinotata* Walker	Lepiodptera	Inderbelidae	Stem, bark	Low	+	3
54.		Powder-post beetle	*Lyctus africanus* Lesne	Coleoptera	Bostrychidae	Sapwood	High	+++	3
55.		Stem borer	*Platypus solidus* Walker	Coleoptera	Platypodidae	Wood	High	+++	3
56.		Defoliator	*Rhesala imparata* Walker	Lepidopera	Noctuidae	Larva	High	+++	3
57.		Auger beetle	*Sinoxylon anale* Lesne	Coleoptera	Bostrychidae	Wood	High	+++	3
58.		Auger beetle	*Sinoxylon crassum* Lesne	Coleoptera	Bostrychidae	Wood	High	+++	3
59.		Long horned beetle	*Xystrocera globosa* (Olivier)	Coleoptera	Cerambycidae	Wood	Low	+	3
60.	Devil's tree (Chhatim) *(Alstonia scholaris)*	Stem borer	*Batocera rufomaculata* De Geer	Coleoptera	Cerambycidae	Wood	Low	+	3, 8
61.		Wood borer	*Crossotarsus saundersi* Chapuis	Coleoptera	Platypodidae	Sapwood	High	+++	3
62.		Powder-post beetle	*Lyctus africanus* Lesne	Coleoptera	Bostrychidae	Sapwood	High	+++	3
63.		Leaf roller	*Palpita marginata* (Hampson)	Lepidopera	Crambidae	Leaf	Medium	++	3
64.		Gall insect	*Pauropsylla tuberculata* Crawford	Homoptera	Psyllidae	Leaf	High	+++	3
65.		Stem borer	*Platypus solidus* Walker	Coleoptera	Platypodidae	Wood	High	+++	3
66.	Kadam *(Anthocephalus chinensis)*	Defoliator	*Antitrygodes cuneilinea* Walker	Lepidopera	Geometridae	Leaf	Low	+	3
67.		Kadam defoliator	*Arthroschista hilaralis* Walker	Lepidopera	Crambidae	Leaf	High	+++	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
68.		Pink gypsy moth	*Lymantria mathura* Moore	Lepidopera	Erebidae	Leaf, inflorescence, bark of shoot	Low	+	3, 6
69.		Stem borer	*Platypus solidus* Walker	Coleoptera	Platypodidae	Wood	High	+++	3
70.		Bark beetle	*Xyleborus interjectus* Blandford	Coleoptera	Scolytidae	Wood	High	+++	3
71.	Pitraj *(Aphanamixis polystachya)*	Wood borer	*Crossotarsus saundersi* Chapuis	Coleoptera	Platypodidae	Sapwood	High	+++	3
72.		Wood borer	*Crossotarsus squamulatus* Chapuis	Coleoptera	Platypodidae	Sapwood	High	+++	3
73.		Stem borer	*Platypus cupulifer* Wichmann	Coleoptera	Platypodidae	Wood	Low	+	3
74.		Bark and ambrosia beetle	*Thamnurgides vulgaris* Eggers	Coleoptera	Scolytidae	Wood	Low	+	3
75.	Agar *(Aquilaria malaccensis)*	Defoliator	*Heortia vitessoides* Moore	Lepiodptera	Crambidae	Leaf	High	+++	3
76.		Bark eating caterpillar	*Indarbela quadrinotata* Walker	Lepiodptera	Inderbelidae	Stem, bark	Low	+	3
77.		*Weaver ant / green tree ant*	*Oecophylla smaragdina* Fabricius	Hymenoptera	Formicidae	Leaf	Low	+	3
78.	Chapalish (*Artocarpus chama)*	Long horn beetle	*Apriona germari* (Hope)	Coleoptera	Cerambycidae	Wood	Low	+	3
79.		Shoot borer	*Glyphodes caesalis* Walker	Lepiodptera	Crambidae	Unfolded leaf, bud, shoot	High	+++	3
80.		Stem borer	*Platypus hybridus* Schedler	Coleoptera	Platypodidae	Wood	Low	+	3
81.		Bark beetle	*Xyleborus semiopacus* Eichhoff	Coleoptera	Scolytidae	Wood	High	+++	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
82.	Neem (*Azadirachta indica)*	Oriental yellow scale	*Aonidiella orientalis* Newstead	Homoptera	Diaspididae	Leaf, twig, branch, fruit, seed	Low	+	3, 9
83.		Pod borer	*Araecerus suturalis* Boheman	Coleoptera	Anthribidae	Seed	High	+++	3
84.		Wax scale	*Ceroplastes cruciferus* Anderson	Homoptera	Coccidae	Leaf, shoot, stem branch	Low	+	3
85.		Neem looper	*Cleora cornaria* Guenee	Lepiodptera	Geometridiae	Leaf	Low	+	3
86.		Greenhouse thrips	*Heliothrips haemorrhoidalis* (Bouche)	Thysanoptera	Thripidae	Leaf	Low	+	3
87.		Tea mosquito bug	*Helopeltis antonii* Signoret	Hemiptera	Capsidae	Young shoot	High	+++	3
88.		Moth	*Laspeyresia koenigiana Fabricius*	Lepiodptera	Trotricidae	Leaf, shoot	High	+++	3
89.		Grey weevil	*Myllocerus dorsatus* (Fabricius)	Coleoptera	Curculionidae	Leaf, shoot, root	Low	+	3
90.		Moth	*Odites atmopa* Meyrick	Lepiodptera	Xylloryctidae	Leaf, shoot	Low	+	3
91.		Scale insects	*Pulvinaria azadirachatae* Green	Homoptera	Coccidae	Leaf, shoot, branch	Low	+	3
92.		Thrips	*Taeniothrips longistylus Karny*	Thysanoptera	Thripidae	Leaf, shoot	Low	+	3
93.		Spider mite	*Tetranychus* sp.	Acarina	Tetranychidae	Leaf, shoot	Low	+	3
94.	Bamboo (*Bambusa polymorpha)*	Long horn beetle	*Abryna regispetri Paiva*	Coleoptera	Cerambycidae	Bore cut bamboo	Low	+	3
95.		Bamboo powder post beetle	*Dinoderus brevis* Horn	Coleoptera	Bostrichidae	Dry bamboo	High	+++	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
96.		Weevil	*Myocalandra exarta* Boheman	Coleoptera	Curculionidae	Internode	Low	+	3
97.		Long horn beetle	*Pterolophia bambusae* Breuning	Coleoptera	Cerambycidae	Bore cut bamboo	Low	+	3
98.		Flatid hopper	*Salurnis marginella* (Guérin-*Méneville)*	Homoptera	Flatidae	Young shoot	Low	+	3
99.		Auger beetle	*Sinoxylon crassum* Lesne	Coleoptera	Bostrychidae	Dry bamboo	High	+++	3
100.		Bark and ambrosia beetle	*Thamnurgides bambusae Beeson*	Coleoptera	Scolytidae	Dry bamboo	Low	+	3
101.		Tropical carpenter bee	*Xylocopa latipes* Drury	Coleoptera	Xylocopidae	Dry bamboo	Low	+	3
102.	Hijal *(Barringtonia acutangula)*	Stem borer	*Batocera rufomaculata* De Geer	Coleoptera	Cerambycidae	Bark, sapwood, wood	High	+++	3, 8
103.		Scale insect	*Chloropulvinaria psidii* (Maskell)	Homoptera	Coccidae	Leaf , shoot	High	+++	3
104.		Leaf webber	*Cryptolechia nyctiphronas* Meyrick	Lepiodptera	Cosmopterigidae	Leaf	High	+++	3
105.		Hairy caterpillar	*Euproctis fraterna Moore*	Lepiodptera	Lymantriiidae	Leaf	Low	+	3
106.		Defoliator	*Hyposidra successaria Walker*	Lepiodptera	Geometridae	Leaf	Low	+	3
107.		Scale insect	*Icerya aegyptiaca* Douglas	Homoptera	Monophlebidae	Leaf, shoot, branch	Low	+	3
108.		Scale insect	*Lindingaspis rossi* (Maskell)	Homoptera	Diaspididae	Leaf, young shoot	Low	+	3
109.		Nettle caterpillar	*Parasa lepida* Cramer	Lepiodptera	Limacodidae	Leaf	Low	+	3
110.		Defoliator	*Trypanophora semihyalina* Kollar	Lepiodptera	Zygaenidae	Leaf	Low	+	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
111.	Kanchan (*Bauhinia acuminata)*	Leaf miner	*Acrocerocops ordinatella* Meyrick	Lepiodptera	Lithocolletidae	Leaf	Low	+	3
112.		Pod borer	*Araecerus fasciculatus* De Geer	Coleoptera	Anthribidae	Pod, seed	High	+++	3
113.		Stem borer	*Batocera rufomaculata* De Geer	Coleoptera	Cerambycidae	Wood	Low	+	3, 8
114.		Weevil	*Caryedon gonagra Fabricius*	Coleoptera	Bruchidae	Seed	High	+++	3
115.		Hopper	*Otionotus oneratus* Walker	Homoptera	Membracidae	Leaf, shoot	Low	+	3
116.		Long horned beetle	*Xystrocera globosa* (Olivier)	Coleoptera	Cerambycidae	Wood	Low	+	3
117.	Polash (*Butea monosperma)*	Long horn beetle	*Aeolesthes holocericea* Fabricius	Coleoptera	Cerambycidae	Bark, wood	Low	+	3
118.		Grass hopper	*Aularches miliaris* Linneaus	Orthoptera	Acrididae	Leaf	High	+++	3
119.		Leaf eating caterpillar	*Catopsilia crocale* Cramer	Lepidopera	Pieridae	Leaf	Low	+	3, 4
120.		Tussock moth	*Dasychira mendosa* Hubner	Lepidopera	Lymantridae	Leaf	High	+++	3
121.		Powder post beetle	*Dinoderus brevis* Horn	Coleoptera	Bostrichidae	Sapwood of drywood	High	+++	3
122.		Giant mealybug	*Drosicha mangiferae (*Green)	Homoptera	Monophlebidae	Shoot, twig	Low	+	3
123.		Trotricid moth	*Laspeyresia heteropa Meyrick*	Lepiodptera	Trotricidae	Leaf, shoot	High	+++	3
124.		Powder-post beetle	*Lyctus africanus* Lesne	Coleoptera	Bostrychidae	Sapwood	High	+++	3
125.		Stem borer	*Platypus solidus* Walker	Coleoptera	Platypodidae	Sapwood	High	+++	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
127.		Auger beetle	*Sinoxylon anale* Lesne	Coleoptera	Bostrychidae	Wood	High	+++	3
128.		Buprestid beetle	*Trachys bicolor* (Kerremans)	Coleoptera	Buprestidae	Leaf	Low	+	3
129.		Bark beetle	*Xyleborus simili* Ferrari	Coleoptera	Scolytidae	Sapwood	High	+++	3
130.		Long horn beetle	*Xylotrechus smei* Laporte & Gory	Coleoptera	Cerambycidae	Bark, sapwood, wood	Low	+	3
131.	Cane / Bet *(Calamus* sp.)	Field cricket	*Brachytrypes protentosus* Lichtenstein	Orthoptera	Gryllidae	Seedling	High	+++	3
132.		Leaf roller	*Gangara thyrsis* Fabricius	Lepidoptera	Hesperiidae	Leaf	High	+++	3
133.		Mole cricket	*Gryllotalpa africana* Palisot de Beauvois	Orthoptera	Gryllatalpidae	Root	High	+++	3
134.		Powder-post beetle	*Lyctus africanus* Lesne	Coleoptera	Bostrychidae	Sapwood	High	+++	3
135.		Termite	*Microtermes* sp.	Isoptera	Termitidae	Root	Low	+	3
136.		Termite	*Odontotermes* sp.	Isoptera	Termitidae	Root	Low	+	3
137.		Shoot borer	*Ommatolapus haemorrhoidalis* (Wiedemann)	Coleoptera	Curculionidae	Shoot	High	+++	3
138.		Rhinoceros beetle	*Oryctes rhinoceros* Linneaus	Coleoptera	Dynastidae	Young shoot	Low	+	3
139.		Tropical fire ant	*Solenopsis geminata* Fabricius	Hymenoptera	Formicidae	Seed, seeling	High	+++	3
140.	Kumbhi *(Careya arobrea)*	Metallic wood boring beetle	*Acmaeodera stictipennis* Laporte & Gory	Coleoptera	Buprestidae	Bark, sapwood	Low	+	3
141.		Scrab beetle	*Anomal bengalensis* Blanchard	Coleoptera	Scarabaeidae	Leaf, root of small tree	Low	+	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
142.		Oriental yellow scale	*Aonidiella orientalis* Newstead	Homoptera	Diaspididae	Leaf, twig, branch, fruit, seed	Low	+	3, 9
143.		Leaf roller	*Archips micaceanus* (*Walker*)	Lepidopera	Tortricidae	Leaf	Low	+	3
144.		Seed borer	*Bruchus pisorum* Linneaus	Coleoptera	Bruchidae	Pod, seed	High	+++	3
145.		Weevil	*Caryedon gonagra Fabricius*	Coleoptera	Bruchidae	Seed	High	+++	3
146.		Lemon emigrant	*Catopsilia crocale Cramer*	Lepidoptera	Pieridae	Leaf	Low	+	3, 4
147.		Wood borer	*Crossotarsus saundersi* Chapuis	Coleoptera	Platypodidae	Sapwood	High	+++	3
148.		Three-spot grass-yellow butterfly	*Eurema blanda silhetana* Wallace	Lepidoptera	Pieridae	Leaf	Low	+	3, 4
149.		Ghoon	*Heterobostrychus aequalis* Waterhouse	Coleoptera	Bostrychidae	Wood	High	+++	3, 7
150.		Leaf beetle	*Holotrichia problematica* Brenske	Coleoptera	Melolonthidae	Leaf, root	Low	+	3
151.		Bark eating caterpillar	*Indarbela quadrinotata* Walker	Lepiodptera	Inderbelidae	Stem, bark	Low	+	3
152.		Fruit fly	*Rhacochlaena cassiae* Munro	Diptera	Trypetidae	Pod	High	+++	3
153.		Auger beetle	*Sinoxylon crassum* Lesne	Coleoptera	Bostrychidae	Wood	High	+++	3
154.		Bark beetle	*Xyleborus perforans* Wollaston	Coleoptera	Scolytidae	Wood	High	+++	3, 5

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
155.	Sonalu/ Bandar lathi *(Cassia fistula)*	Metallic wood boring beetle	*Acmaeodera stictipennis* Laporte & Gory	Coleoptera	Buprestidae	Bark, sapwood	Low	+	3
156.		Scrab beetle	*Anomal bengalensis* Blanchard	Coleoptera	Scarabaeidae	Leaf, root of small tree	Low	+	3
157.		Scrab beetle	*Anomal polita* Blanchard	Coleoptera	Scarabaeidae	Leaf, root of small tree	Low	+	3
158.		Oriental yellow scale	*Aonidiella orientalis* Newstead	Homoptera	Diaspididae	Leaf, twig, branch, fruit, seed	Low	+	3
159.		Leaf roller	*Archips micaceanus* (*Walker*)	Lepidopera	Tortricidae	Leaf	High	+++	3
160.		Seed borer	*Bruchus pisorum* Linneaus	Coleoptera	Bruchidae	Pod, seed	High	+++	3
161.		Weevil	*Caryedon gonagra Fabricius*	Coleoptera	Bruchidae	Seed	High	+++	3
162.		Wood borer	*Crossotarsus saundersi* Chapuis	Coleoptera	Platypodidae	Sapwood	High	+++	3
163.		Three-spot grass-yellow butterfly	*Eurema blanda silhetana* Wallace	Lepidoptera	Pieridae	Leaf	High	+++	3, 4
164.		Ghoon	*Heterobostrychus aequalis* Waterhouse	Coleoptera	Bostrychidae	Wood	High	+++	3, 7
165.		Leaf beetle	*Holotrichia problematica* Brenske	Coleoptera	Melolonthidae	Leaf, root	Low	+	3
166.		Defoliator	*Hyposidra talaca* Walker	Lepidoptera	Geometridae	Leaf	Low	+	3
167.		Auger beetle	*Sinoxylon crassum* Lesne	Coleoptera	Bostrychidae	Wood	High	+++	3
168.		Bark beetle	*Xyleborus perforans* Wollaston	Coleoptera	Scolytidae	Wood	High	+++	3, 5

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
169.		Red coffee borer / coffee carpenter	*Zeuzera coffeae* Nietner	Lepiodptera	Cossidae	Stem, twig	Low	+	3
170.	Australian oak (Jhau) *(Casuarina equisetifolia)*	Weevil	*Amblyrhinus poricollis* Schoenherr	Coleoptera	Curculionidae	Leaf, root	Low	+	3
171.		Field cricket	*Brachytrypes protentosus* Lichtenstein	Orthoptera	Gryllidae	Seedling	High	+++	3
172.		Scale insect	*Coccus elongatus* Signoret	Homoptera	Coccidae	Leaf, stem, shoot, branch	Low	+	3
173.		Wood borer	*Crossotarsus saundersi* Chapuis	Coleoptera	Platypodidae	Sapwood	High	+++	3
174.		Pine bagworm	*Cryptothelea cramari* Westwood	Lepidoptera	Psychidae	Leaf,	High	+++	3
175.		Mole cricket	*Gryllotalpa africana* Palisot de Beauvois	Orthoptera	Gryllatalpidae	Root	Low	+	3
176.		Scale insect	*Icerya aegyptiaca* Douglas	Homoptera	Monophlebidae	Leaf, shoot, branch	Low	+	3
177.		Bark eating caterpillar	*Indarbela quadrinotata* Walker	Lepiodptera	Inderbelidae	Stem, bark	Low	+	3
178.		Termite	*Odontotermes obesus* Rambur	Isoptera	Termitidae	Root	Low	+	3
179.		Auger beetle	*Sinoxylon anale* Lesne	Coleoptera	Bostrychidae	Wood	High	+++	3
180.		Defoliator	*Spodoptera mauritia* Boisduval	Lepidoptera	Noctuidae	Leaf	Low	+	3
181.		Red coffee borer / coffee carpenter	*Zeuzera coffeae* Nietner	Lepiodptera	Cossidae	Stem, twig	Low	+	3
182.	Camphor/ Korpur *(Cinnamomum camphora)*	Leaf miner	*Acrocercops ordinatella* Meyrick	Lepiodptera	Lithocolletidae	Leaf	Low	+	3
183.		Atlas moth	*Attacus atlas* Linneaus	Lepiodptera	Saturniidae	Leaf	Low	+	3

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184.		Bagworm	*Cryptothelea variegata* Snelen	Lepidoptera	Psychidae	Leaf	High	+++	3
185.		Tea mosquito bug	*Helopeltis antonii* Signoret	Hemiptera	Capsidae	Young shoot	Low	+	3
186.		Mealybug	*Pseudococcus comstocki* Kuwana	Homoptera	Pseudococcidae	Leaf, twig, branch, stem	Low	+	3
187.		Bark beetle	*Xyleborus semiopacus* Eichhoff	Coleoptera	Scolytidae	Fallen wood	High	+++	3
188.		Bark beetle	*Xyleborus discolor* Blandford	Coleoptera	Scolytidae	Living branch	Low	+	3
189.		Red coffee borer / coffee carpenter	*Zeuzera coffeae* Nietner	Lepiodptera	Cossidae	Stem, twig	Low	+	3
190.	Cycas *(Cycas circinalis)*	California red scale	*Aonidiella aurantii* Maskell	Homoptera	Diaspididae	Leaf	Low	+	2, 3
191.		Defoliator	*Catochrysops pandava Horsfield*	Lepiodptera	Lycaenidae	Leaf	Low	+	3
192.		Latania scale	*Hemiberlesia lantaniae* Signoret	Homoptera	Diaspididae	Leaf	Low	+	3
193.	Sissoo *(Dalbergia sissoo)*	Scarab beetle	*Adoretus caliginosus* Burmeister	Coleoptera	Scaraebidae	Leaf	Low	+	3
194.		Cutworm	*Agrotis ipsilon* Hufnagel	Lepiodptera	Noctuidae		Low	+	3, 11
195.		Leaf roller	*Archips micaceanus* (*Walker*)	Lepidopera	Tortricidae	Leaf	Low	+	3
196.		Stem borer	*Batocera rufomaculata* De Geer	Coleoptera	Cerambycidae	Wood	Low	+	3, 8
197.		Field cricket	*Brachytrypes protentosus* Lichtenstein	Orthoptera	Gryllidae	Seedling	High	+++	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
198.		Seed borer	*Bruchus pisorum* Linneaus	Coleoptera	Bruchidae	Pod, seed	High	+++	3
199.		Tussock moth	*Dasychira mendosa* Hubner	Lepidopera	Lymantridae	Leaf	High	+++	3
200.		Mealybug	*Drosicha dalbergiae* Green	Homoptera	Monophlebidae	Leaf, shoot	Low	+	3
201.		Mole cricket	*Gryllotalpa africana* Palisot de Beauvois	Orthoptera	Gryllatalpidae	Root	Low	+	3
202.		Ghoon	*Heterobostrychus aequalis* Waterhouse	Coleoptera	Bostrychidae	Wood	High	+++	3, 7
203.		Bark eating caterpillar	*Indarbela quadrinotata* Walker	Lepiodptera	Inderbelidae	Stem, bark	Low	+	3
204.		Grey weevil	*Myllocerus discolor* Boheman	Coleoptera	Curculionidae	Leaf, shoot	Low	+	3
205.		Stem borer	*Platypus solidus* Walker	Coleoptera	Platypodidae	Sapwood	High	+++	3
206.		Auger beetle	*Sinoxylon anale* Lesne	Coleoptera	Bostrychidae	Wood	High	+++	3
207.		Auger beetle	*Sinoxylon crassum* Lesne	Coleoptera	Bostrychidae	Wood	High	+++	3
208.	Flame tree / Krishnachura *(Delonix regia)*	Pod bug / Squash bug	*Anoplocnemis phasiana* (Fabricius)	Hemiptera	Coreidae	Shoot	Low	+	3
209.		Leaf roller	*Archips micaceanus* (*Walker*)	Lepidopera	Tortricidae	Leaf	High	+++	3
210.		Pine bagworm	*Cryptothelea cramari* Westwood	Lepidoptera	Psychidae	Leaf	Low	+	3
211.		Cottony cushion scale	*Icerya purchasi* Maskell	Homoptera	Margarodidae	Leaf, stem, branch	Low	+	3
212.		Bark eating caterpillar	*Indarbela quadrinotata* Walker	Lepiodptera	Inderbelidae	Stem, bark	Low	+	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
213.		Auger beetle	*Sinoxylon anale* Lesne	Coleoptera	Bostrychidae	Wood	High	+++	3
214.		Red coffee borer / coffee carpenter	*Zeuzera coffeae* Nietner	Lepiodptera	Cossidae	Stem, twig	Low	+	3
215.	Dholi garjan *(Dipterocarpus gracilis)*	Seed weevil	*Alcidodes crassus* Pascoe	Coleoptera	Curculionidae	Fruit, seed	High	+++	3
216.		Stem borer	*Crossotarsus latelunatus Beeson*	Coleoptera	Platypodidae	Wood	Low	+	3
217.		Ghoon	*Heterobostrychus aequalis* Waterhouse	Coleoptera	Bostrychidae	Wood	High	+++	3, 7
218.		Trotricid moth	*Laspeyresia pulverula Meyrick*	Lepiodptera	Trotricidae	Seed	Low	+	3
219.		Seed weevil	*Sitophilus rugicollis* Casey	Coleoptera	Curculionidae	Seed	High	+++	3
220.		Stem borer	*Platypus solidus* Walker	Coleoptera	Platypodidae	Sapwood	High	+++	3
221.		Fruit and seed borer	*Thamnurgides dipterocarpi* Beeson	Coleoptera	Scolytidae	Fruit, seed	High	+++	3
222.		Bark beetle	*Xyleborus fallax* Eichhoff	Coleoptera	Scolytidae	Fallen wood	Low	+	3
223.		Bark beetle	*Xyleborus intectus* Beeson	Coleoptera	Scolytidae	Fallen wood	Low	+	3
224.		Bark beetle	*Xyleborus interjectus* Blandford	Coleoptera	Scolytidae	Fallen wood	Low	+	3
225.	Oil palm *Elaeis guineensis*	Defoliator	*Amathusia phidippus* Johann	Lepidoptera	Amathusidae	Leaf	Low	+	3
227.		Fruit borer	*Decadarchis scorpiura* Meyrick	Lepidoptera	Cosmopterygidae	Fruit	Low	+	3
228.		Army ant	*Dorylus orientalis* Westwood	Hymenoptera	Formicidae	Germinating seed, seedling	High	+++	3

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229.		Rhinoceros beetle	*Oryctes rhinoceros* Linneaus	Coleoptera	Dynastidae	Young shoot	High	+++	3
230.		Fruit borer	*Pyroderces certropecta* Meyrick	Lepidoptera	Cosmopterygidae	Fruit	Low	+	3
231.		Tropical fire ant	*Solenopsis geminata* Fabricius	Hymenoptera	Formicidae	Germinating seed, seedling	High	+++	3
232.	Mandar *(Erythrina variegata)*	Stem borer	*Batocera rufomaculata* De Geer	Coleoptera	Cerambycidae	Wood	Low	+	3, 8
233.		Wood boring beetle	*Dinoderus minutus* (Fabricius)	Coleoptera	Bostrychidae	Sapwood, timber	High	+++	3
234.		Defoliator	*Eupterote undata* Blanchard	Lepidoptera	Eupterotidae	Leaf	High	+++	3
235.		Lac insect	*Kerria lacca* Kerr	Homoptera	Lacciferidae	Stem	Low	+	3
236.		Powder-post beetle	*Lyctus brunneus* Stephens	Coleoptera	Bostrychidae	Sapwood, timber	High	+++	3
237.		Hairy powder post beetle	*Minthea rugicollis* (Walker)	Coleoptera	Bostrychidae	Sapwood, timber	High	+++	3
238.		Tussock moth	*Orgyia postica* Walker	Lepidoptera	Lymantriidae	Leaf	Low	+	3
239.		Bark beetle	*Xyleborus interjectus* Blandford	Coleoptera	Scolytidae	Fallen wood	Low	+	3
240.	Eucalyptus *(Eucalyptus alba)*	Field cricket	*Brachytrypes protentosus* Lichtenstein	Orthoptera	Gryllidae	Seedling	High	+++	3
241.		Defoliator moth	*Creatonotos transiens* Walker	Lepidoptera	Arctiidae	Leaf	Low	+	3
242.		Leaf roller	*Strepsicrates rhothia* Meyrick	Lepidoptera	Tortricidae	Leaf	Low	+	3
243.		Pigmy mole cricket	*Tridactylus* sp.	Orthoptera	Tridactylidae	Uproot seedling	Low	+	3

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244.	Banyan tree *(Ficus benghalensis)*	Apple longicorn borer	*Aeolesthes holosericea* Fabricius	Coleoptera	Cerambycidae	Wood	Low	+	3
245.		Shoot weevil	*Alcidodes affaber* Aurivillius	Coleoptera	Curculionidae	Shoot	Low	+	3
246.		Defoliator	*Attatha regalis* Moore	Lepidoptera	Noctuidae	Leaf	Low	+	3
247.		Stem borer	*Batocera rufomaculata* De Geer	Coleoptera	Cerambycidae	Wood	High	+++	3, 8
248.		Wax scale	*Ceroplastes ceriferus* Anderson	Homoptera	Coccidae	Branch, stem	Low	+	3
249.		Wood boring beetle	*Dinoderus brevis* Horn	Coleoptera	Bostrychidae	Sapwood, timber	High	+++	3
250.		Leaf rolling thrips	*Gynaikothrips ficorum (*Marchal)	Thysanoptera	Phloeothripidae	Leaf	High	+++	3
251.		Scale insect	*Icerya aegyptica* Douglas	Homoptera	Margarodidae	Leaf, stem, branch	Low	+	3
252.		Cottony cushion scale	*Icerya purchasi* Maskell	Homoptera	Margarodidae	Leaf, stem, branch	Low	+	3
253.		Lac insect	*Kerria lacca* Kerr	Homoptera	Lacciferidae	Stem	High	+++	3
254.		Longhorn beetle	*Olenecamptus bilobus* Fabricius	Coleoptera	Cerambycidae	Wood, leaf, shoot	High	+++	3
255.		Auger beetle	*Sinoxylon pygmaeum* Lesne	Coleoptera	Bostrychidae	Wood	High	+++	3
256.		Bark beetle	*Xyleborus interjectus* Blandford	Coleoptera	Scolytidae	Fallen wood	High	+++	3
257.		Carpenter bee	*Xylocopa aestuans* Linneaus	Hymenoptera	Xylocopidae	Wood	Low	+	3

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258.	Fig / Khoksha Dumur *(Ficus hispida)*	Longhorn beetle	*Aprioma germari* Hope	Coleoptera	Cerambycidae	Stem, shoot	Low	+	3
259.		Stem borer	*Batocera rufomaculata* De Geer	Coleoptera	Cerambycidae	Wood	High	+++	3, 8
260.		Defoliator	*Euploea core* Cramer	Lepiodptera	Danaidae	Leaf	Low	+	3
261.		Lac insect	*Kerria lacca* Kerr	Homoptera	Lacciferidae	Branch stem	High	+++	3
262.		Powder-post beetle	*Lyctus africanus* Lesne	Coleoptera	Bostrychidae	Sapwood	Low	+	3
263.		Fig leaf roller	*Phycodes minor* Moore	Lepiodptera	Glyphipterygidae	Leaf	Low	+	3
264.		Bark beetle	*Xyleborus fornicates* Eichhoff	Coleoptera	Scolytidae	Branch, wood	Low	+	3
265.		Carpenter bee	*Xylocopa aestuans* Linneaus	Hymenoptera	Xylocopidae	Wood	Low	+	3
266.	Fig / Jog Dumur *(Ficus racemosa)*	Leaf miner	*Acrocerocops desiccata* Meyrick	Lepiodptera	Lithocolletidae	Leaf	Low	+	3
267.		Fruit borer	*Araecerus suturalis* Boheman	Coleoptera	Anthribidae	Ripe fruit	Low	+	3
268.		Stem borer	*Batocera rufomaculata* De Geer	Coleoptera	Cerambycidae	Wood	High	+++	3, 8
269.		Wood borer	*Crossotarsus saundersi* Chapuis	Coleoptera	Platypodidae	Fallen wood	High	+++	3
270.		Giant mealybug	*Drosicha mangiferae (*Green)	Homoptera	Monophlebidae	Shoot, twig	Low	+	3
271.		Tussock moth	*Dasychira mendosa* Hubner	Lepidopera	Lymantridae	Leaf	Low	+	3
272.		Lac insect	*Kerria lacca* Kerr	Homoptera	Lacciferidae	Branch stem	Low	+	3
273.		Longhorn beetle	*Olenecamptus bilobus* Fabricius	Coleoptera	Cerambycidae	Wood, leaf, shoot	High	+++	3
274.		Nettle caterpillar	*Parasa lepida* Cramer	Lepidoptera	Limacodidae	Leaf	Low	+	3

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275.		Gall insect	*Pauropsylla depressa* Crawford	Homoptera	Psyllidae	Leaf	High	+++	3
276.		Stem borer	*Platypus cupulatus* Chapuis	Coleoptera	Platypodidae	Wood	Low	+	3
277.		Stem borer	*Platypus solidus* Walker	Coleoptera	Platypodidae	Wood	High	+++	3
278.		Auger beetle	*Sinoxylon anale* Lesne	Coleoptera	Bostrychidae	Wood	High	+++	3
279.		Fruit borer	*Thamnurgides indicus* Eggers	Coleoptera	Scolytidae	Fruit	Low	+	3
280.		Bark beetle	*Xyleborus burmanicsus* Beeson	Coleoptera	Scolytidae	Sapwood	Low	+	3
281.		Carpenter bee	*Xylocopa aestuans* Linneaus	Hymenoptera	Xylocopidae	Wood	Low	+	3
282.		Bark beetle	*Xylosandrus* (*Xyleborus*) *discolor* Blandford	Coleoptera	Scolytidae	Shoot, twig, small branch	Low	+	3
283.	Aswatha / Peepul tree *(Ficus racemosa)*	Leaf miner	*Acrocerocops resplendens* Stainton	Lepiodptera	Lithocolletidae	Leaf	Low	+	3
284.		Defoliator	*Attatha regalis Moore*	Lepiodptera	Noctuidae	Leaf	Low	+	3
285.		Stem borer	*Batocera rufomaculta* De Geer	Coleoptera	Cerambycidae	Bark, wood	High	+++	3, 8
286.		Wood borer	*Crossotarsus saundersi* Chapuis	Coleoptera	Platypodidae	Fallen wood	High	+++	3
287.		Defoliator	*Euploea core* Cramer	Lepiodptera	Danaidae	Leaf	Low	+	3
288.		Lac insect	*Kerria lacca* Kerr	Homoptera	Lacciferidae	Branch stem	Low	+	3
289.		Fungus growing termite	*Odontotermes feae* Wasmann	Isoptera	Termitidae	Wood	Low	+	3
290.		Stem borer	*Platypus solidus* Walker	Coleoptera	Platypodidae	Wood	High	+++	3
291.		Auger beetle	*Sinoxylon anale* Lesne	Coleoptera	Bostrychidae	Wood	High	+++	3

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292.		Bark beetle	*Xyleborus interjectus* Blandford	Coleoptera	Scolytidae	Fallen wood	High	+++	3
293.		Carpenter bee	*Xylocopa aestuans* Linneaus	Hymenoptera	Xylocopidae	Wood	Low	+	3
294.	Bok phul *(Gliricidia sepium)*	Defoliator	*Cheromettia apicata* Moore	Lepidoptera	Limacodidae	Leaf	Low	+	3
295.		Soft scale insect	*Coccus (Lecanium) viridis* (Green)	Homoptera	Coccidae	Leaf, twig, branch	Low	+	3
296.		Mealybug	*Ferrisiana virgata* Cockerll	Homoptera	Coccidae	Leaf, twig, branch	Low	+	3
297.		Mealybug	*Planococcus citri* Risso	Homoptera	Pseudococcidae	Leaf, twig, branch	Low	+	3, 12
298.		Bark beetle	*Xyleborus semiopacus* Eichhoff	Coleoptera	Scolytidae	Sapwood	High	+++	3
299.	Gamar / Gamari *(Gmelina arborea)*	Leaf miner	*Acrocerocops telestis* Meyrick	Lepiodptera	Lithocolletidae	Leaf	Low	+	3
300.		Shoot weevil	*Alcidodes ludificator* Faust	Coleoptera	Curculionidae	Shoot	Low	+	3
301.		Leaf roller	*Archips micaceanus* (*Walker*)	Lepidopera	Tortricidae	Leaf	Low	+	3
302.		Gamar defoliator	*Calopepla leayana* Laterille	Coleoptera	Chrysomelidae	Leaf	High	+++	3
303.		Teak canker grub	*Dihammus cervinus* Hope	Coleoptera	Cerambycidae	Base of young tree, bark, bud, shoot, twig	High	+++	3
304.		Wood borer	*Endoclita undulifer* Walker	Lepidoptera	Hepialidae	Stem	High	+++	3
305.		Defoliator	*Eupterote geminata* Walker	Lepidoptera	Eupterotidae	Leaf	Low	+	3

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306.		Defoliator	*Eupterote undata* Blachard	Lepidoptera	Eupterotidae	Leaf	Low	+	3
307.		Bark eating caterpillar	*Indarbela quadrinotata* Walker	Lepiodptera	Inderbelidae	Stem, bark	Low	+	3
308.		Powder-post beetle	*Lyctus africanus* Lesne	Coleoptera	Bostrychidae	Sapwood	High	+++	3
309.		Stem borer	*Platypus uncinatus* Blandford	Coleoptera	Platypodidae	Sapwood	High	+++	3
310.		Phassus borer	*Sahyadrassus malabaricus* (Moore)	Lepidoptera	Hepialidae	Base of stem	High	+++	3
311.		Jewel beetle	*Sambus gmelinae* Thery	Coleoptera	Buprestidae	Dead wood	Low	+	3
312.		Auger beetle	*Sinoxylon anale* Lesne	Coleoptera	Bostrychidae	Sapwoood	High	+++	3
313.		Bark beetle	*Xyleborus interjectus* Blandford	Coleoptera	Scolytidae	Fallen wood	High	+++	3
314.		Long horn beetle	*Xylotrechus smei* Laporte & Gory	Coleoptera	Cerambycidae	Heartwood of deadwood	Low	+	3
315.	Sundari / Sundri *(Heritiera fomes)*	Wood borer	*Basitropis nitidicutis* Jekel	Coleoptera	Anthribidae	Sapwood of deadwood	Low	+	3
316.		Wood borer	*Crossotarsus saundersi* Chapuis	Coleoptera	Platypodidae	Sapwood	High	+++	3
317.		Wood borer	*Crossotarsus squamulatus* Chapuis	Coleoptera	Platypodidae	Sapwood	High	+++	3
318.		Dry wood termite	*Cryptotermes bengalensis* Snyder	Isoptera	Kalotermitidae	Wood	High	+++	3
319.		Wood borer	*Derolus discicollis* Gahan	Coleoptera	Cerambycidae	Sapwood	Low	+	3
320.		Pneumatophore moth	*Hymenoptychis sordid*a Zeller	Lepidoptera	Crambidae	Fruit, seed	High	+++	3

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321.		Defoliator	*Labeda nobilis* Walker	Lepidoptera	Lasiocampidae	Leaf	Low	+	3
322.		Wood borer	*Ozotomerus maculosus* Perroud	Coleoptera	Anthribidae	Sapwood of dead wood	Low	+	3
323.		Stem borer	*Platypus uncinatus* Blandford	Coleoptera	Platypodidae	Sapwood	High	+++	3
324.		Fruit and seed borer	*Thamnurgides litoralis* Beeson	Coleoptera	Scolytidae	Fruit, seed	High	+++	3
325.		Bark borer	*Thamnurgides opacifrons* Beeson	Coleoptera	Scolytidae	Bark	Low	+	3
327.		Bark beetle	*Xyleborus bicolor* Blandford	Coleoptera	Scolytidae	Fallen wood	High	+++	3
328.		Bark beetle	*Xyleborus cognatus* Blandford	Coleoptera	Scolytidae	Fallen wood	Low	+	3
329.		Bark beetle	*Xyleborus laticollis* Blandford	Coleoptera	Scolytidae	Fallen wood	Low	+	3
330.		Bark beetle	*Xyleborus noxius* Sampson	Coleoptera	Scolytidae	Fallen wood	Low	+	3
331.		Bark beetle	*Xyleborus perforans* Wollaston	Coleoptera	Scolytidae	Fallen wood	Low	+	3
332.		Bark beetle	*Xyleborus similis* Ferrari	Coleoptera	Scolytidae	Fallen wood	Low	+	3
333.	Rubber *(Hevea brasiliensis)*	Defoliator	*Antheraea paphia* Linneaus	Lepidoptera	Saturniidae	Leaf	Low	+	3
334.		Scale insect	*Aspidiotus destructor* Linneaus	Homoptera	Diaspididae	Leaf, branch	Low	+	3
335.		Monotypic grasshopper	*Aularachis miliaris* Linneaus	Orthoptera	Pyrgomorphidae	Leaf	High	+++	3
336.		Stem borer	*Batocera rufomaculata* De Geer	Coleoptera	Cerambycidae	Bark, wood	High	+++	3, 8

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
337.		Field cricket	*Brachytrypes protentosus* Lichtenstein	Orthoptera	Gryllidae	Seedling	High	+++	3
338.		Subterranean termite	*Coptotermes ceyloincus* Holmgren	Isoptera	Rhinotermitidae	Wood, timber, living tree	High	+++	3
339.		Wood borer	*Crossotarsus minax Walker*	Coleoptera	Platypodidae	Sapwood	High	+++	3
340.		Mole cricket	*Gryllotalpa africana* Palisot de Beauvois	Orthoptera	Gryllatalpidae	Root	High	+++	3
341.		Ghoon	*Heterobostrychus aequalis* Waterhouse	Coleoptera	Bostrychidae	Wood	High	+++	3, 7
342.		Leaf eating weevil	*Lepropus chrysochlorus* Wiedemann	Coleoptera	Curculionidae	Young leaf	High	+++	3
343.		Blister beetle	*Mylabris pustulata* Thunberg	Coleoptera	Meloidae	Flower, leaf	Low	+	3
344.		Dampwood termite	*Neotermes* (*Kalotermes*) *greeni* Desneux	Isoptera	Termitidae	Dead wood,	Low	+	3
345.		Termite	*Odontotermes horni* Wasmann	Isoptera	Termitidae	Dead wood	High	+++	3
346.		Stem borer	*Platypus cupulatus* Chapuis	Coleoptera	Platypodidae	Sapwood	High	+++	3
347.		Stem borer	*Platypus solidus* Walker	Coleoptera	Platypodidae	Sapwood	High	+++	3
348.		Pigmy mole cricket	*Tridactylus* sp.	Orthoptera	Tridactylidae	Uproot seedling	High	+++	3
349.		Bark beetle	*Xyleborus interjectus* Blandford	Coleoptera	Scolytidae	Fallen wood	Low	+	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
350.		Bark beetle	*Xyleborus perforans* Wollaston	Coleoptera	Scolytidae	Fallen wood	High	+++	3
351.		Bark beetle	*Xyleborus semiopacus* Eichhoff	Coleoptera	Scolytidae	Fallen wood	Low	+	3
352.		Bark beetle	*Xyleborus similis* Ferrari	Coleoptera	Scolytidae	Fallen wood	Low	+	3
353.		Bark beetle	*Xyleborus discolor* Blandford	Coleoptera	Scolytidae	Fallen wood	Low	+	3
354.		Bark beetle	*Xylosandrus* (*Xyleborus*) *compactus* Eichhoff	Coleoptera	Scolytidae	Fallen wood	Low	+	3
355.	Jarul/ Pride of India *(Lagerstroemia speciosa)*	Leaf folder	*Agrotera basinotata* Hampson	Lepidopera	Crambidae	Leaf	Low	+	3
356.		Longhorn beetle	*Aristobia approximator Thomson*	Coleoptera	Cerambycidae	Bark, stem, branch	High	+++	3
357.		Atlas moth	*Attacus atlas* Linneaus	Lepiodptera	Saturniidae	Leaf	Low	+	3
358.		Tussock moth	*Dasychira mendosa* Hubner	Lepidopera	Lymantridae	Leaf	Low	+	3
359.		Bark eating caterpillar	*Indarbela quadrinotata* Walker	Lepiodptera	Inderbelidae	Stem, bark	Low	+	3
360.		Shoot and blossom webber	*Lamida moncusalis* Walker	Lepiodptera	Crambidae	Leaf, young shoot	Low	+	3
361.		Powder-post beetle	*Minthea rugicollis* (Walker)	Coleoptera	Bostrychidae	Sapwood of dead wood	High	+++	3
362.		Auger beetle	*Sinoxylon* sp.	Coleoptera	Bostrychidae	Sapwood of dead wood, timber	High	+++	3
363.		Bark beetle	*Xyleborus semiopacus* Eichhoff	Coleoptera	Scolytidae	Fallen wood	High	+++	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
364.		Hairy caterpillar	*Selepa celtis* Moore	Lepidopera	Nolidae	Leaf	Low	+	3
365.		Red coffee borer / coffee carpenter	*Zeuzera coffeae* Nietner	Lepiodptera	Cossidae	Stem, twig	Low	+	3
366.	Jiga *(Lannea coromandelica)*	Leaf miner	*Acrocerocops gemoniella* Stainton	Lepiodptera	Lithocolletidae	Leaf	Low	+	3
367.		Defoliator	*Actias selene* Hubner	Lepiodptera	Saturniidae	Leaf	Low	+	3
368.		Stem borer	*Batocera rufomaculata* De Geer	Coleoptera	Cerambycidae	Wood	High	+++	3, 8
369.		Wood borer	*Crossotarsus bonvouiloiri* Chapuis	Coleoptera	Platypodidae	Sapwood of fallen wood	Low	+	3
370.		Wood borer	*Crossotarsus saundersi* Chapuis	Coleoptera	Platypodidae	Sapwood of fallen wood	High	+++	3
371.		Wood boring beetle	*Dinoderus brevis* Horn	Coleoptera	Bostrychidae	Sapwood, timber	High	+++	3
372.		Ghoon	*Heterobostrychus aequalis* Waterhouse	Coleoptera	Bostrychidae	Wood	High	+++	3, 7
373.		Powder-post beetle	*Lyctus africanus* Lesne	Coleoptera	Bostrychidae	Sapwood of dead wood	High	+++	3
374.		Stem borer	*Platypus solidus* Walker	Coleoptera	Platypodidae	Wood	High	+++	3
375.		Wood borer	*Ptilinus binodulus* (Motschulsky)	Coleoptera	Anobiidae	Dead wood	Low	+	3
376.		Hairy caterpillar	*Selepa celtis* Moore	Lepidopera	Nolidae	Leaf	Low	+	3
377.		Auger beetle	*Sinoxylon anale* Lesne	Coleoptera	Bostrychidae	Sapwoood	High	+++	3
378.		Bark beetle	*Xyleborus fornicatus* Eichhoff	Coleoptera	Scolytidae	Fallen wood	Low	+	3
379.		Bark beetle	*Xyleborus interjectus* Blandford	Coleoptera	Scolytidae	Fallen wood	Low	+	3
380.		Bark beetle	*Xyleborus perforans*	Coleoptera	Scolytidae	Fallen wood	High	+++	3

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			Wollaston						
381.	Mehendi / Hena *(Lawsonia inermis)*	Wax scale	*Ceroplastes ceriferus* Anderson	Homoptera	Coccidae	Leaf, branch, stem	Low	+	3
382.		Soft scale insect	*Chloropulvinaria psidii* (Maskell)	Homoptera	Coccidae	Leaf, shoot, branch, stem	Low	+	3
383.		Pine bagworm	*Cryptothelea crameri* Westwood	Lepidoptera	Psychidae	Leaf, shoot, bud	Low	+	3
384.		Scale insect	*Saissetia nigra Neitner*	Homoptera	Coccidae	Leaf, branch, stem	Low	+	3
385.		Defoliator	*Sylepta crotonalis* Walker	Lepidoptera	Crambidae	Leaf	Low	+	3
386.	Ipil-ipil *(Leucaena leucocephala)*	Cocoa weevil	*Araecerus fasciculatus De Geer*	Coleoptera	Anthribidae	Pod, seed	High	+++	3
387.		Ghoon	*Heterobostrychus aequalis* Waterhouse	Coleoptera	Bostrychidae	Wood	High	+++	3, 7
392.		leucaena psyllid	*Heteropsylla cubana* Crawford	Homoptera	Psyllidae	Leaf	High	+++	3
393.		Auger beetle	*Sinoxylon anale* Lesne	Coleoptera	Bostrychidae	Wood	High	+++	3
394.		Bark beetle	*Xylosandrus* (*Xyleborus*) *morigerus* Blandford	Coleoptera	Scolytidae	Shoot, twig, small branch	Low	+	3
395.	Mohua *(Madhuca indica)*	Leaf miner	*Acrocercops euthycolona* Meyrick	Lepiodptera	Lithocolletidae	Leaf	Low	+	3
396.		Defoliator	*Metanastria hyrtaca Cramer*	Lepiodptera	Lasiocampidae	Leaf	High	+++	3
397.		Termite	*Odontotermes obesus* Rambur	Isoptera	Termitidae	Wood	Low	+	3
398.		Defoliator	*Ophiusa janata* Linneaus	Lepiodptera	Noctuidae	Leaf	Low	+	3

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399.		Stem borer	*Platypus uncinatus* Blandford	Coleoptera	Platypodidae	Sapwood	High	+++	3
400.		Ghoon	*Schistocerus anobioides* Waterhouse	Coleoptera	Bostrychidae	Wood, timber	High	+++	3
401.		Bark beetle	*Xyleborus perforans* Wollaston	Coleoptera	Scolytidae	Fallen wood	High	+++	3
402.	Champa *(Michelia champaca)*	Whitefly	*Aleurocanthus inceratus* Silvestri	Homoptera	Aleyrodidae	Leaf, shoot	Low	+	3
403.		Leaf roller	*Archips micaceanus* (*Walker*)	Lepidopera	Tortricidae	Leaf	High	+++	3
404.		Hairy caterpillar	*Spilarctia obliqua* (Walker)	Lepidopera	Arctiidae	Leaf	Low	+	3
405.		Common bluebottle	*Graphium sarpedon* Linneaus	Lepidopera	Papilionidae	Leaf	High	+++	3
406.		Powder-post beetle	*Lyctus brunneus* Stephens	Coleoptera	Bostrychidae	Sapwood	High	+++	3
407.		Bark beetle	*Xyleborus mus* Eggers	Coleoptera	Scolytidae	Fallen wood	High	+++	3
408.		Carpenter bee	*Xylocopa aestuans* Linneaus	Hymenoptera	Xylocopidae	Wood	Low	+	3
409.		Red coffee borer / coffee carpenter	*Zeuzera coffeae* Nietner	Lepiodptera	Cossidae	Stem, twig	Low	+	3
410.	Randi koroi *(Samanea saman)*	Scarab beetle	Anomala antique (Gyllenhal)	Coleoptera	Scarabaeidae	Leaf	Low	+	3
411.		Leaf roller	*Archips micaceanus* (*Walker*)	Lepidopera	Tortricidae	Leaf	High	+++	3
412.		Atlas moth	*Attacus atlas* Linneaus	Lepiodptera	Saturniidae	Leaf	Low	+	3
413.		Scale insect	*Icerya formicarum* Newstead	Homoptera	Monophlebidae	Leaf, shoot, stem	Low	+	3

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414.		Bark eating caterpillar	*Indarbela quadrinotata* Walker	Lepiodptera	Inderbelidae	Stem, bark	Low	+	3
415.		Lac insect	*Kerria lacca* Kerr	Homoptera	Lacciferidae	Stem	Low	+	3
416.		Stem borer	*Platypus suffodiens* Sampson	Coleoptera	Platypodidae	Wood	High	+++	3
417.		Mealybug	*Rastrococcus iceryodes* Greeni	Homoptera	Pseudococcidae	Leaf, stem, shoot	Low	+	3
418.		Auger beetle	*Sinoxylon* sp.	Coleoptera	Bostrychidae	Wood	High	+++	3
419.	Drumstick / Sajina *(Moringa oleifera)*	Indian luna moth	*Actias selene* (Hübner)	Lepidopera	Saturniidae	Leaf	Low	+	3
420.		Stem borer	*Batocera rufomaculata* De Geer	Coleoptera	Cerambycidae	Wood	High	+++	3, 8
421.		Tussock moth	*Dasychira mendosa* Hübner	Lepidopera	Lymantridae	Leaf	Low	+	3
422.		Defoliator	*Eupterote geminata* Walker	Lepidoptera	Eupterotidae	Leaf	Low	+	3
423.		Low country live wood termite	*Glyptotermes* dilatatus (Bugnion & Popoff)	Isoptera	Kalotermitidae	Wood of living tree	Low	+	3
424.		Bark beetle	*Leperisinus indicus* Beeson	Coleoptera	Scolytidae	Deadwood	High	+++	3
425.		Defoliator	*Pericallia recini* Fabricius	Lepidoptera	Erebidae	Leaf	Low	+	3
427.		Defoliator	*Spodoptra litura* Fabricius	Lepidoptera	Noctuidae	Leaf	Low	+	3
428.		Auger beetle	*Sinoxylon atratum* Lesne	Coleoptera	Bostrychidae	Sapwoood	High	+++	3
429.	White mulberry *(Morus alba)*	Apple longicorn borer	*Aeolesthes holosericea* Fabricius	Coleoptera	Cerambycidae	Dead wood	High	+++	3
430.		Leaf roller	*Archips micaceanus* (*Walker*)	Lepidopera	Tortricidae	Leaf	High	+++	3

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431.		Stem borer	*Batocera rufomaculata* De Geer	Coleoptera	Cerambycidae	Wood	High	+++	3, 8
432.		Silk moth	*Bombyx mori* Linneaus	Lepidopera	Bombycidae	Leaf	High	+++	3
433.		Hairy caterpillar	*Spilarctia obliqua* Walker	Lepidopera	Arctiidae	Leaf	Low	+	3
434.		Yellow peach moth	*Dichocrocis punctiferalis* (Guenee)	Lepidoptera	Crambidae	Leaf	High	+++	3
435.		Ghoon	*Heterobostrychus aequalis* Waterhouse	Coleoptera	Bostrychidae	Wood	High	+++	3, 7
436.		Cottony cushion scale	*Icerya purchasi* Maskell	Homoptera	Margarodidae	Leaf, stem, branch	Low	+	3
437.		Bark eating caterpillar	*Indarbela quadrinotata* Walker	Lepiodptera	Inderbelidae	Stem, bark	Low	+	3
438.		Hairy caterpillar	*Metanastria hyrtaca Cramer*	Lepidoptera	Lasiocampidae	Leaf	High	+++	3
439.		Auger beetle	*Sinoxylon anale* Lesne	Coleoptera	Bostrychidae	Wood	High	+++	3
440.		Spider mite	*Tetranychus telarius Linneaus*	Acarina	Tetranychidae	Leaf	Low	+	3
441.		Longhorn beetle	*Xylotrechus* smei Leporty & smei	Coleoptera	Cerambycidae	Wood	Low	+	3
442.	Pine *(Pinus caribaea)*	Cut worm	*Agrotis ipsilon* Hufnagel	Lepiodptera	Noctuidae	Seedling	High	+++	3
443.		Scarabid beetle	*Anomala polita* (Blanchard)	Coleoptera	Scarabaeidae	Seedling, root, leaf	High	+++	3
444.		Pine bagworm	*Cryptothelea crameri* Westwood	Lepidoptera	Psychidae	Leaf, shoot, bud, & make bag	Low	+	3
445.		Yellow peach moth	*Dichocrocis punctiferalis* (Guenée)	Lepidoptera	Crambidae	Pod, seed, terminal bud	High	+++	3

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446.		Mole cricket	*Gryllotalpa africana* Palisot de Beauvois	Orthoptera	Gryllatalpidae	Root	High	+++	3
447.		Cottony cushion scale	*Icerya purchasi* Maskell	Homoptera	Margarodidae	Leaf, stem, branch	Low	+	3
448.		Termite	*Odontotermes parvidens* Holmgren	Isoptera	Termitidae	Bark of living tree, Fallen wood, root	Low	+	3
449.		Stem borer	*Platypus piniperda* Beeson	Coleoptera	Platypodidae	Wood	High	+++	3
450.		Auger beetle	*Sinoxylon crassum* Lesne	Coleoptera	Bostrychidae	Sapwoood	Low	+	3
451.		Ambrosia beetle	*Xyleborus pinicola* Eggers	Coleoptera	Scolytidae	Sapwoood of fallen wood	High	+++	3
452.	Debdaru *(Polyalthia longifolia)*	Leaf roller	*Acleris epidesma* Lower	Lepiodptera	Tortricidae	Leaf	Low	+	3
453.		Leaf miner	*Acrocerocops aestiopa* Meyrick	Lepiodptera	Lithocolletidae	Leaf	Low	+	3
454.		Defoliator	*Altha nivea* Walker	Lepiodptera	Limacodidae	Leaf	Low	+	3
455.		Seed borer	*Blastobasis spermologa* Meyrick	Lepiodptera	Blastobasidae	Seed	High	+++	3
456.		Scale insect	*Icerya aegyptica* Douglas	Homoptera	Margarodidae	Leaf, stem, branch	Low	+	3
457.		Leaf miner	*Phyllocnistis helicodes* Meyrick	Lepiodptera	Gracillariidae	Leaf	Low	+	3
458.		Seed weevil	*Sitophilus rugicollis*Casey	Coleoptera	Curculionidae	Seed	High	+++	3
459.		Defoliator	*Streblote siva* Lefevre	Lepidoptera	Lasiocampidae	Leaf	Low	+	3
460.		Defoliator	*Thalassodes quadraria* Guenee	Lepidoptera	Geometridae	Leaf	Low	+	3
461.	Sal / Gozari *(Shorea robusta)*	Leaf miner	*Acrocerocops resplendens* Stainton	Lepiodptera	Lithocolletidae	Leaf	Low	+	3

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462.		Defoliator	*Anomala polita* Blanchard	Coleoptera	Scarabaeidae	Leaf	Low	+	3
463.		Scarabaeid beetle	*Anthophila aegyptiaca Zeller*	Coleoptera	Scarabaeidae	Leaf, root	High	+++	3
464.		Seed borer	*Blastobasis sparmologa Meyrick*	Lepiodptera	Blastobasidae	Seed	High	+++	3
465.		Wood borer	*Crossotarsus saundersi* Chapuis	Coleoptera	Platypodidae	Fallen wood	High	+++	3
466.		Wood boring beetle	*Dinoderus minutus* Fabricius	Coleoptera	Bostrychidae	Sapwood, timber	High	+++	3
467.		Ghoon	*Heterobostrychus aequalis* Waterhouse	Coleoptera	Bostrychidae	Wood	High	+++	3, 7
468.		Ghoon	*Heterobostrychus hamatipennis* Lesne	Coleoptera	Bostrychidae	Wood	High	+++	1, 3
469.		Heartwood borer	*Hoplocerambyx spinicornis* Newman	Coleoptera	Cerambycidae	Heartwood of dead wood, timber	High	+++	3
470.		Bark eating caterpillar	*Indarbela teraonis* Moore	Lepiodptera	Inderbelidae	Stem, bark	Low	+	3
471.		Shoot & blossom webber	*Lamida* (Macalla) m*onocusalis Walker*	Lepiodptera	Crambidae	Leaf, shoot, inflorescence	High	+++	3
472.		Moth	*Laspeyresia pulverula Meyrick*	Lepiodptera	Trotricidae	Leaf, shoot	High	+++	3
473.		Powder-post beetle	*Lyctus africanus* Lesne	Coleoptera	Bostrychidae	Sapwood	High	+++	3
474.		Leaf cutting weevil	*Myllocerus severini Marshall*	Coleoptera	Curculionidae	leaf	Low	+	3
475.		Termite	*Odontotermes obesus* Rambur	Isoptera	Termitidae	Fallen wood, root	Low	+	3

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476.		Termite	*Odontotermes parvidens* Holmgren	Isoptera	Termitidae	Bark of living tree, Fallen wood, root	Low	+	3
477.		Seed & seedling borer	*Pammene theristis Moore*	Lepiodptera	Tortricidae	Seed, seedling	High	+++	3
478.		Stem borer	*Platypus solidus* Walker	Coleoptera	Platypodidae	Wood	High	+++	3
479.		Auger beetle	*Sinoxylon anale* Lesne	Coleoptera	Bostrychidae	Wood	High	+++	3
480.		Seed weevil	*Sitophilus rugicollis* Casey	Coleoptera	Curculionidae	Seed	High	+++	3
481.		Leaf roller	*Sylepta balteata* Fabricius	Lepiodptera	Crambidae	Leaf	Low	+	3
482.		Bark beetle	*Xyleborus interjectus* Blandford	Coleoptera	Scolytidae	Fallen wood	High	+++	3
	Mahagoni *(Swietenia mahagoni)*	Leaf miner	*Acrocerocops auricilla* Stainton	Lepiodptera	Lithocolletidae	Leaf	Low	+	3
483.		Oriental yellow scale	*Aonidiella orientalis* Newstead	Homoptera	Diaspididae	Leaf, twig, branch, fruit, seed	Low	+	3
484.		Atlas moth	*Attacus atlas* Linneaus	Lepiodptera	Saturniidae	Leaf	Low	+	3
485.		Weevil	*Bruchidius* uberatus Fabricius	Coleoptera	Bruchidae	Seed	High	+++	3
486.		Tea mosquito bug	*Helopeltis antonnii* Signoret	Homoptera	Miridae	Leaf, shoot, fruit	Low	+	3
488.		Cedar tip moth	*Hypsipyla robusta Moore*	Lepiodptera	Crambidae	Shoot, fruit	High	+++	3
		Powder-post beetle	*Lyctus africanus* Lesne	Coleoptera	Bostrychidae	Sapwood	High	+++	3
489.		Canker weevil	*Pagiophloeus longiclavis* Dalla Torre & Schenkling	Coleoptera	Curculionidae	Sapwood at collar region, canker	High	+++	3

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490.		Bark beetle	*Xyleborus gravidis* Blandford	Coleoptera	Scolytidae	Branch, shoot, twig,	High	+++	3
491.		Bark beetle	*Xylosandrus* (*Xyleborus*) *discolor* Blandford	Coleoptera	Scolytidae	Branch, shoot, twig,	High	+++	3
492.		Red coffee borer / coffee carpenter	*Zeuzera coffeae* Nietner	Lepiodptera	Cossidae	Stem, twig	Low	+	3
493.	Shegun / Teak *(Tectona grandis)*	Shoot weevil	*Alcidodes ludificator* Faust	Coleoptera	Curculionidae	Shoot	Low	+	3
494.		Scarabid beetle	*Anomala polita* (Blanchard)	Coleoptera	Scarabaeidae	Seedling root, leaf	High	+++	3
495.		Aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	Leaf	Low	+	3
496.		Monotypic grasshopper	*Aularachis miliaris* Linneaus	Orthoptera	Pyrgomorphidae	Leaf	High	+++	3
497.		Field cricket	*Brachytrypes protentosus* Lichtenstein	Orthoptera	Gryllidae	Seedling	High	+++	3
498.		Wood borer	*Crossotarsus squamulatus* Chapuis	Coleoptera	Platypodidae	Sapwood	High	+++	3
499.		Yellow peach moth	*Dichocrocis punctiferalis* (Guenée)	Lepidoptera	Crambidae	Pod, seed, terminal bud	High	+++	3
500.		Teak canker-grub	*Dihammus cervinus Hope*	Coleoptera	Cerambycidae	Sapling	High	+++	3
500.		Wood boring beetle	*Dinoderus minutus* Fabricius	Coleoptera	Bostrychidae	Sapwood, timber	High	+++	3
501.		Teak skeletonizer	*Eutectona machaeralis* (Walker)	Lepidoptera	Crambidae	Leaf	High	+++	3
502.		Mole cricket	*Gryllotalpa africana* Palisot de Beauvois	Orthoptera	Gryllatalpidae	Root	High	+++	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
503.		Ghoon	*Heterobostrychus aequalis* Waterhouse	Coleoptera	Bostrychidae	Wood	High	+++	3, 7
504.		Scarabid beetle	*Holotrichia serrata* Fabricius	Coleoptera	Scarabaeidae	Seedling root, leaf	High	+++	3
505.		Breadfruit mealybug	*Icerya aegyptiaca* Douglas	Homoptera	Monophlebidae	Shoot, leaf	Low	+	3
506.		Bark eating caterpillar	*Indarbela quadrinotata* Walker	Lepiodptera	Inderbelidae	Stem, bark	Low	+	3
507.		Powder-post beetle	*Lyctus africanus* Lesne	Coleoptera	Bostrychidae	Sapwood	High	+++	3
508.		Weevil	*Myllocerus discolor* Boheman	Coleoptera	Curculionidae	Leaf, root	Low	+	3
509.		Termite	*Odontotermes parvidens Holmgren*	Isoptera	Termitidae	Bark of living tree	Low	+	3
510.		Moth	*Pagyda salvalis* Walker	Lepidoptera	Crambidae	Inflorescence, seed	High	+++	3
511.		Leaf miner	*Phyllocnistis tectonivora* Meyrick	Lepidoptera	Gracillariidae	Leaf	Low	+	3
512.		Mealybug	*Planococcus lilacinus* (Cockerell)	Homoptera	Pseudococcidae	Leaf, shoot	Low	+	3
513.		Stem borer	*Platypus solidus* Walker	Coleoptera	Platypodidae	Wood	High	+++	3
514.		Auger beetle	*Sinoxylon anale* Lesne	Coleoptera	Bostrychidae	Sapwoood	High	+++	3
515.		Fruit and seed borer	*Thamnurgides variabilis* Beeson	Coleoptera	Scolytidae	Fruit, bark	Low	+	3
516.		Pigmy mole cricket	*Tridactylus* sp.	Orthoptera	Tridactylidae	Uproot seedling	High	+++	3
517.		Bark beetle	*Xyleborus interjectus* Blandford	Coleoptera	Scolytidae	Fallen wood	High	+++	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
518.		Bark beetle	*Xyleborus perforans* Wollaston	Coleoptera	Scolytidae	Wood	High	+++	3, 5
519.	Arjun *(Terminalia arjuna)*	Leaf miner	*Acrocerocops terminaliae* Stainton	Lepiodptera	Lithocolletidae	Leaf	Low	+	3
520.		Defoliator	*Antheraea paphia* Linneaus	Lepidoptera	Saturniidae	Leaf	Low	+	3
521.		Wax scale	*Ceroplastes ceriferus Anderson*	Homoptera	Coccidae	Branch, stem	Low	+	3
522.		Wood borer	*Crossotarsus minax Walker*	Coleoptera	Platypodidae	Sapwood	High	+++	3
523.		Powder-post beetle	*Lyctus africanus* Lesne	Coleoptera	Bostrychidae	Sapwood	High	+++	3
524.		Pink sypsy moth	*Lymantria Mathura Moore*	Lepidoptera	Lymantridae	Leaf	Low	+	3, 6
525.		Auger beetle	*Sinoxylon anale* Lesne	Coleoptera	Bostrychidae	Sapwoood	High	+++	3
526.		Auger beetle	*Sinoxylon atratum* Lesne	Coleoptera	Bostrychidae	Sapwoood	High	+++	3
527.		Auger beetle	*Sinoxylon crassum* Lesne	Coleoptera	Bostrychidae	Sapwoood	High	+++	3
528.		Gall insect	*Trioza fletcheri Crawford*	Homoptera	Psyllidae	Leaf gall	High	+++	3
529.	Thuja *(Thyua orientalis)*	Defoliator	*Ascotis infixaria Walker*	Lepidoptera	Geomatridae	Leaf	Low	+	3
530.		Black ant	*Camponotus compressus Fabricius*	Hymenoptera	Formicidae	Make nest	High	+++	3
532.		Bagworm	*Cryptothelia cramari Westwood*	Lepidoptera	Psychidae	Make bag by cutting leaf, twig, shoot, bud	Low	+	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
533.		Defoliator	*Spodoptera litura Fabricius*	Lepidoptera	Noctuidae	Leaf	Low	+	3, 10
534.	Lohakat / Iron wood *(Xylia kerrii)*	Metallic wood boring beetle	*Acmaeodera stictipennis* Laporte & Gory	Coleoptera	Buprestidae	Dead wood	Low	+	3
535.		Longhorn beetle	*Aristobia approximator* Thompson	Coleoptera	Cerambycidae	Bark, stem, branch	High	+++	3
536.		Field cricket	*Brachytrypes orientalis* Burmeister	Orthoptera	Gryllidae	Seedling	High	+++	3
537.		Wood borer	*Crossotarsus bonvouloiri Chapuis*	Coleoptera	Platypodidae	Sapwood	High	+++	3
538.		Seed predator	*Gonocephalum planatum* (Walker)	Coleoptera	Tenebrionidae	Sown seed	High	+++	3
539.		Bark eating caterpillar	*Indarbela quadrinotata* Walker	Lepidoptera	Inderbelidae	Stem, bark	Low	+	3
540.		Legume pod borer	*Maruca testulalis* Geyer	Lepidoptera	Crambidae	Flower, flower bud	Low	+	3
541.		Nymphalid butterfly	*Neptis jumbah* Moore	Lepidoptera	Nymphalidae	Leaf	Low	+	3, 4
542.		Leaf webber	*Striglina scitaria* Walker	Lepidoptera	Thyrididae	Leaf	Low	+	3
543.		Bark beetle	*Xyleborus fornicatus* Eichhoff	Coleoptera	Scolytidae	Fallen wood	Low	+	3
544.		Bark beetle	*Xyleborus interjectus* Blandford	Coleoptera	Scolytidae	Fallen wood	High	+++	3
545.		Longhorn beetle	*Xystrocera globosa* Olivier	Coleoptera	Cerambycidae	Dead wood	Low	+	3
546.		Red coffee borer / coffee carpenter	*Zeuzera coffeae* Nietner	Lepiodptera	Cossidae	Stem, twig	Low	+	3

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2.12 Recording Insect and Mite Pests of Narcotics and Beverage Crops

Insect and mite pests of 6 different narcotics and beverage crops such as tobacco, hemp, betel leaf, betel nut, tea and coffee are included under this category. Altogether 71 insect and mite pests of narcotics and beverage crops are listed in Table 12 of which 29 pests were in the range of medium to high with common to wide distribution in the country. Plant parts affected include seedling, root, leaf, stem, twig, bud, flower, fruits and seed.

Table 12. Insect and Mite Pests of Narcotics and Beverage Crops

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
01.	Tobacco (*Nicotiana tabacum*)	Turnip moth	*Agrotis* (*Euxoa*) *segetum* (Denis & Schiffermüller)	Lepidoptera	Noctuidae	Stem below ground	Low	+	1, 7, 10
02.		Cut worm	*Agrotis ipsilon* (Hufnagel)	Lepidoptera	Noctuidae	Seedling	High	+++	1,10
03.		Whitefly	*Bemisia tabaci* (Gennadius)	Hemiptera	Aleyrodidae	Leaf	High	+++	1,10
04.		Tobacco capsid/ Shoot bug	*Gallobelicus crassicornis* Distant	Hemiptera	Capsidae	Shoot	Medium	++	1,10
05.		Tobacco stem borer	*Gnorimoschema heliopa* Low	Lepidoptera	Gelechidae	Shoot borer	Low	+	1,10
06.		Darkling beetle	*Gonocephalum bilineatum* (Walker)	Coleoptera	Tenebrionidae	Seedling	Low	+	1,10
07.		Darkling beetle	*Gonocephalum tuberculatum Hope*	Coleoptera	Tenebrionidae	Leaf	Low	+	1
08.		Mole cricket	*Gryllatalpa africana* Pal	Orthoptera	Gryllotalpidae	Seedling	Low	+	1
09.		Oriental tobacco budworm	*Helicoverpa assulta* Green	Lepidoptera	Noctuidae	Leaf	Low	+	1,10
		Gram pod borer	*Helicoverpa armigera* (Hubner)	Lepidotera	Noctuidae	Leaf	High	+++	1
10.		Cigar beetle/ tobacco beetle	*Lesioderma serricorne* Fabricius	Coleoptera	Anobiidae	leaf	High	+++	1,10
11.		Green peach aphid	*Myzus persicae* (Sulzer)	Hemiptera	Aphididae	Leaf, shoot, flower	High	+++	1,10
12.		Thrips	*Neoheegeria indica* Hood	Thysanoptera	Phlaeothripida	Flower	Low	+	1,10

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
13.		Green semilooper	*Plusia signata Fabricius*	Lepidoptera	Noctuidae	Leaf	Low	+	1,10
14.		Tobacco caterpillar	*Spodoptera litura (Fabricius)*	Lepidotera	Noctuidae	Leaf	High	+++	1,10
15.		Root bug	*Stibaraopus tabulatus*	Hemiptera	Pentatomidae	Shoot, pod	Low	+	1
16.	Hemp (*Cannabis sativa*)	Cotton boll wrom	*Helicoverpa (Heliothis) obsoleta* Fabricius	Lepidoptera	Noctuidae	Leaf	Medium	++	1,7,8
17.		Whitefly	*Bemisia tabaci* (Gennadius)	Homoptera	Aleyrodidae	Leaf	High	+++	1,8
18.		Cutworm	*Agrotis ipsilon* (Hufnagel)	Lepidoptera	Noctuidae	Seedling	Medium	++	1
19.		Tobacco caterpillar	*Spodoptera litura (Fabricius)*	Lepidoptera	Noctuidae	Leaf	Medium	++	1,8
20.		Gram pod borer	*Helicoverpa armigera* (Hubner)	Lepidoptera	Noctuidae	Flower	Medium	++	1,7,8
21.		Termite	*Odontotermes obesus (Rambur)*	Isoptera	Termitidae	Root	Low	+	1,8
22.		Fire ant	*Solenopsis geminata (Fabricius)*	Hymenoptera	Formicidae	Root, stem	Low	+	8
23.		Spider mite	*Tetranychus urticae* Koch		Tetranychidae	Leaf	Medium	++	1,8
24.	Betel leaf *(Piper betle)*	Whitefly	*Aleurocanthus nubilans* (Buckton)	Homoptera	Aleyrodide	Foliage	Medium	++	1, 10
25.		Cotton aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	Foliage	Medium	++	1,8
26.		Striped mealybug	*Ferrisia virgata* (Cockerell)	Homoptera	Pseudococcidae	Foliage	High	+++	12
27.		Termite	*Odontotermes obesus (Rambur)*	Isoptera	Termitidae	Root	Low	+	1
28.		Betel vine bug	*Disphinctus politus Walker*	Hemiptera	Miridae	Shoot, leaf	Low	+	1
29.	Betel nut (*Areca catechu*)	Coffee bean weevil	*Araecerus fasciculatus* De Geer	Coleoptera	Anthribidae	Nut	Low	+	5
30.		Grasshopper	*Aularches miliaris* Linn.	Orthoptera	Pyrgomorphidae	Leaf	Low	+	5

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
31.		Palm aphid	*Cerataphis lataniae* Lichtenstein	Homptera	Aphididae	Leaf, shoot	Low	+	5
32.		Scale insect	*Chrysomphalus ficus* Ashmead	Homoptera	Diaspididae	Leaf, shoot	Low	+	5
33.		Bark beetle	*Coccotrypes dactyliperda* Fabricius	Coleoptera	Scolytidae	Nut	High	+++	5
34.		Army ant	*Dorylus orientalis* Westwood	Hymenoptera	Formicidae	Seed, seedling	High	+++	5
35.		Armored scale insect	*Phenacaspis dilatata* (Green)	Homoptera	Diaspididae	Leaf, shoot	Low	+	5
36.		Palm weevil	*Rhynchophorus ferrugineus* Olivier	Coleoptera	Curculionidae	Crown	High	+++	5
37.		Fire ant	*Solenopsis geminata* Fabricius	Hymenoptera	Formicidae	Seed, seedling	High	+++	5
38.		Xyleborus beetle	*Xyleborus testaceus* Walker	Coleoptera	Scolytidae	Dead wood	Low	+	5
39.	Tea (*Camellia sinensis*)	Tea mosquito bug	*Helopeltis theivora* Waterhouse	Hemiptera	Miridae	Leaf, shoot	High	+++	2, 6, 9
40.		Greenfly/ Jassid	*Empoasca flavescens* Fabricius	Homoptera	Jassidae	Leaf, shoot	Low	+	2, 6, 9
41.		Plant lice / aphid	*Toxoptera aurantii* (Boyer de Fonscolombe)	Homoptera	Aphididae	Leaf, shoot	Low	+	2, 6, 9
42.		Tea seed bug	*Poecilocoris latus* Dall.	Hemiptera	Scutelleridae	Stem, seed, bud, flower	Low	+	6, 9
43.		Green scale	*Coccus viridis* (Green)	Homoptera	Coccidae	Leaf, shoot, stem	Low	+	6, 9
44.		Florida red scale	*Chrysomphalus aonidum* (Linneaus)	Homoptera	Coccidae	Leaf, shoot, stem	Low	+	9

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
45.		Looper caterpillar /Tea looper	*Biston suppressaria* Guenee	Lepidoptera	Geometridae	Young leaf	Medium	++	2, 6, 9
46.		Tea flush worm	*Lespeyresia leucotoma*	Lepidoptera	Eucosmidae	Leaf, bud	Low	+	2, 6, 9
47.		Leaf roller	*Gracilaria theivora* Walsom.	Lepidoptera	Gracillaridae	Leaf	Low	+	2, 6, 9
48.		Bag worm	*Clania cramerii* (Westwood)	Lepidoptera	Psychididae	Leaf, shoot, bud	Low	+	6, 9
49.		Faggot worm	*Clania sikkima* (Moore)	Lepidoptera	Psychididae	Leaf, shoot, bud	Low	+	6, 9
50.		Coffee red borer	*Zeuzera coffeae* Neitner	Lepidoptera	Cossidae	Stem	Low	+	6,9
51.		Bark eating borer	*Inderbela theivora* (Hampson)	Lepidoptera	Inderbelidae	Stem	Low	+	9
52.		Field cricket	*Brachytrypes protentosus* Lichtenstein	Orthoptera	Gryllidae	Root, stem, seedling	Low	+	2, 6, 9
53.		Mole cricket	*Gryllotalpa africana* Palisot de Beauvois	Orthoptera	Gryllotalpidae	Root, stem, seedling	Low	+	5, 6, 9
54.		Live wood termite	*Microtemes obesi* (Holmgren)	Isooptera	Termitidae	Root, stem stump	High	+++	2, 6, 9
55.		Live wood termite	*Microcerotermes championi* (Snyder)	Isooptera	Termitidae	Root, stem stump	High	+++	2, 9
56.		Scavenger termite	*Odontotermes feae* (Wasmann)	Isooptera	Termitidae	Root, stem stump	Low	+	6, 9
57.		Scavenger termite	*Odontotermes homi* (Wasmann)	Isooptera	Termitidae	Root, stem stump	Low	+	3, 9
58.		Live wood termite	*Coptotemes heimi* (Wasmann)	Isooptera	Rhinotermitidae	Root, stem stump	High	+++	2, 9
59.		Thrips	*Scirtothrips dorsalis* Hood	Thysanoptera	Thripidae	Unopend and open bud	High	+++	2, 9
60.		Nest building ant	*Oecophylla smaragdina* Fabricius	Hymenoptera	Formicidae	Older leaf	Minor	+	9

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
61.		Cockchafer grub	*Melolontha melolontha*	Coleoptera	Scarabaeidae	Root	Low	+	9
62.		Powder post beetle	*Heterobostrychus aequalis* Waterhouse	Coleoptera	Bostrychidae	Wood	Low	+	1,4
63.		Red spider mite	*Oligonychus coffeae* Nietner	Acarina	Tetranychidae	Mature leaf	High	+++	2, 6, 9
64.		Scarlet mite / False spider mite	*Brevipalpus phoenicis* (Geijskes)	Acarina	Tenuipalpidae	Mature leaf	Low	+	6,9
65.		Pink mite	*Acaphylla theae* (Watt)	Acarina	Triophyidae	Mature leaf	Low	+	6,9
66.	Coffee (*Coffea arabica*)	Coffee green scale	*Coccus viridis* (Green)	Homoptera	Coccidae	Foliage	High	+++	5
67.		Coffee red stem borer	*Zeuzera coffeae* Neitner	Lepidoptera	Cossidae	Stem	Low	+	6, 9
68.		Coffee Stem Borer	*Xylotrechus quadripes* (Chevrolat)	Coleoptera	Cerambycidae	Stem	Low	+	8
69.		Striped mealybug	*Ferrisia virgata* (Cockerell)	Homoptera	Pseudococcidae	Foliage	High	+++	11
70.		White grub/ cockchafer	*Holothrichia* spp.	Coleoptera	Melolonthidae	Leaf, root	Low	+	8
71.		Termite	*Macrotermes* spp.	Isoptera	Termitidae	Root	Low	+	8

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2.13 Recording Insect and Mite Pests of Medicinal Plants

Insect and mite pests of 24 different medicinal plants are included under this category. Altogether 133 insect and mite pests of medicinal plants are listed in Table 13 of which 47 pests were in the range of medium to high with common to wide distribution in the country. Plant parts affected include seedling, root, leaf, stem, twig, bud, flower, inflorescence, fruits and seed.

Table 13. Insect and Mite Pests of Medicinal Plants

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
01.	Ulatchandal / Agnisikha (*Gloriosa superba)*	Semilooper	*Plusia signata Fabricius*	Lepidoptera	Noctuidae	Leaf	Low	+	3, 11
02.		Caterpillar	*Polytela gloriosae*	Lepidoptera	Noctuidae	Leaf	Low	+	3
03.		Tobacco caterpillar	*Spodoptera litura* (Fabricius)	Lepidoptera	Noctuidae	Leaf, shoot	Low	+	2, 3
04.		Thrips	*Thrips tabaci* Lindeman	Thysanoptera	Thripidae	Leaf, shoot	Low	+	3
05.	Phuti Beguin / (Kakmachi *Solanum nigrum)*	Aphid	*Aphis craccivora* Koch	Homoptera	Aphididae	Leaf, shoot, flower	Medium	+++	2, 3
06.		Whitefly	*Bemisia tabaci* (Gennadius)	Homoptera	Aleyrodidae	Leaf, stem	Low	+	2, 3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
07.		Red cotton bug	*Dysdercus cingulatus* (Fabricius)	Hemiptera	Pyrrhocoridae	Leaf, stem	Medium	++	3
08.		Papaya mealybug	*Paracoccus marginatus* Williams & Granara de Willink	Homoptera	Pseudococcidae	Leaf, flower, fruit	High	+++	3, 10
09.		Thrips	*Thrips tabaci* Lindeman	Thysanoptera	Thripidae	Leaf, shoot	Low	+	3
10.	Ashwagandha *(Withania somnifer)*	Hawk moth	*Acherontia styx* Westwood	Lepidoptera	Sphingidae	Leaf	Low	+	3
11.		Aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	Foliage	Medium	+++	3
12.		Stink bug	*Aspongopus janus* (Fabricius)	Hemiptera	Dinidoridae	Leaf, twig	Low	+	3
13.		Jassid	*Amrasca biguttula biguttula* (Ishida)	Homoptera	Cicadellidae	Leaf, shoot	High	+++	3, 6
14.		Stink bug	*Nezara viridula* (Linnaeus)	Hemiptera	Pentatomidae	Leaf, twig	Low	+	3
15.		Snout beetle	*Cyrtozemia dispar* Pascoe	Coleoptera	Curculionidae	Leaf	Low	+	3
16.		Epilachna beetle	*Epilachna vigintioctopunctata* (Fabricius)	Coleoptera	Coccinellidae	Leaf	Medium	+++	3
17.		Seed bug	*Graptostethus servus* Fabricius	Hemiptera	Lygaeidae	Seed	Low	+	3
18.		Seed bug	*Spilostethus pandurus* (Scopoli)	Hemiptera	Lygaeidae	Seed	Low	+	3
19.		Leaf eating caterpillar	*Helicoverpa armigera* (Hubner)	Lepidotera	Noctuidae	Leaf	High	+++	3
20.		Semilooper	*Hyposidra successaria Walker*	Lepiodptera	Geometridae	Leaf	Low	+	3, 4

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
21.		Tree hopper	*Leptocentrus taurus* Fabricius	Homoptera	Membracidae	Leaf, twig	Low	+	3
22.		Tree hopper	*Otinotus oneratus* Walker	Homoptera	Membracidae	Leaf, twig	Low	+	3
23.		Two-spotted mite	*Tetranychus urticae* Koch	Acari	Tetranychidae	Leaf	Medium	+++	3, 11
24.	Isabgol *(Plantago ovate)*	Aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	Foliage	Medium	+++	3
25.		Gram pod borer	*Helicoverpa armigera* (Hubner)	Lepidoptera	Noctuidae	Leaf	High	+++	3
26.		Hairy caterpillar	*Diacrisia obliqua* (Walker)	Lepidoptera	Erebidae	Leaf	Medium	+++	3
27.		Leaf eating caterpillar	*Thysanoplusia orichalcea* Fabricius	Lepidoptera	Noctuidae	Leaf	Low	+	3
28.		Looper	*Hyposidra successaria* Walker	Lepiodptera	Geometridae	Leaf	Low	+	3
29.		Seed bug	*Graptostethus servus* Fabricius	Hemiptera	Lygaeidae	Seed	Low	+	3
30.		Seed bug	*Spilostethus pandurus* (Scopoli)	Hemiptera	Lygaeidae	Seed	Low	+	3
31.		Shield back bug	*Hermolaus typicus* Distant	Hemiptera	Pentatomidae	Leaf, twig	Low	+	3
32.		Spiny caterpillar	*Junonia orithya* (Linneaus)	Lepidoptera	Nymphlaidae	Leaf	Low	+	3, 5
33.		Tobacco caterpillar	*Spodoptera litura (Fabricius)*	Lepidoptera	Noctuidae	Leaf	Medium	+++	3
34.	Basil / Indian Basil/ Tulsi *(Ocimum basilicum)*	Aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	Foliage	Medium	+++	3
35.		Black fly	*Acaudaleyrodes rachipora* Singh	Homoptera	Aleyrodidae	Leaf, twig	Low	+	3
36.		Flea beetle	*Phylotreta* sp	Coleoptera	Chrysomelidae	Leaf	Low	+	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
37.		Scale insect	*Aspidiella* sp.	Homoptera	Diaspididae	Leaf, twig	Low	+	3
38.		Shield bug	*Euscarcoris* sp	Hemiptera	Pentatomidae	Leaf, twig	Low	+	3
39.		Spittle bug	*Aphrophora* sp.	Homoptera	Aphrophoridae	Leaf, twig	Low		3
40.		Tingid bug	*Monanthia globulifera* Walker	Hemiptera	Tingidae	Leaf, twig	Low	+	3
41.		Tobaco caterpillar	*Spodoptera litura (Fabricius)*	Lepidoptera	Noctuidae	Leaf	Medium	+++	3
42.	Aloevera *(Aloe barbadensis)*	Aphid	*Aphis gossypii* Glover	Homoptera	Aphididae	Foliage	Medium	+++	3
43.	Basak (*Adhatoda vasica)*	Moth	*Dasychira obliqua* Walker	Lepidotera	Arctiidae	Foliage	Low	+	3
44.		Shoot borer	*Leucinodes sp.*	Lepidotera	Noctuidae	Shoot	Low	+	3
45.		Pink mealybug	*Phenacoccus hirsutus* Green	Homoptera	Pseudococcidae	Leaf, stem, flower	Low	+	3, 7
46.		Termite	*Microtermes mycophagus* (Desneux)	Isoptera	Termitidae	Root	Low	+	3
47.		Mealy bug	*Pseudococcus* sp.	Homoptera	Pseudococcidae	Leaf, stem, flower	Low	+	3
48.	Kalomegh (*Andrographis paniculata)*	Leaf weevil	*Crytozemia dispar* Pasc	Coleoptera	Curculionidae	Leaf	Low	+	3
49.		Gram pod borer	*Helicoverpa armigera* (Hubner)	Lepidotera	Noctuidae	Leaf	High	+++	3
50.		Green bug	*Nezara viridula* (Linnaeus)	Hemiptera	Pentatomidae	Leaf, twig	Low	+	3
51.		Tobacco caterpillar	*Spodoptera litura (Fabricius)*	Lepidoptera	Noctuidae	Leaf	Medium	+++	3
52.		Red mite	*Tetranychus urticae* Koch	Acari	Tetranychidae	Leaf	Medium	+++	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
53.	Akankda (*Calotropis gigantea)*	Stripped larvae	*Danaus chrysippus* Linnaeus	Lepidoptera	Nymphlaidae	Leaf	Low	+	3, 5
54.	Asparagus / Shotomuli *(Asparagus officinalis)*	Aphid	*Aphis craccivora* Koch	Homoptera	Aphididae	Leaf, flower inflorescence	High	+++	3
55.		Shorgum bug	*Brachytes bicolar* Westwood	Hemiptera	Coreidae	Foliage	Low	+	3
56.		Asparagus beetle	*Crioceris* sp.	Coleoptera	Chrysomelidae	Leaf	Low	+	3
57.		Leaf eating beetle	*Lema downsei* Baly	Coleoptera	Chrysomelidae	Leaf	Low	+	3
58.	Gulancha (*Tinospora cordifolia)*	Looper	*Elygea materna* Linneaus	Lepidotera	Eribidae	Leaf	Low	+	3
59.		Termite	*Odontotermes bellahunisensis* Holmgren	Isoptera	Termitidae	Root	Low	+	3
60.		Two-spotted mite	*Tetranychus urticae* Koch	Acari	Tetranychidae	Leaf	Medium	+++	3, 8
61.	Safed musli (*Chlorophytum borivillianum)*	Gram pod borer	*Helicoverpa armigera* (Hubner)	Lepidotera	Noctuidae	Leaf	Medium	+++	3
62.		Blister beetle	*Mylabris pustulata* Thunberg	Coleoptera	Meloidae	Leaf, shoot	Low	+	3
63.		Grey weevil	*Myllocerus discolor* Boheman	Coleoptera	Curculionidae	Leaf, shoot	Low	+	3, 4
64.		Hairy caterpillar	*Dasychira obliqua* Walker	Lepidotera	Arctiidae	Foliage	Low	+	3
65.		Tobacco caterpillar	*Spodoptera litura (Fabricius)*	Lepidoptera	Noctuidae	Leaf	Medium	+++	3
66.		Looper	*Trichoplusia ni* (Hubner)	Lepidoptera	Noctuidae	Leaf	Medium	++	3
67.	Lemon grass (*Cymbopogon*	Grasshopper	*Acrida exultata* (Walker)	Orthoptera	Acrididae	Leaf	Low	+	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
68.	*flexusos)*	Cut worm	*Agrotis ipsilon* (Hufnagel)	Lepidoptera	Pyralidae	Seedling	Low	+	3
69.		Surface grasshopper	*Crotogonus trachypterous* (Blanchard)	Orthoptera	Pyrgomorphidae	Foliage	Low	+	3
70.		Red cotton bug	*Dysdercus cingulatus* (Fabricius)	Hemiptera	Pyrrhocoridae	Leaf, stem	Low	+	3
71.		Leaf eating caterpillar	*Helicoverpa armigera* (Hubner)	Lepidotera	Noctuidae	Leaf	Medium	+++	3
72.		Susana Looper	*Hyposidra successaria* Walker	Lepiodptera	Geometridae	Leaf	Low	+	3
73.		Grey weevil	*Myllocerus discolor* Boheman	Coleoptera	Curculionidae	Leaf, shoot	Low	+	3, 4
74.		Green stink bug	*Nezara viridula* (Linnaeus)	Hemiptera	Pentatomidae	Leaf, twig	Low	+	3
75.		Tussock moth	*Olene mendosa* Hübner	Lepidoptera	Erebidae	Leaf	Low	+	3
76.		Treehopper	*Otinotus oneratus* Walker	Homoptera	Membracidae	Leaf, twig	Low	+	3
77.		Stink bug	*Plautia fimbriata* Fabricius	Hemiptera	Pentatomidae	Leaf, twig	Low	+	3
78.		Shield-backed bug	*Scutelleria nobilis* Linneaus	Hemiptera	Scutelleridae	Leaf, twig	Low	+	3
79.		Tussock caterpillar	*Somena scintnillans* Walker	Lepidoptera	Eribidae	Leaf, twig	Low	+	3
80.		Leaf eating caterpillar	*Thysanoplusia orichalcea*	Lepidoptera	Noctuidae	Leaf	Low	+	3
81.		Leaf eating caterpillar	*Trichoplusia ni* (Hubner)	Lepidoptera	Noctuidae	Leaf	Medium	++	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
82.	Muskdana or Ambrette seeds (*Abelmoschus moschatus)*	Cotton jassid	*Amrasca biguttula* (Ishida)	Homoptera	Jassidae	Leaf, twig	Low	+	3
83.		Cotton looper	*Anomis flava* (Fabricius)	Lepidoptera	Eribidae	Leaf	Low	+	3
84.		Cotton aphids	*Aphis gossypii* Glover	Homoptera	Aphididae	Foliage	Medium	+++	3
85.		Cabbage-head caterpillar	*Crocidolomia binotalis* Zeller	Lepidoptera	Crambidae	Leaf	Low	+	3
86.		Leaf weevil	*Crytozima despar*	Coleoptera	Curculionidae	Leaf	Low	+	3
87.		Spotted bollworm	*Earias vittella* (Fabricius)	Lepidoptera	Noctuidae	Stem, boll	Medium	++	3
88.		Gram pod borer	*Helicoverpa armigera* (Hubner)	Lepidotera	Noctuidae	Leaf	High	+++	3
89.		Green bug	*Nezara viridula* (Linnaeus)	Hemiptera	Pentatomidae	Leaf, twig	Low	+	3
90.		Tobacco caterpillar	*Spodoptera litura (Fabricius)*	Lepidoptera	Noctuidae	Leaf	Medium	+++	3
91.	Datura *(Datura metel)*	Grasshopper	*Acrida exultata* (Walker)	Orthoptera	Acrididae	Leaf	Low	+	3
92.		Red cotton bug	*Dysdercus cingulatus* (Fabricius)	Hemiptera	Pyrrhocoridae	Leaf, stem	Low	+	3
93.		Hadda beetle	*Epilachna vigintioctopunctata* (Fabricius)	Coleoptera	Coccinellidae	Leaf	Medium	+++	3
94.		Green stink bug	*Nezara viridula* (Linnaeus)	Hemiptera	Pentatomidae	Leaf, twig	Low	+	3
95.		Hairy caterpillar	*Pericallia recini* (Fabricius)	Lepidoptera	Erebidae	Leaf	Low	+	2, 3
96.	Thankuni (*Centella*	Grasshopper	*Acrida exultata* (Walker)	Orthoptera	Acrididae	Leaf	Low	+	3

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
97.	*asiatica)*	Jassid	*Empoasca* sp.	Homoptera	Cicadellidae	Leaf	Low	+	3
98.		Tobacco caterpillar	*Spodoptera litura (Fabricius)*	Lepidoptera	Noctuidae	Leaf	Medium	+++	3
99.	Asoka tree (*Saraca asoca*)	Milkweed aphid	*Aphis nerii* Boyer de Fonscolombe,	Homoptera	Aphididae	Leaf, shoot	Medium	++	3
100.		Looper	*Hyposidra successaria* Walker	Lepidoptera	Geometridae	Leaf, twig	Medium	++	3
101.		Tussock moth	*Olene mendosa* Hübner	Lepidoptera	Erebidae	Leaf	Low	+	3
102.	Meetha neem (*Muarrya koeingii)*	Indian sunbeam	*Curetis thetis* (Drury)	Lepidoptera	Lycanidae	Leaf	Low	+	3
103.		Citrus caterpillar	*Papilio demoleus* Lnneaus	Lepidoptera	Papilionidae	Leaf	Low	+	3, 11
104.	Pudina (*Mentha spacita*)	Whitefly	*Bemisia tabaci* (Gennadius)	Homoptera	Aleyrodidae	Leaf, twig, flower	Medium	+++	1, 3
105.		Tingid bug	*Monanthia globulifera* Walker	Hemiptera	Tingidae	Leaf, twig	Low	+	3
106.	Mint (*Mentha* spp.)	Black cut worm	*Agrotis ipsilon* (Hufnagel)	Lepidoptera	Noctuidae	Seedling	Low	+	1, 3
107.		Thrips	*Frankliniella occidentalis* (Pergande)	Thysanoptera	Thripidae	Leaf, flower bud, petal	Medium	++	3, 8
108.		Aphid	*Myzus persicae* (Sulzer)	Homoptera	Aphididae	Leaf, shoot, bud, flower	High	+++	3, 8
109.		Two-spotted mite	*Tetranychus urticae* Koch	Acari	Tetranychidae	Leaf	Medium	+++	3, 8
110.	Vajradanti (*Barleria prionitis*)	Spiny caterpillar	*Junonia hierta* (Fabricius)	Lepidoptera	Nymphlaidae	Leaf	Low	+	5
111.		Spiny caterpillar	*Junonia orithya* (Linneaus)	Lepidoptera	Nymphlaidae	Leaf	Low	+	5

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
112.	Dodi (*Leptadenia reticulate*)	Milk weed aphid	*Aphis nerii* Boyer de Fonscolombe,	Homoptera	Aphididae	Leaf, shoot	Medium	++	3
113.		Stripped larvae	*Danaus chrysippus* Linnaeus	Lepidoptera	Nymphlaidae	Leaf	Low	+	3, 5
114.		Psyllid	*Diaphornia dakariensis* Boselli	Homoptera	Psyllidae	Leaf, shoot	Low	+	3
115.		Bug	*Geocoris ochopterus* (Fieber)	Hemiptera	Geocoridae	Leaf, shoot	Low	+	3
116.	Bohera *(Terminalia bellirica)*	Leaf miner	*Acrocercops calycophthalma* Meyrick	Lepiodptera	Lithocolletidae	Leaf	Low	+	4
117.		Wood borer	*Crossotarsus bonvouloiri* Chapuis	Coleoptera	Platypodidae	Sapwood	High	++	4
118.		Tussock moth	*Dasychira mendosa* Hubner	Lepidopera	Lymantridae	Leaf	Low	+	4
119.		Wood boring beetle	*Dinoderus minutus* Fabricius	Coleoptera	Bostrychidae	Sapwood, timber	High	+++	4
120.		Ghoon	*Heterobostrychus aequalis* Waterhouse	Coleoptera	Bostrychidae	Wood	High	+++	4, 12
121.		Powder-post beetle	*Lyctus brunneus* Stephens	Coleoptera	Bostrychidae	Bore wood	High	+++	4
122.		Defoliator	*Orgyia postica* Walker	Lepiodptera	Lymantriidae	Leaf	Low	+	4
123.		Stem borer	*Platypus solidus* Walker	Coleoptera	Platypodidae	Wood	High	+++	4
124.		Auger beetle	*Sinoxylon anale* Lesne	Coleoptera	Bostrychidae	Sapwoood	High	+++	4
125.		Bark beetle	*Xyleborus interjectus* Blandford	Coleoptera	Scolytidae	Fallen wood	High	+++	4
126.		Ambrosia beetle	*Xyleborus similis* Ferrari	Coleoptera	Scolytidae	Fallen wood	High	+++	4

Sl. No.	Name of plant and plan products	English name pest	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
127.	Haritoki (*Terminalia chebula*)	Leaf miner	*Acrocercops niphocremna* Meyrick	Lepiodptera	Lithocolletidae	Leaf	Low	+	4
128.		Defoliator	*Barasa alopha* Hampson	Lepiodptera	Nolidae	Leaf	Low	+	4
129.		Wax scale	*Ceroplastes ceriferus Anderson*	Homoptera	Coccidae	Branch, stem	Low	+	4
130.		Defoliator	*Selepa celtis Moore*	Lepidoptera	Noctuidae	Leaf	Low	+	4
131.		Auger beetle	*Sinoxylon crassum* Lesne	Coleoptera	Bostrychidae	Sapwoood	High	+++	4
132.		Defoliator	*Teleclita strigata Moore*	Lepidoptera	Notodontidae	Leaf	Low	+	4
133.		Ambrosia beetle	*Xyleborus perforans* Wollaston	Coleoptera	Scolytidae	Fallen wood	High	+++	4

2.13.1 References

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3.0 RECORDED DISEASES OF PLANTS AND PLANT PRODUCTS

Globally, disease causing agents are the vital pests of plant and plant products causing considerable crop losses and so is the case in Bangladesh. As the disease causing entities are microscopic these could be easily disseminated with different plant and/or plant products not only within the boundary of a country but may move globally and there is possibility of introducing a new devastating pathogen in a country which is otherwise free from it and create additional concern to the growers. This could be avoided if there is ready reference on the association of pathogen with plant and plant products. Pest list of a country is the ready reference that helps any importing country to take decision if there they should import a particular commodity from a particular country. Therefore, to avoid unnecessary hindrance of international trade and deployment of required phytosanitary measures every country should have a comprehensive pest list. The present work is the efforts towards making a pest list for Bangladesh. In this section information related to disease was collected from the plant species under 13 groups such as cereals, pulses, oilseed crops, fibre, sugar crops, tuber crops, vegetables, fruits, spices & condiments, flower, forest trees, narcotics & beverage, and medicinal plants.

Relevant information was collected from different authentic sources such as discussions with the scientists from the research organizations, teachers of different Universities, field level extension officers and from different documents like article published in annual reports, bulletins, scientific journals and proceedings of workshops/ conferences/seminars and the internet resources. Total number of plant species under 13 groups was 401 and the number under each group found to vary. Number of plant species under cereals, pulses, oilseed crops, fibre, sugar crops, tuber crops, vegetables, fruits, spices & condiments, flowers and ornamental plants, forest trees, narcotics & beverage, and medicinal plants were 8, 8, 9, 7, 4, 3, 29, 38, 18, 25, 239, 7 and 5, respectively. The pathogens involved in causing these diseases were fungi, bacteria, viruses, nematodes and parasitic plants. Number of diseases on cereals, pulses, oilseed crops, fibre crops, sugar crops, tuber crops, vegetable crops, fruits, spices & condiments, flowers and ornamental plants, forest trees, narcotics & beverage, medicinal plants were 179, 171, 158, 92, 60, 79, 367, 291, 129, 68, 920, 111 and 19 respectively. Altogether records of 2644 diseases on 400 plant species were compiled. Among these 2641 diseases 1966, 66, 145, 356 and 111 are caused by fungi, bacteria, virus, nematode and parasitic plants.

3.1 Recording Diseases of Cereal Crops

The relevant information collected on the cereals such as rice, wheat, maize, barley, oat, soughum and millets (kaon & cheena) growing in Bangladesh from different authentic sources. Altogether 179 diseases including fungal, bacterial, viral & MLOs, nematode, Phytoplasma and Parasitic plants are listed in Table 14. Out of 179 diseases 43, 52, 43, 25, 11, 1 and 4 were recorded on rice, wheat, maize, millets, barley, oat and sorghum, respectively. In rice, among the 43 diseases 27 were caused by fungal pathogens, 4 by bacteria, 2 by virus/mycoplasma and 10 by nematodes. In wheat 35, 2, 2 and 13 diseases are caused by fungi, bacteria, virus and nematodes, respectively. The corresponding figures for maize were 24, 1, 5 and 13 respectively. In millets (kaon & cheena) the recorded fungal diseases were16 and 9 were nemic diseases. Five fungal diseases two virus and four nemic diseases were recorded on barley and one fungal disease was found on Oat and only four fungal diseases were found on sorghum. In rice, status of 15 diseases was in the range of medium to high with common to widely distribute in the country. Similarly, for wheat, maize, millet and oat number of diseases with medium

to high status and common to wide distribution were 11, 6, 5, and 1 respectively (Table 14). Plant parts affected include leaf, sheath, stem, seed, panicle and root.

Table 14. Diseases of Cereal Crops

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
	Rice (*Oryza sativa* L.)	**Fungi**					
1		Sheath blight	*Rhizoctonia solani*	Leaf sheath, leaf, panicle	High	+++	3
2		Blast	*Pyricularia grisea*	Leaf, panicle, sheath	High	+++	3
3		Stem rot	*Sclerotium oryzae*	Stem, seed sheath	High	++	40
4		Bakanae & Foot rot	*Fusarium moniliforme*	Whole plant, seed	High	+++	5
5		Brown spot	*Bipolaris oryzae*	Leaf, seed	High	+++	40
6		Sheath rot	*Sarocladium oryzae*	Leaf, seed sheath	High	++	24
7		Leaf scald	*Microdochium oryzae*	Leaf, seed	Medium	+++	9
8		Narrow brown spot	*Cercospora janseana*	Leaf, seed	Medium	+++	2
9		Minute leaf spot	*Nigrospora oryzae*	Leaf, seed	Low	++	3
10		Leaf smut	*Entyloma oryzae*	Leaf, seed	Low	++	3
11		Curvularia leaf & Grain spot	*Curvularia lunata*	Leaf, seed	Low	+++	45
12		Stack burn	*Trichoconis padwickii*	Leaf, seed	Low	+++	38
13		Sheath spot	*Rhizoctonia oryzae*	Sheath	Low	++	35
14		Aggregate sheath spot	*Rhizoctonia oryzae sativa*	Sheath	Low	+++	44
15		Sheath Blotch	*Pyrenochaeta oryzae*	Sheath	Low	++	43
16		Seedling blight	*Sclerotium rolfsii*	Collar	Medium	+++	40
17		Seedling blight	*Fusarium oxysporum; Fusarium semitectum*	Seedling base	Low	++	4
18		Damping-off	*Achlya prolifera*	Sprouted seed	Medium	+++	40
19		Kernel bunt	*Tilletia barclayana*	Seed	Low	++	3
20		False smut	*Ustilaginoidea virens*	Seed	Medium	+++	3
21		Grain Red Blotch	*Epicoccum purpurescens*	Seed	Low	++	39
22		Grain discolouration	*Alternaria longissima, Alternaria tenuis, Aspergillus candidus*	Seed	Low	+	27
23		Grain spot	*Cladosporium cladosporioides; Cladosporium* sp.	Seed	Low	+++	46

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
24		Grain discolouration	*Sarocladium oryzae*	Seed	Low	+++	37
25		Germination reduction	*Aspergillus flavus-oryzae, A. niger, A. ruber, A. nidulans*	Seed	Low	+	27
26		Grain spot	*Phoma glumerum*	Seed	Low	++	3
27		Seed rot & seedling blight	*Bipolaris oryzae; Sarocladium oryzae*	Seed	High	+++	27
		Bacteria					
28		Bacterial leaf blight	*Xanthomonas oryzae* pv. *oryzae*	Leaf, grain	High	+++	40
29		Bacterial leaf streak	*Xanthomonas oryzae* pv. *oryzicola*	Leaf, grain	Medium	++	40
30		Foot rot	*Erwinia chrysanthemi* pv. *chrysanthemi*	Base of the plant	Low	+	31
31		Bacterial sheath rot	*Pseudomonas syringae* pv. *syringae*	Leaf sheath	Low	++	27
		Virus/MLOs					
32		Tungro	*Rice tungro virus*	Whole plant	High	++	7
33		Yellow dwarf	Mycoplasma	Whole plant	Low	++	40
		Nematode					
34		Ufra	*Ditylenchus angustus*	Seedling, leaf sheath, panicle, grain	High	+	40
35		White tip	*Aphelenchoides besseyi*	Panicle, grain	Low	+++	46
36		Root knot	*Meloidogyne graminicola*	Root	Medium	+++	40
37		Root rot	*Hirschmanniella oryzae; H. micronatus*	Root	Low	++	26
38		Stunting	*Tylenchorhynchus* sp.	Root	Low	+	3
39		Root lesion	*Criconemoides* sp.	Root	Low	+	30
40		Root lesion	*Helicotylencus dihystera*	Root	Low	+	41
41		Root knot	*Meloidogyne jncognita*	Root	Low	+	41
42		Root knot	*Meloidogyne javanica*	Root	Low	+	41
43		Root decay	*Tylenchus* sp	Root	Low	+	41
	Wheat (*Triticum aestivum*)	**Fungi**					
44		Alternaria leaf blight	*Alternaria triticina*	Leaf, seed	Low	+	1
45		Leaf spot, Leaf blight, head blight	*Bipolaris sorokiniana*	Leaf, sheath, seed	High	+++	22

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
46		Black point	*Alternaria alternata; Bipolaris sorokiniana*	Seed	Medium	+++	27
47		Black point	*Cladosporium cladosporioide; C. herbarum; Curvularia lunata*	Seed	Low	++	27
48		Leaf spot	*Curvularia lunata*	Seed	Low	+	2
49		Germination reduction	*Aspergillus flavus*	Seed	Low	++	27
50		Ascochyta leaf blight	*Ascochyta tritici*	Leaf, seed	Low	+	23
51		Black mould	*Cladosporium herbarum*, *Alternaria sp.*,, *Epicoccum* sp.	Root	Low	+	27
52		Yellow spot	*Drechslera tritici repentis*	Leaf	Low	+	2
53		Foot and root rot	*Sclerotium rolfsii*	Stem, root	Low	+	36
54		Fusarium head blight	*Fusarium graminearum*	Panicle, head	Low	+	42
55		Blast	*Magnaporthe oryzae tritici*	Panicle	High	++	32
56		Loose smut	*Ustilago tritici*	Panicle	High	+	46
57		Covered smut	*Ustilago avenae*	Panicle	Low	+	2
58		Leaf rust (Brown rust)	*Puccinia triticina* Synonym *Puccinia recondita* f. sp. *tritici*	Leaf, Stem	Medium	+	2
59		Stem rust (Black rust)	*Puccinia graminis* f. sp. *tritici*	Leaf, Stem	Low	+	46
60		Powdery mildew	*Blumeria graminis* f. sp. *tritici*	Leaf	Low	+	42
61		Take-all	*Ophiobolus graminis; Gaeumannomyces graminis*	Leaf, root	Low	+	27
62		Tan spot	*Pyrenophora tritici-repentis*	Leaf	Low	+	47
63		Cereal eye spot	*Pseudocercosporella herpotrichoides*	Leaf	Low	+	33
64		Seedling blight & Leaf spot	*Bipolaris sorokiniana*	Leaf, seed	High	+++	36
65		Seedling mortality	*Fusarium oxysporum; Rhizoctonia solani; Sclerotium rolfsii*	Seed, base of seedling	Medium	++	34
66		Germination reduction	*Aspergillus flavus*	Seed	High	++	27
67		Grain discolouration	*Aspergillus* sp.	Seed	Low	+	27
68		Germination failure	*Drechslera victoriae*	Seed	Low	+	27
69		Seed rot/germination failure	*Fusarium graminearum*	Seed	Low	+	27

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
70		Seedling blight, root rot	*Fusarium oxysporum; F. semitectum*	Seedling	Medium	+++	27
71		Germination reduction	*Penicillium* sp.	Seed	Medium	++	27
72		Seed rot	*Drechelera hawaiiensis*	Seed	Low	+	27
73		Seed rot	*Drechslera oryzae*	Seed	Low	+	27
74		Seed rot	*Drechslera rostrata*	Seed	Low	+	27
75		Seed rot	*Drechslera sacchari*	Seed	Low	+	27
76		Seed rot	*Drechslera tetramera*	Seed	Low	+	27
77		Seed rot	*Aspergillus* spp.	Seed	High	++	36
78		Seed rot	*Penicillium* spp.	Seed	Low	+	36
		Bacteria					
79		Black chaff	*Xanthomonas campestris translucens*	Leaf	Low	+	46
80		Bacterial leaf blight	*Pseudomonas syringae pv. syringae*	Leaf	Low	++	21
		Virus					
81		Mosaic	Virus	Leaf	Low	+	46
82		Leaf streak	Virus	Leaf	Low	+	10
		Nematode					
83		Root-knot	*Meloidogyne incognita*	Root	Low	+	11
84		Aerial disease	*Aphelenchoides* sp.	Penicle, seed	Low	+	10
85			*Aphelenchus* sp	Root	Low	+	11
86		Root decay	*Criconema* sp.	Root	Low	+	41
87		Reduced root	*Helicotylencus dihystera*	Root	Low	+	41
88		Root lesion	*Hoplolaimus* sp.	Root	Low	+	10
89		Root tip galling	*Criconemoides*	Root	Low	+	25
90		Reduced root	*Helicotylenchus* sp.	Root	Low	+	25
91		Root lesion	*Pratylenchus* sp.	Root	Low	+	41
92		Root decay	*Tylenchus* sp.	Root	Low	+	25
93		Root decay	*Tylenchorynchus* sp.	Root	Low	+	30
94		Root lesion	*Hirschmaniella* spp.	Root	Low	+	11
95		Aerial disease	*Ditylenchus* spp.	Stem	Low	+	11
	Maize (*Zea mays)*	**Fungi**					
96		Seed rot & seedling	*Rhizoctonia solani*; *Fusarium* sp.,	Seed, root	Medium	++	36

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
		blight	*Pythium* sp., Diplodia sp., *Sclerotium rolfsii, Helminthosporium* sp.				
97		Leaf spot	*Cercospora zeae-maydis*	Leaf	High	++	28
98		Leaf spot	*Curvularia lunata*	Leaf	Low	++	20
99		Leaf spot	*Phyllosticta* sp.	Leaf	Low	+	28
100		Brown spot	*Physoderma zea-maydis*	Leaf	Low	+	36
101		Leaf blight	*Bipolaris maydis*	Leaf	Medium	++	19
102		Northern leaf blight	*Helminthosporium turcicum* syn. *Bipolaris turcicum*	Leaf	Medium	+++	46
103		Maize rust	*Puccinia polysora*	Leaf	Low	+	28
104		Seed rot	*Fusarium moniliforme*	Seed	Low	+	27
105		Seed rot	*Fusarium oxysporum*	Seed	Low	+	28
106		Seed rot, blue eye, Kernel mold	*Penicillium* spp.	Seed	Low	+	28
107		Curvularia leaf spot	*Curvularia lunata; C. maculans*	Leaf	Low	+	28
108		Downy mildew	*Peronossclerospora sorghi; Sclerospora philippeninsis*	Leaf	Low	++	36
109		Stem rot	*Diplodia maydis*	Stem	Medium	++	36
110		Sheath blight	*Rhizoctonia solani*	Sheath	Medium	++	18
111		Sheath rot	*Gaeumannomyces graminis*	Sheath			28
112		Smut	*Ustilago zeae*	Cob	Low	+	46
113		Root rot	*Gibberella avenacea*	Root	Low	+	28
114		Stalk rot	*Fusarium, Diplodia, Pythium, Erwinia, Pseudomonas etc*	Stalk	Low	+	8
115		Ear rot/Cob rot & germination reduction	*Fusarium* sp.; *Penicillium, Aspergillus* spp., *Gibberella* zeae	Cob	Low	+	8
116		Scutellum rot	*Rhizopus* sp.	Seed	Low	+	27
117		Kernel mold	*Aspergillus flavus; Rhizopus* sp, *Penicillium* sp.	Cob	Low	++	19
118		Kernel rot	*Botryodiplodia theobromae*	Cob	Low	+	27
119		Soft rot	*Pythium* sp.	Root	Low	+	46

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
		Bacteria					
120		Bacterial streak	*Xanthomonas* sp.	Leaf	Low	+	46
		Virus					
121		Maize mosaic	Maize mosaic Virus (MMV)	Leaf	Low	+	11
122		Maize Dwarf Mosaic	Maize Dwarf Mosaic Virus (MDMV)	Whole plant	Low	+	17
123		Maize Fine Stripe Virus	Maize Virus (MFV)	Leaf	Low	+	17
124		Maize Streak	Maize Streak Virus (MSV)	Leaf	Low	+	28
125		Corn stunt	Corn stunt virus (CSV)	Whole plant	Low	+	17
		Nematode					
126		Panicle disease	*Aphelenchoides* sp.	Panicle, seed	Low	+	41
127		Stem disease	*Ditylenchus* sp.	Stem	Low	+	41
128		Reduced root	*Helicotylencus dihystera*	Root	Low	+	41
129		Root lesion	*Hoplolaimus indicus*	Root	Low	+	41
130		Root tip galling	*Longidorus elongatus*	Root	Low	+	41
131		Root knot	*Meloidogyne incognita*	Root	Low	+	41
132		Root knot	*Meloidogyne javanica*	Root	Low	+	41
133		Root lesion	*Pratylenchus coffeae*	Root	Low	+	41
134		Root lesion	*Pratylenchus zeae*	Root	Low	+	41
135		Root damage	*Trichodorus christie*	Root	Low	+	10
136		Stunting	*Tylenchorhynchus* sp.	Root	Low	+	10
137		Root decay	*Tylenchus* sp.	Root	Low	+	10
138		Root decay	*Xiphinema index*	Root	Low	+	41
	Millets Kaon *(Setaria italica)*	**Fungi**					
139		Downy mildew	*Sclerospora graminicola*	Leaf	Medium	++	13
140		Grain spot	*Phoma* sp.	Seed	Low	+	46
141		Grain spot	*Fusarium* sp.	Leaf	Low	+	46
142		Grain spot	*Carvularia* sp.	Leaf	Low	+	46
143		Leaf spot	*Pyricularia* sp.	Leaf	Low	+	46
144		Blast	*Pyricularia grisea*	Leaf	Low	+	46
145		Leaf & sheath blight	*Rhizoctonia solani*	Leaf, sheath	Low	+	34
146		Leaf blight	*Helminthosporium* sp.	Leaf	Low	+	13
147		Rust	*Uromyces* sp.	Leaf	Medium	++	13
148		Foot rot	*Sclerotium rolfsii*	Seedling base	High	++	13

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
		Nematodes					
149		Panicle disease	*Aphelenchoides* sp.	Panicle, Seed	Low	+	10
150		Root lesion	*Criconemoides* sp	Root	Low	+	10
151		Root lesion	*Hoplolaimus* sp.	Root	Low	+	41
152		Root tip galling	*Longidorus elongatus*	Root	Low	+	41
153		Root knot	*Meloidogyne incognita*	Root	Low	+	41
154		Root knot	*Meloidogyne javanica*	Root	Low	+	41
155		Root knot	*Meloidogyne* sp.	Root	Low	+	41
156		Stunting	*Tylenchorhynchus* sp.	Root	Low	+	41
157		Root decay	*Tylenchus* sp.	Root	Low	+	41
	Cheena (*Panicum miliaceum*)	**Fungi**					
158		Blast	*Pyricularia grisea*	Leaf, neck, seed	Low	+	14
159		Leaf spot	*Drechslera* sp.	Leaf	Low	+	14
160		Rust	*Uromyces eragrostidis*	Top leaf	Low	+	14
161		Foot rot	*Sclerotium rolfsii*	Root	Low	+	14
162		Leaf & sheath blight	*Drechslera* sp.	Leaf, Sheath	Low	+	15
163		Downy mildew	*Sclerophthora macrospora*	Whole plant	Medium	+	15
	Barley (*Hordeum vulgare*)	**Fungi**					
164		Leaf stripe (Blight)	*Helminthosporium gramineum*	Leaf	Low	+	46
165		Leaf blight	*Bipolaris sorokiniana*	Leaf	High	++	29
166		Covered Smut	*Ustilago nuda*	Head	Low	+	14
167		Stem rot (Foot rot/root rot)	*Sclerotium rolfsii*	Root	High	++	16
168		Rust	*Puccinia hordei*	Leaf	Low	+	12
		Virus					
169		Mosaic	Virus	Leaf	Low	+	10
170		Yellow dwarf	Virus	Whole plant	Low	+	10
		Nematode					
171		Root lesion	*Hoplolaimus* sp.	Root	Low	+	41
172		Root tip galling	*Longidorus elongatus*	Root	Low	+	41
173		Root knot	*Meloidogyne incognita*	Root	Low	+	41
174		Root knot	*Meloidogyne javanica*	Root	Low	+	41
	Oat (*Avena sativa*)	**Fungi**					
175		Leaf spot	*Helminthosporium avenae*	Leaf	Medium	+	46

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
	Sorghum (*Sorghum vulgaris*)	**Fungi**					
176		Red leaf spot	*Colletrotrichum graminicola*	Leaf	Low	+	6
177		Grain smut	*Sphacelotheca sorghi*	Leaf	Low	+	6
178		Black Spot	*Phyllachora graminis*	Leaf	Low	+	46
179		Leaf spot	*Cercospora* sp	Leaf	Low	+	2

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3.2 Recording Diseases of Pulse Crops

Diseases of pulses in Bangladesh along with their causal agents have been compiled from the earlier reports, scientific articles published in Journals, proceedings of workshops/ seminars/ conferences which were very much scattered, from the internet resources. For collecting the documents relevant scientists and teachers from different research organizations and universities were met who helped generously according to their capacity. Altogether 171 diseases were recorded to occur on eight pulse crops namely lentil, chickpea, mungbean, grasspea, cowpea, field pea, pigeon pea and backgram. Among these crops the highest but equal number of disease (28 in each) was found on chickpea and mungbean, which was followed by blackgram (27), lentil (24), cowpea (21), grasspea (20), field pea (12) and the lowest number of diseases (11) were found on pigeon pea. Among the 171 diseases, fungal diseases were dominated over other pathogens and the total number was 123. Number of diseases caused by bacteria, virus and nematode pathogens were 2, 27 and 19, respectively. Number of diseases caused by different groups of pathogens among the pulse species varied. On lentil out of 24 diseases 19 are caused by fungal pathogen, three by virus and two were caused by nematode. On lentil no record of any bacterial disease was found. Similarly, out of 28 diseases on chickpea, 22, 3 and 3 diseases respectively were fungal, viral and nemic disease. Number of fungal diseases on mungbean, grasspea, cowpea, field pea, pigeon pea and black gram were 16, 15, 15, 9, 6 and 21, respectively. Record on bacterial disease was found only on mungbean and cowpea- one on each. Number of virus diseases on lentil, chickpea, mungbean, grasspea, cowpea, field pea, pigeon pea and black gram were 3, 3, 6, 2, 4, 2, 3 and 4 respectively and the corresponding figures for nemic diseases were 2, 3, 5, 3, 1, 1, 2 and 2, respectively (Table 15).

Table 15. Diseases of Pulses Crops

Sl. No.	Plant/plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
	Lentil (*Lens calinaris Medik.)*						
		Fungi					
1		Stemphylium blight	*Stemphylium sarciniformis*	All aerial parts, seed	High	+++	5
2		Foot & root rot	*Fusarium oxysporum, Fusarium solani, Sclerotium rolfsii*	Collar, root	Medium	+++	2
3		Rust	*Uromyces fabae*	All aerial parts	High	+++	19
4		Fusarium wilt	*Fusarium oxysporum f.sp. lentis*	Seed, root, stem base	High	++	17
5		Cercospora leaf spot	*Cercospora cruenta*	Leaf, seed	Low	1	29
6		Leaf spot/ Leaf blight	*Alternaria alternata*	Leaf, seed	Low	+	23
7		Leaf rot	*Choanephora* sp.	Leaf, seed	Low	+	6
8		Powdery mildew	*Erysiphe polygoni*; *Oidium* sp.	All aerial parts	Medium	++	5
9		Downy mildew	*Peronospora* sp., *P. viciae*	All aerial parts	Medium	+	5
10		Pod blight	*Alternaria dianthicola*	Pod	Low	+	5
11		Seedling damping-off	*Fusarium* sp., *Pythium* sp.	All aerial parts	Medium	++	6

Sl. No.	Plant/plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
12		Botrytis grey mould	*Botrytis cinerea*	Leaf, pod	High	+++	26
13		Collar rot	*Sclerotium rolfsii*	Collar, root	Low	++	13
14		Anthracnose	*Colletotrichum truncatum*	Leaf, stem	Low	++	4
15		White mold	*Sclerotinia sclerotiorum*	Stem, leaf, pod flower,	Medium	+++	1
16		Germination reduction	*Aspergillus flavus*	Seed	Low	++	23
17		Seed rot & germination failure	*Fusarium avenaceum, F. moniliforme*	Seed	Low	+	23
18		Seed rot	*Fusarium solani*	Seed	Low	+	23
19		Seed discolouration	*Penicilliun cyclopium*	Seed	Low	+	23
		Virus					
20		Bushy stunt	Mycoplasma	All aerial parts	Low	++	7
21		Yellow mosaic	Bean Yellow mosaic virus	All aerial parts	Low	++	5
22		Leaf roll	Bean (Pea) leaf roll virus	All aerial parts	Low	+	6
		Nematode					
23		Root decay	*Giconemoides* sp., *Tylenchus* sp.	Roots	Low	++	6
24		Root Knot	*Meloidogyne javanica, M. incognita*	Roots	Low	+	6
	Chickpea (*Cicer arietinum* L.)	**Fungi**					
25		Botrytis Grey Mold	*Botrytis cinerea*	Aerial parts	High	++	26
26		Wilt	*Fusarium oxysporum f.sp. ciceri*	Root, stem base	High	+++	15
27		Wilt	*Fusarium orthoceros*	Root, stem base	High	+++	23
28		Collar rot	*Sclerotum rolfsii, Rhizoctonia solani*	Collar, Root	High	+++	5
29		Dry root rot	*Macrophomina phaseolina/ Rhizoctonia bataticola*	Root	High	+++	5
30		Root rot	*Fusarium solani*	Root	Low	+	20
31		Foot & root rot	*Fusarium oxysporum, Sclerotium rolfsii*	Root, Stem base	High	++	14
32		Stem rot	*Macrophomina phaseolina*	Stem	Medium	++	14
33		Stem rot/leaf rot	*Sclerotinia sclerotiorum*	Stem, leaf	Medium	++	14
34		Stemphylium blight	*Stemphylium sarciniformis*	All aerial parts	Medium	++	30
35		Rust	*Uromyces ciceris-arietini; U. appendiculatus*	All aerial parts	Medium	++	5
36		Leaf spot/blight	*Alternaria alternata*	Leaf	Low	++	20
37		Ascochyta blight	*Ascochyta rabiei*	Leaf	Medium	++	29

Sl. No.	Plant/plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
38		Powdery mildew	*Oidium* sp.; *Erysiphe polygoni*	Leaf	Low	++	5
39		Root rot	*F. solani;* *F. oxysporum; Sclerotium rolfsii*	Root	Low	+	20
40		Seed rot	*Phoma* sp.	Seed	Low	+	15
41		Seed rot	*Aspergillus flavus*	Seed	Low	++	23
42		Seed rot	*Aspergillus niger*	Seed	Low	++	28
43		Seed rot	*Penicillium notatum*	Seed	Low	++	28
44		Seed rot	*Botryodiplodia theobromae*	Seed	Low	+	23
45		Seed rot	*Colletotrichum dematium*	Seed	Low	+	23
46		Seed rot/ germination failure/wilt	*Fusarium oxysporum; Fusarium orthoceros*	Seed	Low	+	28
		Virus					
47		Chickpea Stunt	Bean (Pea) leaf roll virus	All aerial parts	Medium	++	6
48		Chickpea Stunt	Chickpea chlorotic dwarf virus	All aerial parts	Low	+	7
49		Yellow mosaic	Yellow mosaic virus	All aerial parts	Low	+	2
		Nematode					
50		Root knot	*Meloidogyne javanica*	Root	Low	++	5
51		Root knot	*Meloidogyne incognita*	Root	Low	++	5
52		Root decay	*Trichodorus* sp.	Root	Low	+	6
	Mungbean (*Vigna radiata* (L.) Wilczek)	**Fungi**					
53		Cercospora leaf spot	*Cercospora cruenta/canescens*	Leaf	High	+++	24
54		Powdery mildew	*Oidium* sp. *Erysiphe polygoni*	Leaf	Medium	++	16
55		Sclerotinia blight/ leaf rot	*Sclerotinia sclerotiorum*	Branch	High	+++	21
56		Leaf blight	*Leptosphaerulina trifolii,* *Phoma medicaginis*	Leaf	Medium	++	5
57		Stem rot	*Macrophomina phaseolina*	Stem	Low	+	6
58		Anthracnose	*Colletotrichum lindemuthianum,* *Colletotrichum dematium*	Leaf, Petiole, Pod, seed	Medium	++	23
59		Infection to germinating seed	*Myrothecium roridum*	Seed	Low	+	23
60		Germination reduction	*Aspergillus flavus, Aspergillus clavatus*	Seed	Low	++	6
61		Leaf spot	*Myrothecium roridum*	Leaf	Low	+	6
62		Target spot	*Corynespora cassicola*	Leaf	Low	+	23
63		Foot & root rot	*Fusarium oxysporum, Sclerotium rolfsii*	Root, stem base	High	+++	2

Sl. No.	Plant/plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
64		Seed rot/ germination failure	*Botryodiplodia theobromae*	Seed	Low	+	23
65		Seed rot	*Fusarium solani,* *Fusarium equiseti;* *F. moniliforme*	Seed	Low	+	6
66		Leaf blight	*Phoma* sp.	Leaf	Low	+	23
67		Wilt	*Fusarium oxysporum*	Root, stem base	Medium	++	5
68		Leaf blight	*Rhizoctonia solani*	Leaf	Low	+	16
		Bacteria					
69		Bacterial leaf blight	*Xanthomonas phaseoli*	Leaf	Medium	++	5
		Virus/ Mycoplasma					
70		Yellow mosaic	Mungbean yellow mosaic virus	Leaf	High	+++	12
71		Leaf crinkle	Virus	Leaf	Low	++	6
72		Little leaf	Mycoplasma	Leaf	Low	+	6
73		Yellowing	Virus/Mycoplasma	Leaf	Low	+	2
74		Bean common mosaic	Bean common mosaic virus	Leaf	High	+++	23
75		Mosaic	Mungbean golden mosaic virus	Leaf	High	+++	23
		Nematode					
76		Root knot	*Meloidogyne incognita*	Root	Medium	++	2
77		Root decy	*Helicotylenchus* sp.	Root	Low	+	6
78		Root lesion	*Hoplolaimus indicus*	Root	Low	+	6
79		Panicle disease	*Aphelenchoides* sp.	Panicle	Low	+	6
80		Root decay	*Tylenchus* sp.	Root	Low	+	10
	Grasspea (*Lathyrus sativus* L.)						
		Fungi					
81		Downy mildew	*Peronospora viciae*	Leaf	Medium	++	2
82		Foot and root rot	*Fusarium oxysporum, Sclerotium rolfsii*	Root, plant base	High	+++	23
83		Ashy stem blight	*Macrophomina phaseolina*	Stem	Medium	++	5
84		Leaf rust	*Uromyces* sp.	Leaf, pod	Low	1	5
85		Cercospora leaf spot	*Cercospora cruenta*	Leaf	Low	1	5
86		Leaf blight	*Alternaria* sp.	Leaf	Low	+	2
87		Ascochyta blight	*Ascochyta trifolii*	Leaf	Low	+	6
88		Leptosphaerulina blight	*Leptosphaerulina trifolii*	Leaf	Low	+	6

Sl. No.	Plant/plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
89		Target spot	*Corynesporium cassiicola*	Leaf	Low	+	23
90		Powdery mildew	*Oidium* sp.	Leaf	High	+++	5
91		Wilt	*Fusarium oxysporum, Verticillium* sp.	Root, plant base	Low	+	6
92		Seed discolouration & germination reduction	*Aspergillus* spp., *Penicillium* sp.	Seed	Low	+	6
93		Seed rot & germination failure	*Fusarium* spp.	Seed	Low	+	6
94		Seed rot	*Fusarium moiliforme*	Seed	Low	+	23
95		Germination reduction & seed discolouration	*Aspergillus flavus*	Seed	Low	++	23
		Virus					
96		Leaf curl	Leaf curl virus	Leaf	Low	+	6
97		Yellowing	Virus	Leaf	Low	+	7
		Nematode					
98		Root knot	*Meloidogyne javanica, M. incognita*	Root	Medium	+	5
99		Stunting	*Tylenchorhynchus* sp.	Root	Low	+	5
100		Root decay	*Tylenchus* sp.	Root	Low	+	10
	Cowpea (*Vigna unguiculata* (L.)Walp.)						
		Fungi					
101		Anthracnose	*Colletotrichum dematium/ Colletotrichum lindemuthianum*	Leaf, pod	Medium	++	27
102		Cercospora leaf spot	*Cercospora cruenta/canescens*	Leaf	Low High	++ +++	29
103		Ashy stem blight	*Macrophomina phaseolina*	Stem	Low	++	23
104		Foot & root rot	*Fusarium oxysporum*	Root, plant base	Medium	++	6
105		Foot & root rot	*Sclerotium rolfsii*	Foot, root	Medium	++	25
106		Leaf rust	*Uromyces appendiculatus*	Leaf	Low	+	6
107		Stem rot	*Macrophomina phaseolina*	Stem	Low	+	30
108		Powdery mildew	*Erysiphe polygoni*	Leaf	Low	+	29
109		Wilt	*Fusarium udum*	Root, plant base	Medium	++	5
110		Wilt	*Sclerotinia sclerotiorum*	Root, plant base	Low	+	27

Sl. No.	Plant/plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
111		Leptosphaerulina leaf spot	*Leptosphaerulina trifolii*	Leaf	Low	+	5
112		Dieback	*Vermicularia capsici*	Branches	Medium	++	5
113		Root rot	*Hypochnus solani*	Root	Low	+	29
114		Seed rot	*Aspergillus flavus*	Seed	Low	+	27
115		Seed rot	*Aspergillus niger*	Seed	Low	+	27
		Bacteria					
116		Bacterial leaf blight	*Xanthomonas vignicola*	Leaf	Medium	++	6
		Virus					
117		Mosaic	*Bean common mosaic virus*	Leaf	Medium	++	29
118		Yellow mosaic	*Cowpea yellow mosaic Virus*	Leaf	Medium High	++ +++	6
119		Little leaf	Mycoplasma	Leaf	Medium	++	6
120		Cowpea mosaic	*Cowpea aphid-borne mosaic virus*	Leaf	Medium	++	22
		Nematode					
121		Root decay	*Helicotylenchus* sp.	Root	Low	+	6
	Field Pea (*Pisum sativum*)						
		Fungi					
122		Foot & root rot	Sclerotium rolfsii; Fusarium oxysporum	Root & stem	Medium	++	2
123		Ascochyta blight	Ascochyta pisi, *Ascochyta rabiei,*	Leaf & stem	Low	1	6
124		Rust	Uromyces fabae	Leaf	Low	+	2
125		Powdery mildew	Erysiphe polygoni	Leaf, pod	High	+++	2
126		Anthracnose	Colletotrichum sp.	Leaf, stem	Low	+	2
127		Downy mildew	Peronospora viciae	Leaf	Low	+	6
128		Leaf spot	Cercospora sp.	Leaf	Low	+	6
129		Wilt	*Verticillium* sp.	Root	Low	+	6
130		Seedling blight	*Rhizoctonia solani*	Seedling base	Low	+	3
		Virus					
131		Yellow mosaic	*Yellow mosaic virus*	Leaf	Low	+	6
132		Little leaf	Mycoplasma	Leaf	Low	+	6
		Nematode					
133		Root knot	*Meloidogyne javanica*	Root	Low	+	6

Sl. No.	Plant/plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
	Pigeon pea (*Cajanus cajan*)						
		Fungi					
134		Foot & root rot	*Fusarium oxysporum*	Root & stem	Meium	++	2
135		Stem rot	*Macophomina phaseolina*	Stem	Low	+	2
136		Wilt	*Fusarium udum*	Leaf, Stem	Medium	++	29
137		Anthracnose	*Colletotrichum cajani*	Leaf, stem	Low	+	6
138		Collar rot	*Sclerotium rolfsii*	Collar	Low	+	6
139		Leaf spot	*Phyllosticta* sp.	Leaf	Low	+	6
		Virus					
140		Sterility mosaic	Virus	Leaf	Low	+	2
141		Yellow mosaic	Mungbean yellow mosaic virus	Leaf	Medium	++	2
142		Witches broom	Mycoplasma	Leaf	Medium	++	6
		Nematode					
143		Root lesion	*Hoplolaimus* sp.	Root	Low	+	6
144		Hypertrophy	*Rotylenchus reniformis*	Root	Low	+	6
	Blackgram (*Vigna mungo*)						
		Fungi					
145		Foot & root rot	*Fusarium oxysporum, Sclerotium rolfsii*	Base of plant, root	Medium	+++	9
146		Cercospora leaf spot	*Cercospora cruenta*	Leaf	High	+++	18
147		Anthracnose	*Colletotrichum caulicola, C. graminicola*	Leaf	Low	+	6
148		Target spot	*Corynespora cassiicola*	Leaf	Low	+	23
149		Leaf spot	*Cercospora canescens*	Leaf	Medium	+++	23
150		Leaf spot	*Colletotrichum graminicola, Alternaria* sp.	Leaf	Low	++	23
151		Blight	*Choaneohora* sp	Leaf			6
152		Powdery mildew	*Oidium* sp., *Erysiphe polygoni*	Leaf	High	+++	8
153		Seed rot & germination failure	*Colletotrichum graminicola, F. oxysporum, F. moniliforme, F. semitectum, F. solani*	Seed			6
154		Seed rot, seedling blight	*Macrophomina phaseolina*	Seed	Medium	++	8
155		Seed rot	*Botryodiplodia theobromae*	Seed	Low	+	23
156		Seed rot/ germination failure	*Fusarium semitectum*	Seed	Low	+	23

Sl. No.	Plant/plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
157		Damping off/wilt	*Fusarium oxysporum*	Base of the plant	Medium	++	23
158		Germination reduction, seed rot	*Aspergillus flavus*	Seed	Low	++	6
159		Seed discolouration	*Aspergillus fumigatus*	Seed	Low	+	23
160		Leaf blight	*Leptosphaerulina trifolii; Phoma medicaginis*				6
161		Leaf blight	*Phoma* sp.	Leaf	Medium	++	6
162		Seedling infection	*Myrothecium roridum*	Seed	Low	+	23
163		Collar rot	*Rhizoctonia solani*	Base of the plant, root	Low	+	6
164		Pod spot	*Diplodia* sp.	Pod	Low	+	6
165		Stem rot	*Macrophomina phaseolina*	Stem	Low	+	2
		Virus					
166		Leaf crinkle & Rosette	Virus	Leaf	Medium	++	6
167		Yellow mosaic	Blackgram Yellow mosaic virus	Leaf	High	+++	18
168		Mosaic	Blackgram golden mosaic virus	Leaf	Medium	++	23
169		Mosaic	Blackgram mosaic virus	Leaf	Medium	++	23
		Nematode					
170		Panicle disease	*Aphelenchoides* sp.	Panicle	Low	+	6
171		Root knot	*Meloidogyne incognita, M. javanica*	Root	Medium	+	11

3.2.1 References

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3.3 Recording Diseases of Oilseed Crops

Exploring the old documents including current ones at all the relevant research organizations and universities and internet resources revealed the records of 158 diseases on eight oilseed crops growing in Bangladesh. The crop species were rape & mustard, sesame, groundnut, soybean, sunflower, linseed, castor, safflower and niger. As per the records, number of diseases on these crops was 29, 19, 37, 30, 20, 12, 3, 5 and 3 respectively. After the compilation of Talukdar in 1974, there was no report of any new disease on castor. As shown in Cereals and Pulses maximum number of diseases in oilseed crops was also caused by fungal pathogens. Out of 158 diseases, number of fungal, bacterial, virus and nemic diseases was 105, 3, 15 and 35, respectively. This trend is more or less similar in all the eight species of oilseed crops included for this study. In rape & mustard the number of diseases caused by fungi, bacteria, virus and nematode was 18, 1, 2 and 8 respectively. In sesame no bacterial disease was found and out of 19 diseases 16 were caused by fungi, one by virus and two by nematode pathogen. In groundnut, the total number of diseases was highest (37) among the eight crop species. On this crop also, so far, no bacterial disease was recorded. The highest number of diseases (19) was caused by fungal pathogen, which was followed by nematode pathogen (13) and virus (5). Total records of 30 diseases were found on soybean diseases, of which 18, 2, 6 and 4 were fungus, bacterial, virus and nemic diseases. Unlike other oilseed crop species prevalence of virus diseases were in the second position in soybean. In sunflower, out of 20 diseases 14, 1 and 5 number of diseases were caused by fungi, virus and nematode pathogens. In Linseed, out of 12 diseases 9 were fungal and 3 were caused by nematode. In castor, safflower and niger only 3, 5 and 3 diseases were found and all were fungal disease (Table 16). Among the diseases, the status of maximum number of diseases was low with common distribution and nine diseases were with high status and wide distribution.

Table 16: Diseases of oilseed Crops

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
	Rape & Mustard (*Brassica* spp.)						
		Fungi					
1		Leaf spot	*Alternaria brassicae*	Leaf, stem, seed	High	+++	1
2		Leaf spot	*Alternaria brassicicola; A. raphani*	Leaf, stem, seed	High	++	12
3		White rust	*Albugo candida*	Whole plant	Medium	++	29
4		White rot/ white mold/ stem rot	*Sclerotinia sclerotiorum*	Stem, leaf, pod	High	++	18
5		Club root	*Plasmodiophora brassicae*	Root	Low	++	13
6		Downy mildew	*Peronospora brassicae*	Seedling, leaf	Medium	++	9
7		Powdery mildew	*Erysiphe polygoni / Oidium* sp.	Leaf	Medium	++	4
8		Leaf blight	*Leptosphaerulina brassicae*	Leaf	Low	++	4
9		Wilt/ foot rot	*Fusarium oxysporum*				4
10		Leaf spot/seed rot/germination failure	*Alternaria raphani*	Leaf, seed	Low	+	14
11		Leaf spot/seed rot/germination failure	*Alternaria tenuis*	Leaf, seed	Low	+	14
12		Seed discoloration	*Curvularia lunata*	Seed	Low	+	12
13		Root rot	*Fusarium* spp.	Seed	Medium	+	12
14		Seed rot	*Curvularia senegalensis*	Seed	Low	+	14
15		Seed rot	*Fusarium avenaceum; F. equiseti; F. moniliforme; F. oxysporum; F. semitectum; F. solani*	Seed	Medium	++	14
16		*Seed discolouration*	*Penicillium* spp.	Seed	Low	+	14
17		*Black leg, black rot*	*Phoma lingam*	Seedling base	Low	++	4
18		*Seed rot & Germination failure*	*Aspergillus flavus, A. candidus*	Seed	Medium	++	12
		Bacteria					
19		Bacterial black rot	*Xanthomonas campestris*	Leaf	Low	+	4
		Virus					
20		Mosaic	Virus	Leaf	Low	++	4
21		Aster yellows	Virus	Leaf	Low	++	4

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
		Nematode					
22		Root lesion	*Hoplolaimus* sp.	Root	Low	+	10
23		Root knot	*Meloidogyne* spp.	Root	Low	+++	10
24		Root decay	*Tylenchus* sp.	Root	Low	+	10
25		Stunting	*Tylenchorhynchus* sp.	Root	Low	+	10
26		Root lesion	*Criconimoides* sp.	Root	Low	+	10
27		Root tip galling	*Longidorus* sp.	Root	Low	+	22
28		Root lesion	*Pratylenchus coffeae*	Root	Low	+	22
29		Parasitic plant	*Orobanche* sp.	Root	High	+++	11
	Sesame (*Sesamum indicum*)						
		Fungi					
30		Choanephora fruit rot	*Choanephora sesamearum*	Pod			24
31		Leaf spot	*Alternaria sesami*	Leaf, pod	Low	+++	29
32		Leaf spot	*Cercospora sesami*	Leaf	Medium	+++	15
33		Leaf blight	*Drechslera sesami*	Leaf	Low	+	14
34		Stem rot/ Charcoal rot	*Macrophomina phaseolina*	Stem, leaf	High	+++	8
35		Stem rot	*Colletotrichum dematium*	Stem	Low	+	19
36		Leaf spot	*Macrophomina phaseolina*	Leaf	Medium	++	28
37		Cottony soft rot	*Sclerotinia sclerotiorum*				24
38		Powdery mildew	*Podosphaera xanthii*				24
39		Seed discoloration	*Alternaria tenuis*	Seed	Low	+	25
40		Seed discoloration	*Aspergillus flavus*	Ear, seed	Low	+	25
41		Foot rot	*Sclerotium rolfsii*		Medium	++	7
42		Fusarium wilt	*Fusarium oxysporum* f.sp. *vasinfectum*	Seed, base of plant	Medium	++	7
43		Blight	*Corynospora cassicola*	Leaf	Low	+	14
44		Seed rot/ germination failure/ Seedling blight	*Fusarium dimerum; Fusarium equiseti; F. semitectum; F. solani*	Seedling	Medium	++	14
45		Germination reduction. Seed discolouration	*Penicillium* spp.	Seed	Low	+	14
		Virus					
46		Mosaic	Virus	Leaf	Low	+	4
		Nematode					
47		Reduced root	*Helicotylenchus dihystera*	Root	Low	+	22

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
48		Root knot	*Meloidogyne* spp	Root	Low	+	22
	Groundnut (*Arachis hypogaea* L.)						
		Fungi					
49		Early Leaf spot	*Cercospora arachidicola*	Leaf	High	+++	29
50		Late Leaf spot	*Phaeoisariopsispersonata/ Cercosporidium personatum*	Leaf	High	+++	1
51		Rust	*Puccinia arachidis*	Leaf, pod	Medium	++	3
52		Foot & root rot	*Sclerotium rolfsii*	Root	High	+++	19
53		Stem blight / charcoal rot/ black rot	*Macrophomina phaseolina*	Stem	Low	+	14
54		Leaf blight	*Alternaria* sp.	Leaf	Low	+	1
55		Stem rot/wilt	*Sclerotium rolfsii*	Stem base	Low	+	29
56		Wilt	*Fusarium* sp.	Root, plant base	Low	+	29
57		Anthracnose	*Colletotrichum acutatum Colletotrichum dematium Colletotrichum orbiculare*	Leaf	Low	+	27
58		Bud rot	*Fusarium semitectum*	Bud	Low	++	1
59		Collar rot/ Crown rot	*Aspergillus niger*	Collar	High	++	14
60		Leaf spot	*Phyllosticta* sp.	Leaf, root, pod	Low	+	29
61		Leaf spot/ seedling rot	*Rhizoctonia solani*	Leaf, seed, seedling base	Low	+	17
62		Sclerotinia blight	*Sclerotinia sclerotiorum*	Branch, stem	Low	+	4
63		Dry root rot	*Rhizoctonia solani*	Root	Low	+	14
64		Cylindrocladium black rot	*Cylindrocladium crotalariae*	Stem, branch, pod, root	Low	+	27
65		Seed rot & germination failure	*Aspergillus flavus*	Pod, peg, seed	Low	++	14
66		Damping-off	*Fusarium* sp., *Pythium* sp.,	Seedling base	Low	++	4
67		Leaf scorch	*Leptosphaerulina trifolii*	Leaf	Medium	+	4
		Virus					
68		Mosaic	Peanut mosaic virus	Leaf	Low	+	23
69		Stunt	Peanut stunt virus	Entire plant	Low	+	23
70		Spotted wilt	Tomato spotted wilt virus	Entire plant	Low	+	23

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
71		Chlorosis	Virus	Leaf	Low	+	4
72		Bushy stunt	Mycoplasma	Entire plant	Low	+	4
		Nematode					
73		Root lesion	*Aphelenchoides* sp.	Peg	Low	+	22
74		Root lesion	*Belonolaimus longicaudtus*	Peg	Low	+	22
75		Root lesion	*Criconemoides rusticum*	Peg	Low	+	22
76		Reduced root	*Helicotylynchus* sp.	Peg	Low	+	4
77		Stunting	*Hoplolaimus sp.*	Root	Low	++	10
78		Root knot	*Meloidogyne* spp.	Peg, root, pod	Low	++	20
79		Root lesion	*Pratylenchus coffeae*	Peg	Low	+	22
80		Root lesion	*Rotylenchus* sp.	Root, peg	Low	+	4
81		Root decay	*Trichodorus christiei*	Peg	Low	+	22
82		Root decay	*Tylenchus* sp.				10
83		Stubby root	*Trichodorus sp.*	Root	Low	++	4
84		Stunting	*Tylenchorhynchus* sp.	Peg, root			10
85		Root decay	*Xiphinema diversicaudatum*	Peg	Low	+	22
	Soybean (*Glycine max)*						
		Fungi					
86		Foot & root rot	*Fusarium oxysporum; Sclerotium rolfsii; Rhizoctonia* sp.	Root, base of plant	High	+++	28
87		Cercospora leaf spot	*Cercospora* sp.	Leaf, seed	Medium	+++	4
88		Alternaria leaf spot	*Alternaria* sp.	Leaf, seed	Medium	++	4
89		Purple seed stain	*Cercospora kikuchii*	Seed	Low	++	14
90		Charcoal rot	*Macrophomina phaseolina*	Stem, leaf	Medium	++	28
91		Seed decay	*Aspergillus flavus Penicillium sp.*	Seed	High	+++	14
92		Rust	*Phakopsora pachyrhizi*	Leaf	Medium	++	4
93		Leaf blight	*Leptosphaerulina trifolii*	Leaf	Low	+	4
94		Downy mildew	*Peronospora trifoliorum; P. manshurica*		Medium	++	4
95		Wilt	*Fusarium sp.*	Plant base	Low	+	14
96		Pod & stem blight	*Phomopsis sojae*	Seed, pod, stem	Low	+	14
97		Damping off & seedling blight	*Colletotrichum dematium var. truncatum, M. phaseolina, R. solani, Fusarium* sp.	Stems, pods, leaf petiole, seed	High	+++	14

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
98		Anthracnose/ Seed rot	*Colletotrichum lindemuthianum*	Seed	Low	+	15
99		Brown stem rot	*Cephalosporium grogatum*	Stem	Low	+	4
100		Seed rot/ germination failure	*Fusarium equiseti;* *F. oxysporum;* *F. semitectum; F. solani*, *P. sojae, M. phaseolina, Aspergillus flavus*	seed	Medium	++	15
101		Seed rot	*Myrothecium roridum*	Seed	Low	+	14
102		Brown spot	*Septoria glycina*	Leaf	Low	+	4
103		Germination reduction & seed discolouration	*Penicillium* spp.	Seed	Low	++	14
		Bacteria					
104		Blight	*Pseudomonas glycinea*	Leaf	Low	+	4
105		Bacterial postule	*Xanthomonas phaseolina var. sojense*	Leaf	Low	++	14
		Virus					
106		Mosaic	Soybean mosaic virus	Leaf	High	+++	14
107		Bean yellow mosaic	Bean yellow mosaic virus	Leaf	Low	+	23
108		Leaf curl	Leaf curl virus	Leaf	Low	+	4
109		Cowpea chlorotic mottle	Cowpea chlorotic mottle virus	Leaf	Low	+	4
110		Chlorotic mottle	Chlorotic mottle virus	Leaf	Low	+	4
111		Chlorosis	Virus	Leaf	Low	+	4
		Nematode					
112		Root knot	*Meloidogyne* spp.	Root	Medium	++	5
113		Stunting, Root injury	*Rotylenchus* sp.	Root	Low	+	22
114		Root decay	*Trichodorus christei*		Low	+	4
115		Root decay	*Xiphinema* sp.		Low	+	22
	Sunflower (*Helianthus annuus)*	**Fungi**					
116		*Alternaria leaf blight*	*Alternaria helianthi*	Leaf	Medium	++	21
117		*Brown spot*	*Alternaria alternata*	Leaf			26
118		*White mold*	*Sclerotinia sclerotiorum*	Stem	Medium	++	2
119		*Verticillium wilt*	*Verticillium albo-atrum*	Leaf	Low	+	4
120		*Foot rot & wilt*	*Sclerotium rolfsii*	Root	Low	+	5
121		*Root rot*	*Sclerotium rolfsii*	Root	Low	+	4
122		*Wilt*	*Sclerotium rolfsii*	Root, plant base	Low	+	1
123		Anthracnose	*Colletotrichum* sp.	Stem, leaf	Low	+	29

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
124		Stem rot/ Collar rot	*Sclerotium rolfsii*	Collar, stem	High	+++	21
125		Grey mold	*Botrytis cinerea*	Foliage, seed	Medium	++	25
126		Leaf spot	*Alternaria alternata*	Leaf, seed	Low	+	26
127		Head rot	*Rhizopus stolonifer*	Seed	Low	+	25
128		Seed rot & germination failure	*Fusarium moniliforme*	Seed	Low	+	26
129		Seed rot & germination failure	*Fusarium semitectum*	Seed	Low	+	26
		Virus					
130		Mosaic	Virus	Leaf	Low	+	1
		Nematode					
131		Root lesion	*Pratylenchus brachyurus*	Root	Low	+	16
132		Root injury	*Beleodorus* sp.	Root	Low	+	16
133		Root lesion	*Hoplolaimus* sp.	Root	Low	+	16
134		Root lesion	*Criconemoides* sp.	Root	Low	+	4
135		Panicle disease	*Aphelenchoides* sp.	Root	Low	+	4
	Linseed (*Linum usitatissimum)*	**Fungi**					
136		Stem rust	*Melamspora lini*	Stem	High	++	6
137		Leaf rust	*Melamspora lini*	Leaf	High	++	1
138		Leaf spot	*Alternaria brassicicola*	Leaf	Medium	++	25
139		Leaf spot	*Alternaria lini*	Leaf	Medium	++	4
140		Wilt	*Fusarium oxysporum f.sp. lini*	Root, plant base	Medium	++	6
141		Foot rot	*Fusarium oxysporum*	Root, plant base	Low	++	4
142		Pwdery mildew	*Oidium lini*		Low	+	4
143		Curvularia leaf spot	*Curvularia lunata*		Low	+	26
144		Bud necrosis	*Alternaria* sp.		Low	+	7
		Nematode					
145		Stem disease	*Ditylenchus* sp.	Stem	Low	+	22
146		Root tip galling	*Longidorus* sp.	Root	Low	+	22
147		Root knot	*Meloidogyne javanica*	Root	Medium	++	22
	Castor (*Ricinus communis*)	**Fungi**					
148		Leaf spot	*Cercospora ricinella*	Leaf/pod	Low	+	29
149		Blight	*Alternaria ricini*	Leaf/pod	High	+	29
150		Seedling blight	*Phytophthora parasitica*	Leaf/pod	Low	+	29

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
	Safflower (*Carthemustinctorius*)	**Fungi**					
151		Rust	*Puccinia carthami*	Leaf, seed	Low	++	29
152		Leaf spot	*Cercospora* sp.	Leaf	Low	+	6
153		Curvularia leaf spot	*Curvularia lunata*	Leaf		+	25
154		Leaf spot	*Alternaria brassicicola*	Leaf	Low	+	25
155		Leaf blight	*Alternaria* sp.	Leaf	Low	+	4
	Niger (*Guizotica abyssinica L.)*						
		Fungi					
156		Curvularia leaf spot	*Curvularia lunata*	Leaf	Low	+	25
157		Leaf spot	*Alternaria brassicicola*	Leaf	Low	+	25
158		Powdery mildew	*Oidium* sp.	Leaf	Low	+	4

3.3.1 References

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3.4 Recording Diseases of Fibre crops

While exploring the documents related to diseases of fibre crops in Bangladesh, records of 92 diseases were obtained on seven different species of fibre crops namely cotton, jute, kenaf, mesta, sunhemp, flax and rhea with 21, 20, 21, 22, 4, 3 and 1 diseases respectively on each crop. Among these 70, 1, 6 and 15 diseases were caused by fungal, bacterial, virus and nematode pathogens. It showed that fungi are the most dominating pathogens causing maximum number of diseases followed by nematode followed by virus and bacteria. This trend could be seen in all the seven species of fibre crops (Table 17). Out of 21 diseases on cotton, number of diseases caused by fungus, bacteria, virus and nematode were 13, 1, 1 and 6, respectively. The distributions of 20 diseases of jute under these four groups of pathogen were 14, 0, 1 and 5 respectively. The corresponding figures for kenaf and mesta were 17, 0, 2, 2 and 18, 0, 2 and 2 respectively. Records of only fungal diseases were found on sunhemp, flax and rhea and the number of diseases on these crops were 4, 3 and 1 respectively (Table 17).

Table 17: Diseases of fibre crops

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
	Cotton (*Gossypium hirsutum* L.)						
		Fungi					
1		Seedling blight & Damping off	*Rhizoctonia solani, Sclerotium rolfsii, Fusarium* spp., *Macrophomina phaseolina, Pythium* sp.	Seedling	High	+++	5
2		Wilt	*Fusarium oxysporum f. sp. vasinfectum*	Root, Stem base	Medium	++	11
3		Boll rot	*Diplodia gossypina, Fusarium* spp., *Colletotrichum* spp.	Boll	High	+++	1
4		Foot & Root rot	*Rhizoctonia solani Sclerotium rolfsii*	Root	High	+++	1
5		Anthracnose	*Colletotrichum gossypii*	Leaf, stem, branch	High	++	11
6		Rust	*Puccinia* sp., *Phakospora gossypii*	Leaf	Medium	+	3
7		Cercospora leaf spot	*Cercospora gossypina*	Leaf	Low	++	13
8		Alternaria leaf spot	*Alternaria macrospora; A. alternata*	Leaf	Low	+	11
9		Rhizoctonia leaf spot	*Rhizoctonia solani*	Leaf	Low	+	3
10		Areolate mildew	*Ramularia areola*	Leaf	Medium	++	4
11		Leaf blight	*Sphaeropsis* sp	Leaf	Low	++	2
12		Wilt	*Verticillium* sp.	Root, base of plant	Low	++	2
13		Damping off	*Rhizoctonia* sp.	Seedling base	Medium	++	13

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
		Bacteria					
14		Angular leaf spot/ Bacterial blight	*Xanthomonas campestris* pv. *malvacearum*	Leaf	Medium	++	3
		Virus					
15		Mosaic	Virus	Leaf	Low	+	13
		Nematode					
16		Root lesion	*Belonolaimus longicaudatus*	Root	Low	+	12
17		Root decay	*Helicotylencus dihystera*	Root	Low	+	12
18		Root lesion	*Hoplolaimus* sp,	Root	Low	+	12
19		Root lesion	*Pratylenchus* sp.	Root	Low	+	12
20		Stunting	*Tylenchorhynchus* sp.	Root	Low	+	12
21		Root decay	*Xiphinema* sp.	Root	Low	+	12
	Jute (*Corchorus* spp.)						
		Fungi					
22		Stem rot	*Macrophomina phaseolina*	Stem, seed	High	+++	10
23		Anthracnose	*Collectotrichum corchori*	Stem, seed	High	+++	8
24		Black band	*Botryodiplodia theobromae; Diplodia corchori*	Stem, seed	High	+++	6
25		Root rot / wilt	*Rhizoconia solani*	Root, stem	Medium	++	10
26		Soft rot	*Sclerotium rolfsii*	Stem base, Seed	High	+++	10
27		Die back	*Glomerella cingulata*	Stem	High	+++	10
28		Seedling blight	*Rhizoctonia solani, Collectotrichum corchori, Macrophomina phaseolina*	Seed & seedling	Medium	++	10
29		Powdery mildew	*Oidium* sp	Leaf, fruit	Low	+	10
30		Wilt	*Rhizoctonia solani, Fusarium* sp.	Stem base, Root	Low	+	13
31		Cercospora leaf spot	*Cercospora corchori*	Leaf	Low	++	10
32		Target leaf spot	*Corynespora casicola*	Leaf	Low	+	8
33		Seed rot	*Curvularia lunata*	Seed	Low	+	8
34		Germination failure	*Phomopsis* sp.	Seed	Low	+	8
35		Seed rot/germination failure	*Fusarium oxysporum; F. semitectum*	Seed	Medium	++	8

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
		Virus					
36		Mosaic disease	Leaf mosaic virus/MLO	Leaves	High	+++	10
		Nematode					
37		Root-knot	*Meloidogyne incognita*	Root	Medium	++	9
38		Root knot	*Meloidogyne javanica*	Root	Medium	++	6
39		Root decay	*Helicotylenchus* sp.	Root	Low	+	12
40		Root lesion	*Hoplolaimus* sp.	Root	Low	+	12
41		Root lesion	*Pratylenchus* sp.	Root	Low	+	12
	Kenaf (*Hibiscus cannabinus*)						
		Fungi					
42		Seedling blight	*Rhizoctonia solani; Macrophomina phaseolina; Pythium* sp*; Phytopthora parasitica; Fusarium solani*	Seed, seedling	Medium	++	10
43		Stem rot	*Macrophomina phaseolina; Botryodiplodia theobromae; Fusarium* spp.	Stem, seed	High	+++	10
44		Anthracnose	*Colletotrichum hibici; C. gleosporodies*	Stem, seed	Medium	++	7
45		Blight	*Ascochyta hibisci*	Leaf, seed	Medium	++	8
46		Root rot/foot rot or wilt	*Rhizoctonia solani; M. phaseolina; Phytopthora parasitica; F. oxysporum*	Roots & stem	Low	+	10
47		Soft rot	*Sclerotium rolfsii*	Roots & stem	Low	+	10
48		Collar rot	*M. phaseolina, B. theobromae, Phytopthora parasitica*	Collar	Low	+	10
49		Eye spot	*Myrothecium roridum, Volutella sp.*	Leaf	Low	+	10
50		Basal blackening	*M. phaseolina; B. theorbromae; Pythium sp.; Fusarium sp.*	Stem base	Low	+	10
51		Die back	*Glomerella cingulata; Volutella* sp.	Stem	Medium	++	10
52		Powdery mildew	*Oidium* sp.; *Leveillula* sp.	Leaf, fruit	Low	+	10
53		Damping off	*M. Phaseolina; R. solani; F. solani, Altrnaria* sp.	Seedling	Low	+	10
54		Leaf/stem spot	*Cercospora hibici*; *Phyllosticta hibici, Phomopsis/ Phoma sabdariffae*	Leaf	Medium	+	10
55		Grey mold	*Botrytis sp.*				10
56		Tip blight/leaf blight	*Colletotrichum hibici; Phoma sabdariffae*	Seed & stem	Low	+	7

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
57		Sooty mold	*Corynespora cassicola*	Fruit	Low	+	10
58		Rust	*Aecidium* sp.		Low	+	7
		Virus					
59		Leaf yellowing	Virus/Mycoplasma	Leaf	High	+++	10
60		Leaf curling	Leaf curling virus/ Mycoplasma	Leaf	Low	++	7
		Nematode					
61		Root-knot	*Meloidogyne incognita*	Root	Medium	++	10
62		Root-knot	*Meloidogyne javanica*	Root	Medium	++	10
	Mesta (*Hibiscus sabdariffa*)						
		Fungi					
63		Seedling blight	*Rhizoctonia solani; Macrophomina phaseolina; Pythium* sp*; Phytopthora parasitica; Fusarium solani*	Seed, seedling	Medium	++	7
64		Stem rot	*Macrophomina phaseolina; Botryodiplodia theobromae; Fusarium* spp.	Stem, seed	High	+++	7
65		Anthracnose	*Colletotrichum hibici; C. gleosporodies*	Stem, seed	Medium	++	7
66		Root rot/foot rot or wilt	*Rhizoctonia solani; M. phaseolina; Phytopthora parasitica; F. oxysporum*	Roots & stem	Low	+	7
67		Soft rot	*Sclerotium rolfsii*	Roots, stem& seed	Low	+	7
68		Collar rot	*M. phaseolina, B. theobromae, Phytopthora parasitica*	Collar	Low	+	10
69		Eye spot	*Myrothecium roridum, Volutella sp.*	Leaf	Low	+	10
70		Basal blackening	*M. phaseolina, B. theorbromae, Pythium sp., Fusarium sp.*	Stem base	Low	+	10
71		Grey mold	*Botrytis sp.*	Leaf	Low	+	10
72		Die-back	*Glomerella cingulata, Volutella sp.*	Stem, branch	Low	+	10
73		Powdery mildew	*Oidium* sp.; *Leveillula* sp.	Leaves & fruit	Low	+	7
74		Damping off	*M. phaseolina, R. solani, F. solani, Alternaria* sp.,	Seedling	Low	+	10
75		Leaf/stem spot	*Cercospora hibici*; *Phyllosticta hibici,*	Leaf	Medium	++	7

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
			Phomopsis/ Phoma sabdariffae				
76		Grey mold	*Botrytis sp.*				10
77		Tip blight	*Colletotrichum hibici; Phoma sabdariffae*	Seed & stem	Low	+	10
78		Sooty mold	*Corynespora cassicola*	Fruit	Low	++	10
79		Leaf spot/blight	*Phoma sabdariffae*	Fruit	Low	+	7
80		Rust	*Aecidium* sp.		Low	+	7
		Virus					
81		Leaf yellowing	Virus/Mycoplasma	Leaf	High	+++	10
82		Leaf curling	Virus/ Mycoplasma	Leaf	Low	++	10
		Nematode					
83		Root-knot	*Meloidogyne incognita*	Root	Medium	++	10
84		Root knot	*Meloidogyne javanica*	Root	Medium	++	10
	Sunhemp (*Crotalaria juncea*)						
		Fungi					
85		Cercospora leaf spot	*Cercospora crotalareae*	Leaf	High	++	13
86		Wilt	*Fusarium udum f.sp. crotalareae*	Root, plant base	Low	++	13
87		Anthracnose	*Colletotrichum* sp.	Leaf, stem	Medium	++	1
88		Rust	*Uromyces decoratus*	Leaf,	Low	++	13
	Flax (*Linum usitatissimum*)						
		Fungi					
89		Leaf spot	*Alternaria*	Leaf	Low	+	13
90		Stem rot	*Sclerotium*	Stem	Low	+	13
91		Wilt	*Fusarium oxysporum f.sp. lini*	Root, plant base	Low	+	13
	Rhea (*Boehmeria nivae*)						
		Fungi					
92		Leaf spot	*Diplodia rheae*	Leaf	Low	+	13

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3.5 Recording Diseases of Sugar Crops

In Bangladesh sugarcane is the single major sugar crop. Recently attention has been given on other sugar crops like sugar beet, date palm and palm. However not much works have been done on these minor sugar crops and same is the case for studies on diseases. Diseases, recorded on sugar crops in Bangladesh along with their causal agents have been compiled from the earlier reports, scientific articles published in Journals, proceedings of workshops/ seminars/ conferences which were very much scattered and from the internet resources. For collecting the documents relevant scientists and teachers from different research organizations and universities were met who helped generously according their capacity. Altogether 60 diseases were recorded to occur on four sugar crops namely sugarcane, sugarbeet, date palm and palm. Among these crops the highest number of disease (44) was found on sugarcane, which was followed by sugarbeet (6), date palm (6) and palm (4). Among the 60 diseases 32 were fungal diseases, 5 bacterial, 4 virus, 13 and 2 diseases are caused by nematode and phanerogamic parasites. Out of 44 diseases recorded on sugarcane crop, 24, 5, 4, 9 and 2 were caused by fungi, bacteria, virus, nematode and parasitic plants. Similarly, out of 6 diseases on sugarbeet, 2 and 4 diseases were fungal and nemic respectively. Only fungal diseases were so far recorded on date palm (6) and palm (4) (Table 18).

Table 18. Diseases of Sugar Crops

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
	Sugarcane (*Saccharum officinarum*)	**Fungi**					
1		Red rot	*Colletotrichum falcatum*	Leaf, Stem	High	+++	1
2		Wilt	*Cephalosporium sacchari*	Stem	Medium	++	3
3		Smut	*Ustilago scitaminea*	Whole plant	High	++	3
4		Pineapple disease	*Certocystis paradoxa*	Sett	High	++	2
5		Fusarium stem rot	*Fusarium moniliforme*	Leaf	Medium	++	3
6		Ring spot	*Leptosphaeria sacchari*	Leaf	Medium	+++	1
7		Rind disease	*Phaeocytostroma sacchari*	Stem (Surface) Stem (Inside)	Medium	++	3
8		Collar rot	*Hendersonina sacchari*	Leaf, stalk	Low	+	2
9		Leaf scorch	*Stagonospora sacchari*	Leaf	low	+	3
10		Sheath rot	*Cytospara sacchari*	Sheath	low	+	3
11		Seedling damping off	*Pythium* sp., *Fusarium* sp., *Rhizoctonia* sp.	Seedling/Settling	low	+	3
12		Root rot	*Pythium* sp., *Fusarium* sp., *Rhizoctonia* sp.	Root	low	+	3
13		Sooty mold	*Capnodium* sp, *Fumago sacchari, Spegazzini*	Leaf	low	++	8
14		Red leaf spot	*Dimeriella sacchari*	Leaf	low	++	3
15		Pokkah boeng	*Gibberella moniliforme*	Top of leaf	low	++	8
16		Banded sclerotial disease	*Sterile mycelium (Thanatephorus sasakii) Rhizoctonia sasakii*	Leaf	low	+	3
17		Eye spot	*Helminthosporium sacchari*	Leaf	low	+	1
18		Rust	*Puccinia kuehnii*				8,
19		Brown stripe	*Drechslera stenospilas*	Leaf	low	+	3
20		Target blotch	*Drechslera* sp.				3
21		Yellow spot	*Cercospora* sp.	Leaf	low	+	3
22		Leaf blight	*Leptosphaeria taiwanensis*	Leaf	low	+	3
23		Brown spot	*Cercospora longipes*	Leaf	low	+	3
24		Seedling blight	*Alternaria sp, Curvularia* sp, *Phythium sp, Rhizoctonia* sp.	Whole seedling	low	+	3
		Bacteria					
25		Ratoon stunting	*Clavibacter xyli*	Stem	Medium	++	2
26		Red stripe	*Pseudomonas rubrilineans*				1

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
27		Leaf scald	*Xanthomonas albilineans*	Leaf, Stem	Medium	+	3
28		Gumming	*Xanthomonas vasculorum*				9
29		Top rot	*Pseudomonas rubrilineans*	Top of plant	High	+	3
		Virus /Mycoplasma					
30		White Leaf	Mycoplasma like organism	Whole plant	High	++	3
31		Green grassy shoot	Mycoplasma like organism	Whole plant	High	+	1
32		Mosaic	Sugarcane mosaic virus (SCMV)	Leaf, sheath, rarely Stem	Low	+++	1
33		Chlorotic streak	Virus	Leaf			9
		Nematode					
34		Root knot	*Meloidogyne auenaria*	Root	Medium	++	2
35		Root knot	*Meloidogyne incognita*	Root	Medium	++	2
36		Root lesion/ injury	*Pratylenchus* pratensis	Root	Medium	++	3
37		Root lesion	*Hoplolaimus* sp..	Root	Low	++	3
38		Root decay	*Helicotylenchus* indicus	Root	Low	++	2
39		Root lesion	*Criconemoides* sp.	Root	Low	++	2
40		Stunting	*Tylenchorhynchus sp.*	Root	Low	++	3
41		Root decay	*Xiphinema indicum*	Root	Low	++	2
42		Root injury	*Zygotylenchus* sp.	Root	Low	++	2
		Phanerogamic parasites					
43		Striga	*Striga densiflora*				3
44		Orbanche	*Orbanche* sp.				3
	Sugarbeet (*Beta vulgaris*)	**Fungi**					
45		Foot rot	*Sclerotium rolfsii*	Base of the plant	Medium	++	4
46		Leaf spot	*Cercospora beticola*	Leaf	Low	+	8
		Nematode					
47		Root knot	*Meloidogyne* sp.	Root	High	+++	7
48		Root lesion	*Hoplolainus* sp.	Root	Medium	++	7
48		Root lesion	*Pratylenchus* sp.	Root	Medium	++	7
50		Root decay	*Trichodorus christiei*	Root	Medium	++	7
	Date Palm (*Phoenicis dactylifera*	**Fungi**					
51		Leaf spot	*Graphiola phoenicis*	Leaf	Low	+	9
52		Leaf spot	*Pestalotia phoenicis*	Leaf	Low	+	5
53		Leaf spot	*Pestalotiopsis palmarum*	Leaf	Low	++	6

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
54		Fruit rot	*Botryodiplodia theobromae*	Fruit	Low	++	6
55		Blotchy white rot	*Daldinia eschscholzii*	Wood	Medium	++	8
56		White root rot	*Flammula dilepsis*	Wood	Low	++	8
	Palm (*Borassus flabillifer*)	**Fungi**					
57		Leaf spot	*Exosporium palmivorum*	Leaf	Low	+	9
58		Leaf spot	*Pestalotia palmarum*	Leaf	Low	+	9
59		Fruit rot	*Penicilliopsis clavariaeformis*	Fruit	Low	+	8
60		White root rot	*Flammula dilepsis*	Root	Low	+	8

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3.6 Recording Diseases of Tuber Crops

Altogether 79 diseases were recorded on three tuber crops namely, Potato, Arum/Tar and Sweet potato each having 53, 9 and 17 diseases caused by fungi, bacteria, virus and nematode. In Potato the highest number of diseases were caused by fungal pathogens (19), followed by nematode (16), Virus (11) and bacteria (7). In Taro, number of recorded diseases caused by fungi, nematode and virus were 5, 3 and 1 respectively. The corresponding figures for Sweet potato were 5, 7 and 5 respectively. No bacterial disease was recorded, so far, on Taro and Sweet potato (Table 19).

Table 19. Diseases of Tuber Crops.

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
	Potato (*Solanum tuberosum*)	**Fungi**					
1		Early blight	*Alternaria solani*	Leaf, stem	Medium	++	1
2		Late blight	*Phytophthora infestans*	Leaf, Tuber	High	+++	6
3		Leaf spot complex	*Corynespora cassicola; Cladosporum* sp.*; Stemphylium* spp.*; Phoma* sp.	Leaf	Low	+	7
4		Fusarium wilt	*Fusarium oxysporum*	Whole plant	Medium	+++	6
5		Wilt	*Fusarium solani*	Root, plant base			1
6		Verticillium wilt	*Verticillium albo-atrum*	Root	Low	+	10
7		Fusarium dry rot	*Fusarium caeruleiam*	Tuber	Medium	+++	15
8		Gangrene	*Phoma exigua* f. sp. *foveata*	Tuber	Low	++	10
9		Powdery scab	*Spongospora subterranea* f.sp. *subterranea*	Leaf, Tuber	Medium	++	6
10		Rhizoctonia foot rot	*Rhizoctonia solani*	Root, Stem base	Medium	++	2
11		Stem canker & black scurf	*Rhizoctonia solani*	Stem	Low	++	12
12		Stem rot	*Sclerotium rolfsii*	Stem base	Medium	++	15
13		Foot & root rot	*Sclerotium rolfsii*				1

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
14		Stem breaking	*Sclerotinia sclerotiorum*	Stem	Low	+	6
15		Silver scurf	*Helminthosporium solani*	Tuber	Low	+	6
16		Charcoal rot	*Macrophomina phasiolina*	Stem, tuber	Medium	++	6
17		Stem blight	*Colletotrichum dematium*	Stem	Low	+	7
18		Choanephora blight	*Choanephora cucurbitarum*	Leaf	Low	+	7
19		Skin spot	*Oospora pustulans*	Tuber skin	Low	+	7
		Bacteria					
20		Blackleg and bacterial soft rot	*Erwinia carotovora* var. *atroseptica*	Tuber	Medium	++	6
21		Soft rot	*Pectobacterium carotovora* var. *carotovora [Syn. E. carotovra subsp. carotovora*	Tuber	High	+++	14
22		Soft rot & black rot	*Erwinia crysenthemi*	Tuber	Low	+	13
23		Common scab	*Streptomyces scabies*	Tuber	High	+++	15
24		Ring rot	*Corynebacterium sepedonicum*	Tuber	Medium	++	6
25		Bacterial wilt = brown rot	*Ralstonia solanacearum*	Plant, tuber	High	++	6
26		Pink eye	*Pseudomonas fluorescens*	Tuber	Low	+	7
		Virus /Mycoplasma					
27		Potato leaf roll	Potato leaf roll virus (PLRV)	Leaf	Medium	+++	10
28		Mild mosaic	Potato virus X (PVX)	Leaf, tuber	High	+++	2
29		Severe mosaic	Potato virus Y (PVY)	Leaf, tuber	High	+++	2
30		Virus disease	Potato virus A (PVA)	Leaf, tuber	Medium	++	6
31		Mosaic	PVS	Leaf	Leaf	+	2

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
32		Mosaic	PAMV	Leaf	Low	+	7
33		Mosaic	PMV	Leaf	Low	+	7
34		Purple top roll (PTR)	Mycoplasma	Leaf	Low	+	7
35		Marginal flavescence (MF)	Mycoplasma	Leaf, node	Low	+	7
36		Yellows	Mycoplasma	Whole plant	Low	+	7
37		Witches' broom	Mycoplasma	Foliage	Low	+	6
		Nematode					
38		Root knot	*Meloidogyne incognita*	Root	Medium	++	6
39		Root knot	*Meloidogyne javanica*	Root	Medium	+++	11
40		Root knot	*Meloidogyne arenaria*	Root	Medium	++	11
41		Tuber rot	*Ditylenchus destructor*	Tuber	Low	+++	11
42		Stem base injury	*Ditylenchus dipsaci*	Stem base	Medium	++	11
43		Malformed leaf	*Aphelenchoides fragariae*	Leaf	Low	+	4
44		Root lesion	*Belonolaimus longicaudatus*	Root	Low	+	11
45		Root lesion	Helicotylencus dihystera	Root	Low	+	11
46		Root lesion	*Hoplolaimus indicus*	Root	Low	+	11
47		Root lesion	*Longidorus elongatus*	Root	Low	+	11
48		Root lesion	*Pratylenchus coffeae*	Root	Low	+	11
49		Root lesion	*Pratylenchus penetrans*	Root	Low	+	11
50		Root lesion	*Rotylenchus* sp.	Root	Low	+	11
51		Root lesion	*Trichodorus christiei*	Root	Low	+	11
52		Stunting	*Tylenchorhynchus clatony*	Root	Low	+	11

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
53		Root lesion	*Xphinema index*	Root	Low	+	11
	Taro/Arum *(Colocasia esculenta, C. antiquorum)*						
		Fungi					
54		Leaf spot	*Phyllosticta* sp.	leaf	Low	+	15
55		Leaf spot	*Colletotrichum capsici*	Leaf	Medium	++	8
56		Leaf blight	*Phytophthora colacasiae*	leaf, stem	High	++	15
57		Rhizome/corm rot	*Pythium aphanidermatum*	Rhizome	Medium	+	9
58		Foot rot/ Collar rot	*Sclerotium rolfsii*	Root, collar	Medium	+	7
		Virus					
59		Taro dasheen mosaic	Dasheen mosaic virus	Leaf	Low	+	7
		Nematode					
60		Root knot	*Meloidogyne* sp.	Root	Medium	++	11
61		Root lesion	*Pratylenchus* sp.	Root	Low	+	11
62		Root lesion	*Tylenchus* sp.	Root	Low	+	11
	Sweet potato *(Ipomoea batatas)*	***Fungi***					
63		Leaf spot	*Cercospora batatae*	Leaf	Low	+	15
64		Black rot/ charcoal rot	*Macrophomina phaseolina/ Diplodia natalensis*	Stem	Medium	+++	7
65		Soft rot	*Rhizopus nigiricans*	Tuber	Medium	+++	3
66		Leaf spot	*Alternaria* spp.	Leaf	Low	++	7
67		Tuber rot	*Botryodiplodia theobromae*	Tuber	Medium	++	5
		Virus/Viroid					
68		Feathery mottle	Sweet potato feathery mottle virus	Leaf	Low	++	7

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
			(SPFMV)				
69		Mild mottle	Sweet potato mild mottle virus (SPMMV)	Leaf	Low	++	7
70		Latent virus	Sweet potato latent virus (SPLV)	Leaf	Low	++	7
71		Chlorotic fleck	Sweet potato chlorotic fleck virus (SPCFV)	Leaf	Low	++	7
72		Leaf curl	Sweet potato leaf curl virus (SPLCV)	Leaf	Low	++	7
		Nematode					
73		Leaf malformation	*Aphelenchoides fragariae*	Leaf	Low	++	4
74		Root lesion	*Criconema* sp.	Root	Low	++	11
75		Root lesion	*Criconemoides* sp.	Root	Low	++	11
76		Stunting	*Ditylenchus* sp.	Stem	Low	++	11
77		Root knot	*Meloidogyne* sp.	Root	Low	++	11
78		Root lesion	*Pratylenchus brachyarus*	Root	Low	++	11
79		Stunting	*Tylenchorhynchus clatony*	Root	Low	++	11

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3.7 Recording Diseases of Vegetable Crops

Results of the listing of vegetable diseases are shown in Table 20. Altogether 367 diseases were found on 29 different types of vegetable species. All the four groups of pathogens namely, fungus, bacteria, virus/mycoplasma and nematode were involved in causing the diseases. Among the diseases the highest number (199) was found to be caused by fungal pathogens, which was followed by nematode (110), virus/mycoplasma (41) and the lowest number was bacterial diseases (17). With regards to total number of diseases tomato (40) and eggplant (39) was followed by okra (23), country bean (22), cucumber (21) and sweet gourd (20) diseases were recorded. Ten vegetables where the number of diseases ranged from 10 to less than 20 were radish (18), cauliflower (17), cabbage (16), bottle gourd (16), Amaranth (15), ash gourd (13), Indian spinach (12), ribbed gourd (11) and bitter gourd (10). On Tamato the number of diseases caused by fungi, bacteria, virus and nematode was 17, 2, 9 and 12 respectively, which was closely followed by eggplant where the number of fungal, bacterial, virus and nematode diseases recorded was 22, 2, 2 and 13 respectively (Table 20).

Table 20: Diseases of Vegetable Crops

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
	Eggplant (*Solanum melongena*)	**Fungi**					
1		Alternaria leaf spot	*Alternaria melongena*	Leaf	Low	+	37
2		Leaf spot	*Alternaria solani*	Leaf	Medium	+	55
3		Cercospora leaf spot	*Cercospora melongenae*	Leaf	Low	++	33
4		Anthracnose	*Colletotrichum melongenae, C. capsici; C. dematium*	Fruit	High	+++	19
5		Powdery mildew	*Oidium* sp.	Leaf	Low	+	47
6		Black fruit rot	*Colletotrichum atvamentarium*	Fruit, seed	High	+++	55
7		Fruit rot	*Vermicularia capsici*	Fruit	Low	+	55
8		Fruit blight	*Phomopsis vexans*	Fruit	High	+++	18
9		Fruit rot	*Phytophthora parasitica*	Fruit	Low	+	5
10		Fruit rot	*Phytophthora nicotianae var. nicotianae*	Fruit	Medium	++	26
11		Verticillium wilt	*Verticillium* sp.	Stem base	Low	+	5
12		Wilt	*Rhizoctonia solani*	Stem base	Low	+	4
13		Leaf spot	*Alternaria solani, Phyllosticta hortorum*	Leaf	Low	+	4
14		Foot & Root rot	*Sclerotium rolfsii, Fusarium solani*	Stem, base, root	High	+++	52
15		Foot & root rot	*Rhizoctonia solani*	Stem, base, root	High	+++	16
16		Damping off	*Pythium aphanidermatum; Rhizoctonia* sp. *Phytophthora* sp.; *Fusarium* sp.; *Sclerotium* sp.	Seedling base	Low	+	33

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
17		Fusarium wilt	*Fusarium oxysporum* f. sp. *melongenae*	Stem base	Low	++	21
18		White mold	*Sclerotinia sclerotiorum*	Stem, branch	Low	++	7
19		Germination failure & seed discolouration	*Aspergillus flavus, A. ochraceous, Aspergillus sp.*	Seed	Medium	+	21
20		Seed rot	*Fusarium moniliforme*	Seed	Low	+	21
21		Seed rot	*Fusarium oxysprum*	Seed	Low	+	21
22		Seed rot	*Fusarium solani*	Seed	Low	+	21
		Bacteria					
23		Bacterial wilt	*Ralstonia solanacearum*	Plant	High	+++	49
24		Bacterial soft rot	*Erwinia carotovora* subsp. *carotovora*	Fruit	Medium	++	45
		Virus/ Mycoplasma					
25		Mosaic	Eggplant mosaic virus	Leaf	Low	+	41
26		Little leaf	Mycoplasma	Leaf	Low	+	41
		Nematode					
27		Root knot	*Meloidogyne incognita, M. javanica*	Root	High	++	1
28		Malformation	*Aphelenchus avenae*	Root	Low	++	1
29		Root lesion	*Cephalenchus emerginatus*	Root	Low	++	1
30		Root lesion	*Helicotylenchus indicus*	Root	Low	++	1
31		Root lesion	*Hoplolaimus indicus*	Root	Low	++	1
32		Root lesion	*Paratylenchus pratensis*	Root	Low	++	1
33		Root lesion	*Pratylenchus zeae*	Root	Low	++	1

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
34		Stunting	*Tylenchorhynchus claytoni*	Root	Low	++	1
35		Root lesion	*Tylenchus* sp.	Root	Low	++	1
26		Stem	*Ditylenchus melongena*	Root	Low	++	1
27		Root decay	*Xiphinema americanum*	Root	Low	++	1
38		Root injury	*Zygotylenchus gueverai*	Root	Low	++	1
39		Shoot proliferation	*Candidatus Phytoplasma solani*	Leaf	High	++	37
	Tomato (*Lycopersicon esculentum* L.)						
		Fungi					
40		Late blight	*Phytophthora infestans*	Leaf, stem, fruit	High	+++	4
41		Early blight	*Alternaria solani*	Leaf, fruit, seed	High	++	55
42		Gray leaf spot	*Stemphylium solani*	Leaf	Low	+	5
43		Cercospora leaf spot	*Cercospora sp.*	Leaf	Low	++	4
44		Leaf mould	*Cladosporium fulvum*	Leaf	Low	+	5
45		Root rot	*Rhizoctonia solani*	Leaf	Low	++	55
46		Fusarium wilt	*Fusarium oxysporum f.sp. lycopersici*	Stem base	Medium	+++	6
47		Powdery mildew	*Oidium* sp.	Leaf	Low	+	5
48		Verticillium wilt	*Verticillium* sp.	Stem base	Low	+	5
49		Fruit rot	*Glomerella piperata*	Fruit	Low	+	55
50		Fruit rot	*Sclerotium rolfsii* *Phytophthora* sp.	Fruit	Low	++	4
51		Foot & root rot	*Fusarium oxysporum*	Root, plant base	Medium	++	16

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
52		Wilt	*Sclerotium rolfsii*	Base of plant, root	Medium	++	37
53		Damping off & root rot	*Phytophthora* sp., *Sclerotium* sp., *Pythium aphanidermatum*	Seedling, root	Medium	++	5
54		Germination reduction & seed discolouration	*Aspergillus flavus, A. fmigatus*	Seed	Low	++	19
55		Germination reduction	*Penicillium* sp.	Seed	Low	+	19
56		White mold	*Sclerotinia sclerotiorum*	Stem	Low	+	7
		Bacteria					
57		Bacterial wilt	*Ralstonia solanacearum*	Base of plant, root	High	+++	30
58		Soft rot	*Erwinia carotovora* sub sp. *carotovora*	Fruit	Medium	++	34
		Virus					
59		Leaf curl	Tomato leaf curl New Delhi virus	Foliage	High	+++	36
60		Mosaic	Tobacco mosaic virus	Foliage	Medium	+	19
61		Mosaic	Tomato mosaic virus	Foliage	High	+++	19
62		Bushy stunt	Virus	Leaf	Low	+	5
63		Bunchy top	Virus	Leaf	Low	+	5
64		Curly-top	Virus	Leaf	Low	+	5
65		Spotted wilt	Tomato spotted wilt virus	Leaf	Low	+	20
66		Tomato yellow leaf curl	Tomato yellow leaf curl virus	Leaf	Medium	++	40
67		Tomato purple vein	Tomato purple vein virus	Leaf	Medium	++	32
		Nematode					
68		Root knot	*Meloidogyne incognita*	Root	High	++	37

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
69		Root knot	*M. javanica*	Root	Medium	++	37
70		Root knot	*M. arenaria*	Root	Low	+	38
71		Leaf damage	*Aphelenchoides* sp.	Root	Low	+	38
72		Root lesion	*Criconemoides* sp.	Leaf	Low	+	38
73		Stunting	*Ditylenchus* sp.	Root	Low	+	38
74		Root lesion	*Hoplolaimus indicus*	Root	Low	+	38
75		Root lesion	*Longidorus elogatus*	Root	Low	+	38
76		Root lesion	*Pratylenchus* sp.	Root	Low	+	38
77		Root lesion	*Trichodorus christiei*	Root	Low	+	12
78		Root lesion	*Xiphinema* sp.	Root	Low	+	38
79		Root lesion	*Helicotylenchus* sp.	Root	Low	+	12
	Amaranth (*Amaranthus lividus)*	**Fungi**					
80		Leaf spot	*Phyllosticta* sp. *Cercospor*a sp.	Leaf	Low	+	55
81		Anthracnose	*Colletotrichum capsici*	Leaf	Medium	++	4
82		Foot rot	*Sclerotium rolfsii*	Root	Medium	++	13
83		Stem rot	*Macrophomina phaseolina*	Stem	High	++	5
84		White rust	*Albugo candida*	Leaf, stem, root	Low	+	27
85		Sclerotinia rot	*Sclerotinia sclerotiorum*	Stem	Low	+	49
		Nematode					
86		Leaf malformation	*Aphelenchoides fragariae*	Inflorescence	Low	+	38
87		Root lesion	*Criconemoides* sp.	Root	Low	+	38

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
88		Root lesion	*Hoplolaimus* sp,	Root	Low	+	12
89		Root lesion	*Longidorus* sp.	Root	Low	+	38
90		Root knot	*Meloidogyne incognita*	Root	Medium	++	12
91		Root knot	*Meloidogyne javanica*	Root	Medium	++	38
92		Root lesion	*Pratylenchus coffeae*	Root	Low	+	38
93		Root lesion	*Trichodorus* sp.	Root	Low	+	12
94		Root lesion	*Xiphinema* sp.	Root	Low	+	38
	Beet *(Beta vulgaris)*	**Fungi**					
95		Foot rot	*Sclerotium rolfsii*	Stem base, root	Low	+	55
96		Leaf spot	*Cercospora beticola*	Leaf	Medium	++	55
		Nematode					
97		Stunting	*Ditylenchus dipsaci*	Stem, bulb	Medium	++	38
98		Root lesion	*Longidorus elongatus*	Root	Low	+	38
99		Root knot	*Meloidogyne incognita*	Root	Medium	++	38
100		Root lesion	*Meloidogyne javanica*	Root	Medium	++	38
101		Root lesion	*Pratylenchus coffeae*	Root	Low	+	38
102		Root lesion	*Xiphinema* sp.	Root	Low	+	38
	Turnip (*Brassica rapa*)	**Fungi**					
103		White rust	*Albugo candida*.	Whole plant	Low	+	5
104		Powdery mildew	*Erysiphe polygoni*	Whole plant	Low	+	5
105		Leaf spot	*Cercospora* sp.	Leaf	Low	+	55
106		Blight	*Aiternaria brassicae*	leaf.pod	Low	+	55

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
	Cauliflower (*Brassica oleracea*)	**Fungi**					
107		White rust	*Albugo candida*	Whole plant	Low	+	55
108		Blight	*Alternaria brassicae*	leaf	High	+++	55
109		Wire stem/ bottom rot	*Rhizoctonia solani*	Stem base	Low	+	5
110		Wilt	*Fusaium* sp.	Whole plant	Medium	++	15
111		Grey leaf spot	*Alternaria brassicae*	Leaf	High	+++	4
112		Black spot	*Alternaria brassicicola*	Leaf	High	+++	37
113		Curd rot	*Botryodiplodia theobromae, Fusarium equiseti, Erwinia carotovora*	Curd	Low	+	37
114		Foot & root rot	*Sclerotium rolfsii*	Seedling base, root	High	+++	23
115		Foot & root rot	*Rhizoctonia solani*	Root, stem base	High	+++	16
116		Downy mildew	*Peronospora parasitica*	Leaf	Low	++	38
117		Soft rot	*Choanephora cucurbitarum*	Curd	Medium	++	55
118		Damping off	*Pythium aphanidermatum*	seedling	Low	++	38
119		Seedling disease	*Fusarium oxysporum*	Seedling	Medium	++	22
120		Collar rot	*Sclerotinia sclerotiorum*	Collar	Medium	++	13
		Bacteria					
121		Black rot	*Xanthomonas campestris pv. campestris*	Leaf	Medium	++	29
		Virus					
122		Leaf curl	Leaf curl virus	Leaf	Low	+	37
		Nematode					
123		Root knot	*Meloidogyne* spp.	Root	Medium	++	25

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
	Cabbage (*Brassica oleracea* var. *capitata*)	**Fungi**					
124		Damping-off	*Pythium aphanidermatum*	seedling	Medium	++	16
125		Foot & root rot	*Sclerotium rolfsii*	Seedling base, root	High	+++	23
126		Foot & root rot	*Rhizoctonia solani*	Seedling base, root	High	+++	16
127		Grey leaf spot	*Alternaria brassicae, A. brassicicola*	Leaf	Medium	++	27
128		Cabbage yellow	*Fusarium oxysporum f.* sp. *conglutinans*	Leaf	Low	++	19
129		Downy mildew	*Peronospora parasitica*	Leaf	Low	++	55
130		Wire stem/ bottom rot	*Rhizoctonia solani*	*Leaf*	Low	++	5
131		Leaf spot	*Ascochyta oleracea*	Leaf	Low	++	10
132		White rust	*Albugo candida*	Leaf	Low	++	55
133		Club-root	*Plasmodiophora brassicae*	Root	Medium	++	55
		Bacteria					
134		Black rot	*Xnthomonas campestris* pv. *campestris*	Leaf	Low	++	29
135		Soft rot	*Pseudomonas sp.*	Head	Low	++	12
		Virus					
136		Leaf curl	Leaf curl virus	Leaf	Low	+	37
		Nematode					
137		Lesion	*Hoplolaimus sp.*	Root	Low	++	12
138		Lesion	*Longidorus sp.*	Root	Low	++	12

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
139		Lesion	*Trichodorus sp.*	Root	Low	++	12
	Okra (*Abelmoschus esculentus*)	**Fungi**					
140		Leaf spot	*Cercospora abelmoschi*	Leaf	Low	++	55
141		Leaf spot	*Pseudocercospora abelmoschi*	Leaf	Medium	++	35
142		Leaf spot	*Alternaria* sp.				13
143		Seed rot, germination failure, die-back, anthracnose	*Colletotrichum dematium var truncatum*	Fruit	High	+++	37
144		Seed rot, gemination failure	*Fusarium oxysporumf.sp. vasinfectum*	Seed	Medium	+	19
145		Seed rot, gemination failure	*Colletotrichum gloeosporioides, C. graminicola*	Seed	Low	+	19
146		Seed rot, gemination failure	*Fusarium equiseti, F. moniliforme*	Seed	Low	+	19
147		Seed rot, gemination failure	*Fusarium semitectum*	Seed	Medium	+	19
148		Seedling blight	*Fusarium solani*	Seed	Medium	+	19
149		Stem rot, die back	*Macrophomina phaseolina*	Branches, stem	High	+++	19
150		Germination reduction, seed discolouration	*Penicillium* sp.	Seed	Low	+	19
151		Necrotic spot	*Corynespora cassicola*	Leaf, stem, fruit	Low	+	3
152		Sclerotinia rot	*Sclerotinia sclerotiorum*	Stem base	Medium	++	46

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
153		Foot rot	*Sclerotium rolfsii*	Root, stem base	Low	++	6
		Bacteria					
154		Soft rot	*Erwinia carotovora* subsp. *carotovora*	Fruit	Medium	++	34
		Virus					
155		Yellow mosaic	Yellow mosaic virus	Leaf	High	+++	55
156		Vein clearing	Yellow Vein clearing moaic virus (OkYVCMV)	Leaf	Low	+	35
157		Okra leaf curl	Okra leaf curl virus (OLCV)	Leaf	Low	+	37
158		Okra yellow vein mosaic	Okra yellow vein mosaic virus (OYVMV)	Leaf	Low	+	2
		Nematode					
159		Root-knot	*Meloidogyne* spp.	Root	High	+++	5
160		Malformation of leaf & flower bud	*Aphelenchoides* sp.	Flower bud, leaf	Low	+	12
161		Root decay	*Helicotylenchus* sp.	Root	Low	+	12
162		Root lesion	*Hoplolaimus* sp.	Root	Low	+	12
	Radish (*Raphanus sativus)*	**Fungi**					
163		Blight	*Alternaria brassicae*	Leaf, fruit	Low	++	4
164		Leaf blight	*Alternaria raphani*	Leaf	High	+++	37
165		Petiole rot	*Macrophomina phaseolina*	Petiole	Low	+	55
166		Alternaria blight	*Alternaria raphani*	leaf	Low	1	49
167		Leaf spot	*Alternaria tenuis*	Leaf	Low	++	19
168		Leaf spot	*Phoma* sp.	Leaf			4

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
169		Rot	*Alternaria brassicicola*	Leaf, fruit	Low	++	19
170		Germination reduction & seed discolouration	*Aspergillus* sp.	Seed	Low	+	19
171		Germination reduction & seed discolouration	*Penicillium* sp.	Seed	Low	+	19
172		Fruit rot	*Sclerotinia sclerotiorum*	Fruit	Medium	++	49
173		White rust	*Albugo candida*	Leaf	Medium	++	5
174		Damping off	*Pythium aphanidermatum*	Seedling base	Medium	++	5
		Bacteria					
175		Soft rot	*Erwinia carotovora* subsp. *carotovora*	Taproot	Medium	++	37
		Nematode					
176		Stunting	*Ditylenchus dipsaci*	Stem	Medium	++	38
177		Root lesion	*Hoplolaimus* sp,	Root	Low	++	38
178		Root knot	*Meloidogyne incognita*	Root	Low	++	38
179		Root knot	*Meloidogyne javanica*	Root	Low	++	38
180		Root lesion	*Pratylenchus* sp.	Root	Low	++	38
	Cucumber (*Cucumis sativus*)	**Fungi**					
181		Powdery mildew	*Oidium* sp. *Erysiphe cichoracearum*	Leaf	High	++	4
182		Downy mildew	*Pseudopernospora cubensis*	Leaf	Low	++	37
183		Leaf spot	*Phyllosticta* sp.	Leaf	Low	+	55
184		Anthracnose	*Colletotrichum lagenarium*	Leaf, vine, leaf, fruit	Medium	++	37
185		Gummy stem blight	*Didymella bryoniae*	Vine, fruit	Medium	++	42

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
186		Fusarium wilt	*Fusarium oxysporum* f.sp. *cucumerinum*	Root, base of plant	High	++	9
187		Phytophthora rot	*Phytophthora* sp.	Leaf	Medium	++	10
		Bacteria					
188		Leaf spot/rot	*Xanthomonas cucurbitae*	Leaf	Low	++	37
189		Angular leaf spot	*Pseudomonas lachrymans*	Leaf	Medium	++	50
190		Soft rot	*Erwinia carotovora* subsp. *carotovora*	Fruit	Medium	++	34
		Virus					
191		Cucumber mosaic	Cucumber mosaic virus (CMV)	Leaf	Low	++	9
182		Papaya ringspot	Papaya ringspot virus type W	Leaf	Low	++	52
193		Cucumber mosaic	Cucumber mosaic virus	Leaf	Low	++	52
		Nematode					
194		Root-knot	*Meloidogyne incognita*	Root	Medium	+++	39
195		Root knot	*Meloidogyne javanica*	Root	Medium	+++	38
196		Root lesion	*Hoplolaimus indicus*	Root	Medium	++	38
197		Root tip galling	*Longidorus maximus*	Root	Low	++	38
198		Lesion/injury	*Radopholus similis*	Root	Low	++	38
199		Lesion/injury	*Rotylenchulus* sp.	Root	Low	++	38
200		Lesion/injury	*Pratylenchus* spp.	Root	Low	++	14
201		Lesion/injury	*Tylenchus* spp.	Root	Low	++	14
	Palwal/ pointed gourd (*Trichosanthes*	**Fungi**					
202		Downy mildew	*Pseudoperenospora cubensis*	Leaf	High	+++	55
203		Leaf spot	*Alternaria* sp.; *Cercospora* sp.	Leaf	Medium	+++	5

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
204	*dioica*)	Anthracnose	*Colletotrichum lindemuthianum*	Leaf, fruit	Medium	++	13
205		Soft rot	Phytophthora sp.	Leaf, vine, fruit	Medium	++	10
	Ash gourd *(Benincasa hispida, B.asacerifera)*	**Fungi**					
206		Leaf spot	*Cercospora cucurbitae*	Leaf	Medium	++	55
207		Leaf spot	*Colletotrichum* sp.	Leaf	Low	++	13
208		Anthracnose	*Colletotrichum* sp.	Leaf	Medium	++	57
209		Damping-off	*Fusarium* spp.	Leaf	Medium	++	57
210		Powdery mildew	*Oidium* sp.	Leaf	Medium	++	57
211		Downy mildew	*Pseudoperonospora cubensis*	Leaf	Medium	++	57
212		Wilt	*Fusarium oxysporum*	Root, stem base	High	++	54
		Virus					
213		Cucumber mosaic	Cucumber mosaic virus (CMV)	Leaf	Low	++	54
214		Papaya ringspot	Papaya ringspot virus (PRSV-W)	Leaf	Low	+	42
215		Mosaic	Water Melon Mosaic virus-2 (WMV-2)	Leaf	Low	+	42
216		Mosaic	Bottle gourd mosaic virus (BgMV)	Leaf	Low	+	42
217		Leaf curl	Leaf curl virus	Leaf	Low	+	5
218		Mosaic	Mosaic Virus	Leaf	Low	+	5
	Bitter gourd (*Momordica charantia*)	**Fungi**					
219		Leaf spot	*Cercospora momordiceae*	Leaf	High	++	55
220		Powdery mildew	*Oidium* sp.	Leaf	Low	++	37
221		Rhizopus rot	*Rhizopus* sp.	Leaf	Medium	++	19
222		Germination reduction,	*Aspergillus fkavus*	Seed	Low	++	19

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
		seed discolouration	*Penicillium* sp.				
223		Seed rot	*Fusarium* sp.	Seed	Low	+	19
		Virus					
24		Mosaic	Cucumber mosaic virus (CMV)	Leaf	Low	++	19
		Nematode					
225		Root-knot	*Meloidogyne incognita*	Root	Medium	++	38
226		Root knot	*Meloidogyne javanica*	Root	Medium	++	38
227		Root lesion	*Hoplolaimus* sp,	Root	Low	++	38
228		Root lesion	*Pratylenchus coffeae*	Root	Low	++	38
	Bottle gourd (*Lagenaria vulgaris*)	**Fungi**					
229		Powdery mildew	*Erysiphe cichoracearum*	Leaf	High	+++	44
230		Fruit rot	*Pythium aphinadermattan*	Fruit	Medium	++	55
231		Anthracnose	*Colletotrichum lagenarium*	Leaf	High	+++	50
232		Leaf blight	*Phytophthora* sp.	Leaf	Medium	++	6
233		Leaf spot	*Cercospora* sp.	Leaf	Low	+	55
234		Leaf spot	*Phyllosticta* sp.	Leaf	Low	++	55
235		Leaf spot	*Gloeosporium* sp.	Leaf	Low	++	13
236		Wilt	*Fusarium* sp.	Root, stem base	Low	++	9
237		Gummy stem blight	*Didymella bryoniae*	Stem	Low	++	2
		Virus					
238		Leaf curl	Leaf curl virus	Leaf, fruit	Low	++	5
239		Mosaic	*Cucumber mosaic virus*	Leaf, fruit	Low	++	5

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
		Nematode					
240		Root-knot	*Meloidogyne incognita*	Root	Medium	++	38
241		Root knot	*Meloidogyne javanica*	Root	Medium	+++	38
242		Root lesion	*Hoplolaimus indicus*	Root	Low	++	38
243		Root lesion	*Pratylenchus coffeae*	Root	Low	++	38
244		Root lesion	*Trichodorus* sp.	Root	Low	++	38
	Ribbed gourd (*Luffa acutangula*)	**Fungi**					
245		Anthracnose	*Colletotrichum* sp.	Leaf	High	+++	55
246		Leaf spot	*Cercospora sp.*	Leaf	Low	+	5
247		Fruit rot	*Rhizopus sp.*	Fruit	High	++	37
248		Powdery mildew	*Erysiphe cichoracearum*	Leaf	Low	++	37
249		Downy mildew	*Pseudoperonospora cubensis*	Leaf	High	++	55
		Bacteria					
250		Fruit rot/soft rot	*Erwinia sp.*	Fruit	Medium	++	37
		Virus					
251		Mosaic	Cucumber Mosaic virus	Leaf	Medium	++	37
252		Mosaic, leaf curl etc	Papaya ringspot virus (PRSV)	Leaf	Medium	++	31
		Nematode					
253		Root knot	*Meloidogyne incognita*	Root	Medium	++	38
254		Root knot	*Meloidogyne javanica*	Root	Medium	++	38
255		Stunting	*Tylenchorhynchus* sp.	Root	Medium	++	38

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
	Sponge gourd (*Luffa cylindrica*)	**Fungi**					
256		Leaf spot	*Cercospora* sp.	Leaf	Medium	++	5
257		Anthracnose	*Colletotrichum* sp.	Leaf	Medium	++	5
258		Downy mildew	Pseudoperonospora cubensis	Leaf	Medium	++	5
		Virus					
259		Mosaic	Virus	Leaf	Medium	++	50
		Nematode					
260		Root knot	*Meloidogyne incognita*	Root	Medium	++	38
261		Root knot	*Meloidogyne javanica*	Root	Medium	++	38
262		Root lesion	*Pratylenchus coffeae*	Root	Low	++	38
	Sweet gourd (*Cucurbita pepo*)	**Fungi**					
263		Powdery mildew	*Erysiphe cichoracearum*	Leaf	Medium	++	55
264		Leaf spot	*Cercospora* sp.	Leaf	Low	++	37
265		Fruit rot	*Macrophomina phaseolina*	Fruit	High	+++	37
266		Downy mildew	*Psedoperonospora cubensis*	Leaf/ Stem	Medium	++	47
267		Leaf spot	*Phyllosticta* sp.	Leaf	Low	++	5
268		Anthracnose	*Colletotrichum* sp.	Leaf	Medium	++	5
269		Watery soft rot	*Sclerotinia sclerotiorum*	Leaf	Low	++	45
270		Dry root rot	*Fusarium* sp.	Root	Low	++	45
271		Phytophthora rot	*Phytophthora* sp.	Leaf	Low	++	10
		Bacteria					
272		Leaf spot/ rot	*Xanthomonas cucurbitae*	Leaf	Low	+	37

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
273		Bacterial wilt	*Pseudomonas solanacearum*	Root	Medium	+++	17
		Virus					
274		Mosaic	Cucumber mosaic virus	Leaf	Low	++	37
275		Papaya ring spot	Papaya ring spot Virus-W *(PRSV)*	Leaf	Low	++	24
276		Leaf curl	Leaf curl virus	Leaf	Low	++	5
277		Yellow mosaic	Zucchini yellow mosaic virus	Leaf	Low	++	46
278		Mosaic	Virus	Leaf	Low	++	5
		Nematode					
279		Root knot	*Belonolaimus longicaudatus*	Root	Medium	++	38
280		Root knot	Meloidogyne *incognita*	Root	Medium	+++	38
281		Root knot	*Meloidogyne javanica*	Root	Medium	+++	38
282		Root lesion	*Rotylenchulus* sp.	Root	Low	++	38
	Snake gourd (*Trichosanthes anguina*)	**Fungi**					
283		Leaf spot	*Cercospora tricosanthes*	Leaf	Low	1	5
284		Leaf spot	*Cercospora* sp.	Leaf	Low	++	50
285		Fruit rot	*Macrophomina phaseolina*	Fruit	High	++	37
286		Fruit rot	*Fusarium moniliforme*	Fruit	Low	++	37
287		Die-back	*Colletotrichum* sp.	Vine	Low	++	16
288		Powdery mildew	*Oidium* sp.	Leaf	Low	++	5
		Bacteria					
289		Leaf spot/ rot	*Xanthomonas cucurbitae*	Leaf	Low	+	37

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
		Virus					
290		Mosaic	Virus	Leaf	Low	+	37
	Teasle gourd *(Momordica cochinchinensis)*	**Fungi**					
291		Ripe fruit rot	*Colletotrichum gloeosporioides*	Fruit	Low	++	37
292		Leaf spot	*Cercospora momordicae*	Leaf	Low	++	55
	Lettuce (*Lactuca sativa*)	**Fungi**					
293		Leaf spot	*Cercospora lactucae*	Leaf	Low	++	55
294		Leaf spot	*Alternaria sonchi*	Leaf	Low	++	
295		Leaf spot	*Alternaria solani*	Leaf	Low	++	5
296		Downy mildew	*Bremia lactucae*	Leaf	Low	++	55
		Nematode					
297		Malformation	*Aphelenchoides* sp.	Leaf	Low	++	38
298		Root knot	*Meloidogyne incognita*	Root	Low	++	38
299		Root knot	*Meloidogyne javanica*	Root	Low	++	38
300		Root decay	*Xphinema index*	Root	Low	++	38
	Indian spinach (*Basella rubra, B. alba*)	**Fungi**					
301		Leaf spot	*Alternaria* sp; *Cercospora* sp.	Leaf	Low	++	55
392		Anthracnose	*Colletotrichum* sp.				5
303		Leaf spot	*Cercospora momordicae*	Leaf	Low	++	27
304		Foot rot	*Rhizoctonia* sp.	Plant base	Medium	++	5
304		Foot & root rot	*Rhizoctonia solani*	Root & plant base	Medium	++	16

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
		Nematode					
306		Nematode disease	*Aphelenchoides fragariae*	Leaf	Low	++	38
307		Root injury	*Helicotylencus dihystera*	Root	Low	++	38
308		Root lesion	*Hoplolaimus indicus*	Root	Low	++	38
309		Root knot	*Meloidogyne incognita*	Root	Low	++	38
310		Root knot	*Meloidogyne javanica*	Root	Low	++	38
311		Root lesion	*Pratylenchus* sp.	Root	Low	++	38
312		Root decay	*Tylenchus* sp.	Root	Low	++	12
	Spinach *(Spinacia oleracea)*	**Fungi**					
313		Leaf spot	*Cercospora* sp.		High	++	55
		Nematode					
314		Stunting	*Ditylenchus dipsaci*	Stem	Low	++	38
315		Root lesion	*Hoplolaimus* sp.	Root	Low	++	38
316		Root knot	*Meloidogyne incognita*	Root	Low	++	38
317		Root knot	*Meloidogyne javanica*	Root	Low	++	38
318		Root lesion	*Pratylenchus* sp.	Root	Low	++	38
	Yard long bean *(Vigna unguiculata)*	**Fungi**					
319		Leaf spot	*Cercospora* sp.	Leaf	Low	++	16
320		Foot & Root rot	*Fusarium oxysporum*	Root, stem base			16
		Nematode					
321		Root lesion	*Helicotylenchus* sp.	Root	Low	++	38
322		Root knot	*Meloidogyne incognita*	Root	Medium	++	38

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
323		Root knot	*Meloidogyne javanica*	Root	Medium	++	38
324		Root injury	*Pratylenchus* sp.	Root	Low	++	38
325		Root decay	*Xiphinema* sp.	Root	Low	++	38
	Country bean (*Phaseolus vulgaris*)	**Fungi**					
326		Leaf spot	*Cercospora cruenta*	Leaf	High	+++	37
327		Leaf spot	*Cercospora canesens*	Leaf	Low	++	19
328		Powdery mildew	*Erysiphe polygoni*		High		5
329		Anthracnose	*Colletotrichum lindemuthianum*	Leaf, pod	High	+++	19
330		Rust	*Uromyces appendiculatus, (U. phaseoli 51)*	Leaf, pod	Medium	++	19
331		Die-back	*Colletotrichum* sp.	Vine	Low	++	16
332		Charcoal rot, ashey stem blight, die-back	*Macrophomina phaseolina*	Seed	Medium	++	19
333		Cladosporium spot, Stickiness	*Cladosporium* sp.	Seed	Low	+	19
334		Seed infection	*Alternaria brassicicola, A. tenuis*	Seed	Low	+	19
335		Seed rot	*Fusarium moniliforme*	Seed	Low	++	19
336		Seed rot/ wilt	*Fusarium oxysporum* f.sp. *phaseoli*	Seed	Medium	++	19
337		Germination reduction	*Aspergillus flavus, A. clavatus, A. glaucas*	Seed	High	+++	19
338		Seed rot, root rot	*Fusarium solani* f.sp. *phaseoli; Rhizoctonia solani; Pythium* sp.	Seed	Medium	++	19
339		Angular leaf spot	*Isariopsis griseola*	Leaf	Low	+	5
340		Foot rot	*Sclerotium rolfsii*	Root, base	Medium	+++	5

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
341		Choanephora blight	*Choanephora cucurbitarum*	Leaf, blossom, twig, pod	Medium	+	47
342		White mold	*Sclerotinia sclerotiorum*	Stem	Low	++	7
		Bacteria					
343		Common bacterial	*Xanthomonas campestris pv.phaseoli*	Seed	Medium	++	19
		Virus					
344		Yellow mosaic	Yellow mosain virus	Leaf	High	++	37
345		Bean common mosaic	Bean common mosaic virus	Leaf	High	+++	19
346		Mosaic	Virus	Leaf	Low	++	5
		Nematode					
347		Root knot	*Meloidogyne* sp.	Root	Medium	++	5
	Hyacinth bean (*Lablab purpureus*)	**Fungi**					
348		Stem & Pod blight	*Sclerotinia sclerotiorum*	Stem, pod	Medium	++	43
349		Choanephora blight	*Choanephora cucurbitarum*	Leaf, blossom, vine tip, fruit	Low	++	48
		Nematode					
350		Root lesion	*Hoplolaimus* sp.	Root	Low	++	19
351		Root knot	*Meloidogyne incognita*	Root	Medium	++	19
352		Root knot	*Meloidogyne javanica*	Root	Medium	++	19
353		Root lesion	*Pratylenchus penetrans*	Root	Low	++	19
	Bush bean (*Phaseolus vulgaris)*	**Fungi**					
354		Foot rot	*Sclerotium rolfsii*	Root, base	High	+++	8
355		Seedling mortality	*Fusarium oxysporum* f.sp. *phaseoli*	Root, base	Medium	++	53

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
356		Seedling blight	*Rhizoctonia solani*	Seedling base	High	+++	6
357		White mold	*Sclerotinia sclerotiorum*	Stem	Medium	++	7
	Carrot (*Daucus carota)*						
		Fungi					
358		Foot rot	*Sclerotium rolfsii*	Root, base	Medium	++	28
359		Alternaria blight	*Alternaria dauci*	Leaf	Medium	++	6
360		White mold	*Sclerotinia sclerotiorum*	Stem	Low	++	7
		Nematodes					
361		Root knot	*Meloidogyne* incognita	Root	Medium	++	19
362		Root knot	*Meloidogyne javanica*	Root	Medium	++	19
363		Root lesion	*Pratylenchus* sp.	Root	Low	++	19
	Red Amaranth (*Amaranthus cruentus)*						
		Fungi					
364		White rust	*Albugo occidentalis*	Leaf	Medium	+++	56
365		White mold	*Sclerotinia sclerotiorum*	Stem	Low	++	7
		Nematode					
366		Root knot	*Meloidogyne* spp.	Root	Medium	++	11
	Napasak (*Malva verticillata)*	**Fungi**					
367		White mold	*Sclerotinia sclerotiorum*	Stem	Medium	++	7

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3.8 Recording Diseases of Fruit Crops

While exploring the occurrence of diseases on fruit crops in Bangladesh we come across the records of 291 diseases on 38 fruit species including minor fruit species. Of course, the exact number of fruit species will be more because here we considered all the citrus species as one fruit. Among the 291 diseases most of the diseases (229) were fungal disease; this was followed by nematode disease where the number was 38. Number of diseases caused by other groups of organisms such as bacteria, virus and parasitic plants were 12, 8 and 4 respectively. Records of fungal diseases were obtained on all the 38 crops included in this report and number of diseases on each crop ranged from 1 to 36. The highest was on mango followed by jackfruit (21), citrus (19), ber (18), guava (16), papaya (14) and coconut (12). Number of recorded diseases on banana, pineapple, water melon, litchi and wood apple were 10, 8, 8, 7 and 6, respectively. Number of diseases on rest of the fruit crops ranged from 1-4, mostly with one. Bacterial diseases were recorded only on citrus, guava, mango, banana, litchi, pine apple and papaya having 3, 1, 2, 2, 1, 1 and 2 diseases, respectively. Eight virus diseases were recorded on five fruit crops namely citrus (1), banana (2), coconut (1), water melon (1) and papaya (3) only. All the 38 nematode diseases were found on six crop species. The highest number of nematode diseases was 13 and was found on pine apple. Number of nemic diseases on citrus, banana, coconut, water melon and papaya was 10, 7, 3, 3 and 2, respectively. On each of mango and black berry tree one phanerogamic parasite was found (Table 21). Number of diseases with high status was 29 and 60 diseases were with medium status and status of rest of the diseases were low. Leaf is the most common site of infection for most of the diseases followed by fruits and roots. In mango some wood decaying fungi were also recorded. Detail results of the findings are presented in Table 21.

Table 21. Diseases of Fruit Crops

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
	Citrus	**Fungi**					
1	*(Citrus* spp.)	Die-back	*Colletotrichum gloesporioides; Botryodiplodia theobromae; Fusarium solani; Phomopsis citri*	Branch	High	+++	1
2		Gummosis	*Phytophthora citrophthora*	stem	High	++	1
3		Scab	*Elsinoe fawcetti*	Leaf, fruit	High	+++	2
		Scab	*Sphaceloma fawcettii*	Leaf, fruit	Medium	++	50
4		Yellowing	Mycoplasma	Leaf	Medium	++	7
5		Anthracnose	*Colletotrichum gloeosporioide*	Fruit, leaf	low	+	54
6		Sooty mould	*Capnodium citri*	Leaf	Low	+++	34
7		Leaf spot	*Meliola butleri*	Leaf	Low	+++	1
8		Powdery mildew	*Oidium* sp.	Leaf	Low	++	1
9		Pink disease	*Botryobasidium salmonicolor*	Leaf, petiole	Low	++	7
10		Red rust	*Capnodium citri*	Leaf, fruit	Low	++	7
11		Fruit rot	*Aspergillus niger, Candida krusei, Fusarium sp., Rhizopus stolonifer, Penicillium digitatum*	Fruit	Low	++	47
12		Fruit rot	*Phythiacystis citrophthora*	Fruit	Medium	++	50
13		Bark rot	*Melanomma citricola*	Fruit	Low	++	50
14		Stem-end rot	*Lasiodiplodia pseudotheobromae*	Fruit	Low	+++	51
15		Unclassified leaf disease	*Capnodium citri*	Leaf	Low	++	50
16			*Colletotrichum gloeosporioides*	Leaf	Low	++	50
17			*Meliola butleri*	Leaf	Low	++	50
18			*Meliola citri*	Leaf	Low	++	50
19			*Phyllosticta* sp.	Leaf	Low	++	50
		Bacteria					
20		Canker	*Xanthomonas axonopoides* pv. *citri*	Fruit, leaf, stem	High	+++	31
21		Greening	*Candidatus Liberibacter asiaticus*	Leaf	Medium	++	17
22		Bacterial spot	*Xanthomonas campestris pv. citrumelo*	Leaf, stem	Low	+	26
		Virus					
23		Tristeza	Citrus Tristeza Virus	Yellowing of foliage	Low	+	2

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
		Nematode					
24		Root lesion	*Criconemoides* sp.	Root	Low	++	35
25		Stem injury	*Ditylenchus dipsaci*	Stem, leaf	Low	++	35
26		Root decay	*Helicotylenchus* sp.	Root	Low	++	10
27		Root lesion	*Hoplolaimus indicus*	Root	Low	++	10
28		Root lesion	*Radopholus similis*	Root	Low	++	35
29		Root lesion	*Pratylenchus* spp.	Root	Low	++	12
30		Root injury	*Hoplotylus* spp.	Root	Low	++	12
31		Root decay	*Tylenchus semipenetrans*	Root	Low	++	10
32		Discolouration	*Tylenchorhynchus* sp.	Root, stem, bark	Low	++	35
33		Root decay	*Xiphinema* spp.	Root	Low	++	12
	Guava (*Psidium guajava* L.)						
		Fungi					
34		Anthracnose	*Gloeosporioium sydae*	Fruit	Low	+++	22
35		Fruit rot	*Pestalotia psidii*	Fruit			11
36		Wilt	*Fusarium oxysporum* f. sp. *psidii*	Branches/ whole plant	High	+++	15
37		Leaf spot	*Pestalotia* sp. *Cephaleuros parasitica* Kar.	Leaf	Low	+	52
38		Leaf spot	*Cercospora psidii*	Leaf	Low	+	34
39		Leaf spot	*Colletotrichum* sp.				13
40		Red rust	*Cephaleuros viens*	Leaf, fruit	Low	++	6
41		Stem rot	*Metasphaeria* sp.; *Physalospora sp.*	Stem	Low	+	2
42		Fruit rot	*Colletotrichum* sp. *Pestalotia psidii Botryodiplodia*	Fruit	Low	+	28
43		Fruit rot	*Colletotrichum gloeosporioides*	Fruit	Medium	++	29
44		Fruit rot	*Pestalotia psidi*	Fruit	Medium	++	29
45		Phomopsis dry rot	*Phomopsis psidii*	Fruit	Low	+	34
46		Phytophthora soft rot	*Phytophthora nicotiane*	Fruit	Low	+	40
47		Fruit rot	*Fusarium solani*	Fruit	Low	+	34
48		Canker	*Physalospora sydae*	Fruit	Low	+	53
		Die-back	*Botryodiplodia theobromae Phytophthora* sp.	Branch	Low	++	2

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
49		Scab	*Pestalotiopsis psidii*	Fruit	Low	+	18
		Bacteria					
50		Bacterial leaf blight	*Pseudomonas syringae* pv. *syringae*	Leaf	Medium	+++	6
	Mango (*Mangifera indica* L.)						
		Fungi					
51		Anthracnose	*Colletotrichum gloeosporioides*	Fruit, leaf, twig	High	++	39
52		Inflorescence die-back	*Colletotricum gloeosporioides*	Stem, twig	High	+++	34
53		Leaf spot	*Cercospora mangiferae-indicae/ Alternaria dianthicola, Pestalotiopsis mangiferae, Cephaleuros parasitica*	Leaf	low	+	25
54		Sooty mould	*Capnodium mangiferum; C. roseum*	Leaf, twig	Medium	++	25
55		Leaf margin blight	*Fusarium decemcellutare/ Botryodiplodia theobromae*	Leaf	Medium	++	34
56		Stem end rot	*Diplodia natalensis; Botryodiplodia theobromae*	Fruit	High	+++	36
57		Fruit rot	*Gloeosporium* sp.	Fruit	low	+	54
58		Fruit rot	*Phoma* sp.	Fruit			34
59		Fruit rot	*Botryodiplodia theobromae*	Fruit	Medium	++	11
60		Fusarium rot	*Fusarium sp*	Fruit	Low	++	18
61		Powdery mildew	*Oidium mangifera*	Leaf, inflorescence, flower and fruit	Medium	++	34
62		Black mildew	*Capnodium ramosus,*	Leaf	low	+	50
63			*Coccomyces vilis*	Leaf	low	+	50
64			*Colletotrichum gloeosporioides*	Leaf	low	+	50
65			*Gloeosporium* sp.	Leaf	low	+	50
66		Bark disease	*Colletotrichum gloeosporioides*	Bark	low	+	50
67			*Gloeosporium* sp.	Bark	low	+	50
68			*Starbaeckiella mangifera*	Bark	low	+	50
69		Unclassified disease			low	+	50
70		Unclassidied leaf disease	*Capnodium ramosus*	Leaf	low	+	50

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
71			*Coccomyces vilis*	Leaf	low	+	50
72			*Pestalozzia mangiferae*	Leaf	low	+	50
73			*Stragonospora* sp.	Leaf	low	+	50
74		Red rust	*Cephaleurous virescencs/ C. parasitica*	Leaf	Low	++	34
75		Pink disease	*Botryodiplodia salmonicolor*	Stem, branch	Low	+	34
76		Stem rot	*Dothlorella mangiferae*	Stem	low	+	2
77		Gummosis	*Lesiodiplodia theobromae*	Stem	High	+++	37
78		Leaf/twig blight	*Macrophomina mangiferae*	Twig	low	+	2
79		Malformation	*Fusarium moniliforme*	Inflorescence , twigs, stem	High	++	34
80		White spongy rot	*Lentinus palisorti*	Wood	Low	+	19
81		White stringy rot	*Daedalea* boseii	Wood			50
82		White stringy rot	*Fomes pachyphloeus*	Wood			50
83		White rot	*Ganoderma applanatum*				50
84			*Hexagonia disopoda*				50
85		White spongy rot	*Schizophyllum commune*	Wood			49
86			*Tremella fuciformis*				50
		Bacteria					
87		Mango blight	*Pseudomonas syringae pv. syringae*	Leaf	Medium	++	27
88		Bacterial soft rot	*Erwinia carotovora* subsp. *carotovora*	Fruit	Medium	++	20
		Phanerogamic parasite					
89			*Loranthus* sp.	Branches	Low	++	2
90			*Dendrophthoe pentandra*				50
91			*Scurrula pulverulenta*				50
	Jackfruit (*Artocarpus heterphyllus*)						
		Fungi					
92		Pink disease	*Pelliculana (Corticium) salmonicolor*, *Botryodiplodia theobromae*	Stem	Medium	++	34
93		Gummosis	*Phomopsis atrocarpi*	Stem	High	+++	41
94		Stem bleeding	*Ceratocystis paradoxa*				34
95		Leaf spot	*Phyllostictina artocarpina;*	Leaf	Medium	++	52

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
			Macrophomina phaseolina; Colletotrichum spp.; *Cercospora* spp.				
96		Die-back	*Colletotrichum* spp.		Medium	++	34
97		Die-back	*Botryodiplodia theobromae*	Branch			43
98		Canker	*Fusarium solani*	Stem, branch	Medium	++	24
99		Die-back and Canker	*Nectria haematococca*	Leaf, bark, branch	Medium	++	54
100		Die-back	*Colletotrichum gloeosporioides, Botryodiplodia theobromae, Chaetomella raphigera*	Leaf, bud, stem, branch, twig	Low	+	19
101		Rhizopus fruit rot	*Rhizopus artocarpi*	Fruit	Medium	++	22
102		Ripe fruit rot	*Fusarium* sp.	Fruit	Low	++	34
103		Leaf spot	*Cladosporium* sp.	Leaf	low	+	54
104		Leaf spot	*Curvularia* sp. ;*Alternaria* sp.	Leaf	low	+	54
105		Leaf spot	*Colletotrichum gloeosporioides*	Leaf	Medium	++	50
106		Unclassified leaf disease	*Phyllostictina artocarpi*	Leaf	Low	++	50
107		Stem rot	*Macrophomina phaseolina*	Stem	Low	+	34
108		White mould	*Sclerotinia sclerotiorum*	Stem	Low	+	44
109		Yellow pocket rot	*Fomes durissimus*	Wood	Medium	++	50
110		Wood decay	*Ganoderma applantum*	Wood	Medium	++	50
111		Wood decay	*Irpex flavus*	Wood	Medium	++	50
112		White rot with black zone	*Poria* sp.	Wood decay	Medium	++	49
	Banana (*Musa* spp.)						
		Fungi					
113		Panama	*Fusarium oxysporum* f. *cubens*	Whole plant	High	++	2
114		Sigatoka	*Cercospora musae*	Leaf	High	+++	2
115		Stem rot	*Macrophoma musue*	Plant	Low	+	2
116		Anthracnose	*Gloeosporium musarum / Colletotrichum musae*	fruit	High	++	34
117		Foot-rot	*Sclerotium rqlfsii* Sacc. *Thielaviopsis paradoxa.*	Plant	Low	+	2
118		Fruit rot	*Botryodiplodia theobromae Lasiodiplodia, Colletotrichum musae*	Fruit	Medium	++	38

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
119		Distal end rot	*Colletotrichum* sp.	Fruit	Low	++	34
120		Crown rot	*Fusarium roseum*	Crown	Medium	++	34
121		Rhizome rot	*Sclerotium rolfsii* *Colletotrichum* sp.	Rhizome	Medium	++	34
122		Root rot	*Radopholus* sp.	Root	Low	+	2
		Bacteria					
123		Heart rot/wilt	*Pseudomonas solanacearum*	Root, Plant	Medium	++	2
124		Bacterial soft rot	*Erwinia carotovora* subsp. *carotovora*	Fruit	Low	+	20
		Virus					
125		Bunchy top	Bunchy top virus	Stem , twig, leaf and fruit	High	++	34
126		Mosaic	*Banana mosaic virus*	Leaf	Low	++	34
		Nematode					
127		Root injury	*Helicotylenchus multicinctus*	Root	Low	++	35
128		Root lesion	*Hoplolaimus* sp.	Root	Low	++	35
129		Root knot	*Meloidogyne incognita*	Root	Low	++	35
130		Root knot	*Meloidogyne javanica*	Root	Low	++	35
131		Root lesion	*Pratylenchus* sp.	Root	Low	++	10
132		Root lesion	*Radopholus similis*	Root	Low	++	10
133		Root/Stem discolouration	*Tylenchorhynchus clatony*	Root	Low	++	35
	Litchi (*Litchi chinensis*)	**Fungi**					
134		Anthracnose	*Colletotrichum gloeosporioides*	Leaf , twig, inflorescence, fruit	High	+++	22
135		Leaf spot	*Pestalotia pauciseta*	Leaf	Low	++	34
136		Leaf spot	*Colletotrichum* spp.	Leaf	High	++	3
137		Leaf blight	*Botryodiplodia theobromae*	Leaf	Medium	++	34
138		Fruit blight & crack	*Fusarium moniliforme*	Fruit	High	++	34
139		Red rust	*Cephaleuros parasiticus*	Leaf	Low	++	48
140		Pink disease	*Botryobasidium salmonicolor*	Leaf, petiole, fruit	Low	++	34
		Bacteria					
141		Bacterial leaf blight	*Pseudomonas syringae* pv. *syringae*	Leaf	Medium	++	33

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
	Dragon fruit (*Hylocereus polyrhizus, H. undatus*)	**Fungi**					
142		Stem rot	*Lasiodiplodia theobromae*	Stem	Medium	++	16
143		Stem rot	*Diaporthe phaseolorum*	Stem	High	+	32
144		Soft rot	*Fusarium fujikuroi*	Stem	High	+	32
	Blackberry (*Eugenia jambolana*)						
		Fungi					
145		Leaf blight	*Botryodiplodia theobromae*	Leaf	Medium	++	34
146		Pink disease	*Botryobasidium salmonicolor*	Leaf	High	+	34
147		Leaf spot	*Monochaetia*	Leaf	Low	+	54
148		Leaf spot	*Phyllosticta* sp.	Leaf	Low	++	54
		Parasitic plant					
149		Loranthus	*Dendrophthoe falcata*	Stem, branch	Low	++	34
	Coconut (*Cocos nucifera* L.)	**Fungi**					
150		Bud rot	*Phytophthora palmivora*	Bud	Low	++	34
151		Grey leaf spot/ Leaf blight	*Pestalotia palmarum/ Pestaliopsis palmarum*	Leaf	Low	+	14
152		Leaf /Sheath spot	*Botrydlplodla theobromae*	Leaf & Sheath	Low	+	2
153		Anthracnose	*Colletorichum* sp	Fruit	Low	+	54
154		Leaf spot	*Cercospora* sp.	Leaf	Low	+	54
155		Leaf spot	*Glomerella cingulala*	Leaf	Low	+	54
156		Inflorescence die-back	*Ascochyta* sp.	Inflorescence	Medium	++	34
157		Stem bleeding	*Ceratosystis paradoxa, Thielaviopsis paradoxa*	Stem	Medium	+++	42
158		Stem rot	*Ganoderma lucidum*	Stem	Medium	+	14
159		White mottled spongy rot	*Ganoderma lucidum*	Wood	Medium	++	19
160		White spongy rot	*Irpex flavus*	Wood	Medium	+	19
161		Brown rot	*Polyporus ostresformis*	Wood	Medium	+	19
		Virus					
162		Cadang cadang	Viroid	Inflorescence	Medium	+	2
		Nematode					
163		Root injury	*Hemicyclophora* sp.	Root	Low	+	35
164		Root injury	*Pratylenchus penetrans*	Root	Low	+	35
165		Root decay	*Xiphinema* sp.	Root	Low	+	35

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
	Pineapple (*Ananas comosus*)	**Fungi**					
166		Heart rot, Stem rot	*Phytophthora parasitica*	Fruit/Stem	Low	+	2
167		Black rot	*Thtelaviopsls paradoxa/ Botryodiplodia theobromae*	Fruit	High	++	2
168		Anthracnose	*Colletotrichum* sp.	Fruit	low	+	2
169		Leaf spot	*Phyllosticta* sp.	Leaf	low	+	34
170		Leaf spot	*Curvularia* sp.	Leaf	low	+	34
171		Leaf & fruit rot	*Ceratocystis paradoxa*	Leaf, Fruit	Low	+	34
172		Fruit rot	*Sclerotium rolfsii*	Fruit	Low	+	34
173		Foot rot	*Fusarium* sp.	Fruit	Low	+	34
		Bacteria					
174		Bacterial soft rot	*Erwinia carotovora* subsp. *carotovora*	Fruit	Medium	++	20
		Nematode					
175		Root lesion	*Helicotylenchus dihystera*	Root	Low	+	12
176		Root lesion	*Hoplolaimus indicus*	Root	Low	+	35
177		Root tip galling	*Longidorus maximus*	Root	Low	+	35
178		Root knot	*Meloidogyne* spp.	Root	Low	+	35
179		Root injury/lesion	*Paratylenchus* sp.	Root	Low	+	35
180		Root lesion	*Pratylenchus brachyurus*	Root	Low	+	35
181		Plant decline	*Rotylenchus* sp.	Root	Low	+	10
182		Root decay	*Xiphinema index*	Root	Low	+	10
183			*Aphelenchus* spp.	Root	Low	+	10
184		Root lesion	*Criconemoides* sp.	Root	Low	+	10
185		Stunting	*Tylenchorhynchus*	Root	Low	+	10
186		Root lesion	*Pratylenchus* spp.	Root	Low	+	12
187		Root injury	*Zygotylenchus* spp.	Root	Low	+	12
	Carambola (*Averrhoa carambola*)	**Fungi**					
188		Leaf spot	*Phyllosticta* sp.	Leaf	Low	+	54
189		Leaf spot	*Colletotrichum* sp	Leaf	Low	+	30
	Watermelon (*Citrullus vulgaris*)	**Fungi**					
190		Stem/collar rot	*Fusarium oxysporum*	Stem, collar	Medium	++	34
191		Leaf spot	*Cercospora* sp.	Leaf	Low	++	45
192		Leaf spot	*Colletotrichum* sp.				2

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
193		Wilt	*Fusarium oxysporum* f. sp. *niveum*	Plant	Medium	++	45
194		Powdery mildew	*Oidium* sp.	Leaf	Medium	++	45
195		Gummy stem blight	*Didymella bryoniae*	Vine	Medium	+	45
196		Downy mildew	*Pseudoperonospora cubensis*	Leaf	Medium	++	45
197		Fruit rot	*Diplodia natalensis*	Fruit	Low	++	11
		Virus					
198		Leaf mosaic	Virus	Leaf	Medium	+	45
		Nematode					
199		Root knot	*Meloidogyne* sp.	Root	Medium	++	45
200		Root knot	*Meloidogyne incognita*	Root	Medium	++	8
201		Root lesion	*Tylenchus* spp.	Root	Low	+	12
	Papaya (*Carica papaya*)	**Fungi**					
202		Leaf spot	*Phyllosticta sulata*	leaf	Low	+	34
203		Anthracnose	*Colletotrichum gloeosporioides*	Fruit	Low	+	4
204		Stem end rot	*Botryodiplodia theobromae*	Fruit	Low	+	18
205		Leaf spot	*Phyllosticta caricacola*	Leaf	Low	+	54
206		Powdery mildew	*Oidium caricae*	Leaf	Low	++	34
207		Leaf blight	*Drechslera rostrata*	Leaf	Low	++	34
208		Fruit rot	*Gloeosporium* sp	Fruit	Low	+	2
209		Fruit rot	*Macrophomina phasiolina*	Fruit	Low	+	54
210		Fruit rot	*Aspergillus* sp.	Fruit	Low	+	18
211		Fruit rot	*Fusarium solani*	Fruit	Low	+	18
212		Fruit rot	*Rhizopus stolonifer*		Low	++	18
213		Stem rot/ Foot rot	*Pythium aphanidermatum*	Seedling, Stem	Low	++	34
214		Foot rot	*Fusarium roseum*	Base of the plant	Low	++	18
215		Damping off/ seedling blight/ stem rot	*Pythium aphanidermatum, Fusarium* sp.	Young seedling	Low	++	2
		Bacteria					
216		Bacterial soft rot	*Erwinia carotovora* subsp. *carotovora*	Fruit	Medium	++	20
217		Soft rot	Klebsiella variicola	Fruit	Low	++	23
		Virus					
218		Mosaic	Papaya mosaic virus	Leaf	High	++	54
219		Leaf curl	Tobacco leaf curl virus	Leaf	High	+++	34

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
220		Chlorotic streak	Virus	Leaf	Medium	++	54
		Nematode					
221		Root knot	*Meloidogyne javan*	Root	Medium	++	10
222		Root decay	*Xiphinema index*	Root	Low	+	10
	Pome granate (*Punica granatum*)	**Fungi**					
223		Leaf spot	*Cercospora* sp.	Leaf	Low	+	34
224		Die back	*Colletotrichum* sp.	Twig	Low	+	34
225		Soft rot	*Rhizopus arrhizus*	Fruit	Low	+	34
	Olive (*Olea europea*)	**Fungi**					
226		Leaf margin blight	*Macrophomina phaseolina*	Leaf	High	++	34
227		Die-back	*Pestalotia* sp.	Stem	Medium	+	31
228		Die-back	*Diplodia* sp.	Stem	Medium	+	31
	Sofeda (*Manilkara sapota*)	**Fungi**					
229		Leaf spot	*Cephaleuros parasitica*	Leaf	Low	++	54
230		Leaf spot	*Pestalotia* sp.	Leaf	Low	++	31
	Custard apple (*Annona* spp.)	**Fungi**					
231		Fruit rot	*Cercospora annonae* *Gloeosporium* sp.	Fruit	Low	+	34
232		Pink disease	*Botryobasidium salmonicolor*	Leaf, petiole	Low	+	34
233		Sooty mould	*Capnodium* sp.	Leaf	Medium	++	34
234		Fruit rot	*Gloeosporium* sp.	Fruit	Low	++	54
	Cashew-nut (*Anacardium occidentale*)	**Fungi**					
235		Leaf spot	*Colletotrichum gloeosporioides*	Leaf	Low	++	34
236		Pink disease	*Botryobasidium salmonicolor*	Leaf	Low	++	34
237		Sooty mould	*Capnodium* sp.	Leaf	Medium	++	34
238		Powdery mildew	*Oidium anacardii*	Leaf	Low	++	34
	Strawberry (*Fragaria ananassa*)	**Fungi**					
239		Fusarium wilt	*Fusarium oxysporum*	Crown	Medium	++	52
240			*Rhizoctonia* sp.	Crown	Medium	++	4
241			*Fusarium* sp.	Crown	Medium	++	4
242		Anthracnose	*Colletotrichum gloeosporioide*	Leaf, fruit	Medium	++	5
243			*Alternaria* sp.	Leaf, fruit	Low	+	4
244			*Rhizopus* sp	Leaf, fruit	Low	++	4

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
245		Crown rot	*Pestalotiopsis* sp.	Crown	Low	++	55
	Tamarind (*Tamarindus indica*)	**Fungi**					
246		Powdery mildew	*Oidium* sp.	Leaf	Low	++	34
247		Leaf spot	*Colletotrichum* sp.	Leaf	Low	+	34
	Ber (*Zizyphus* spp.)	**Fungi**					
248		Powdery mildew	*Oidium erysiphoidess* f. sp. *ziziphi*	Leaf	Low	++	2
249		Leaf spot	*Isariopsis* sp.	Leaf	low	1	2
250		Leaf spot	*Cladosporiutn* sp.	Leaf	low	1	2
251		Leaf spot	*Cercospora jujubae*	Leaf	low	1	54
252		Black leaf spot	*Pestalotia* sp.	Leaf	Low	+	3
253		Fruit rot	*Rhizopus stolonifer*	Fruit	High	+++	
254		Sooty mould	*Isariopsis indica var. ziziphi*	Leaf	Low	+++	21
255		Stem bleeding	*Pestalotiopsis palmarum*	Stem	Medium	++	21
256		Leaf spot	*Alternaria alternata* *Cercospora ziziphi* *Curvularia lunata* *Fusarium semitectum*	Leaf	Low	++	21
257			*Lasiodiplodia theobromae* *Mitteriella ziziphina* *Pestalotiopsis palmarum*	Leaf	Low	++	21
258		Pre-harvest Fruit spot/rot	*A. alternata, Colletotrichum gloeosporioides, Curvularia lunata, F. semitectum, Lasiodiplodia theobromae, Mitteriella ziziphina, Nigrospora oryzae, P. palmarum, Phomopsis* sp.	Fruit	Low	++	21
259		Post-harvest fruit rot	*A. alternate, Aspergillus* spp., *Colletotrichum gloeosporioides, Curvularia lunata, Fusarium semitectum, Nigrospora oryzae, Penicillium spp., Phomopsis* sp., *Pestalotiopsis palmarum, Rhizopus* sp	Fruit	Low	++	21
260		Stemphylium blight	*Stemphylium* sp.	Fruit	Low	++	18

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
261		Rhizopus rot	*Rhizopus stolonifer*	Fruit	Low	++	18
262		Anthracnose	*Colletotrichum gloeosporioides*	Fruit	Low	++	36
263		Alternaria fruit rot	*Alternaria alternata*	Fruit	Low	++	18
264		Fusarium rot	*Fusarium* sp,	Fruit	Low	++	36
265		Pestalotiopsis rot	*Pestalotiopsis* sp.	Fruit	Low	++	36
	Avocado (*Persea americana*)	**Fungi**					
266		Leaf spot	*Phyllosticta* sp.	Leaf	low	+	54
	Hog plum (*Spondias mangifera*)	**Fungi**					
267		Stem rot	*Colletotrichum* sp. *Asterina delicatula*.	Stem	Low	+	54
	Dewa (*Artocarpus lakoocha)*	**Fungi**					
268		Spot	*Pestalotia* sp.	Leaf	Low	+	46
	Taikor (*Gancinia pedunculata)*						
269		Leaf spot	*Phoma* sp.	Leaf	Low	+	46
	Chalta (*Dillenia indica)*						
270		Leaf spot	*Pestalotia* sp., Colletotrichum *sp.*	Leaf	Low	+	46
	Latkon (*Baccaurea ramiflora*)	**Fungi**					
271		Leaf blight	*Pestalotia* sp.	Leaf	High	++	9
272		Leaf spot	*Phoma* sp.,	Leaf	Low	++	31
273		Leaf spot	Colletotrichum *sp.*	Leaf	Low	++	31
	Ashfol (*Dimocarpus longan)*	**Fungi**					
274		Leaf spot	*Pestalotia* sp.	Leaf	Medium	++	31
275		Leaf spot	*Botrytis* sp.	Leaf	Low	+	31
	Karamcha (*Carissa carandas)*	**Fungi**					
276		Leaf spot	*Phoma* sp.	Leaf	Low	+	31
	Golden apple (*Spondias dulcis)*	**Fungi**					
277		Gummosis	*Phytophthora Isp.*	Stem, fruit	Low	++	37
	Wood apple (*Aegle mamelos*)	**Fungi**					
278		Powdery mildew	*Oidium* sp.	Leaf	Low	+	34
279		Fruit rot	*Fusarium* sp. *Rhizopus* sp.	Fruit	Low	+	34

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
280		Leaf spot	*Asterina delicatula*	Leaf	Low	+	54
281		Gummosis	*Phytophthora sp.*	Stem, fruit	High	++	37
282		Leaf spot/blight	*Alternaria* sp., *Botrytis* sp., *Fusarium* sp. *Curvularia* sp.,	Leaf	Low	++	31
283		Leaf blight	*Colletotrichum* sp.	Leaf	Low	++	13
	Passion fruit (*Spondias dulcis)*	**Fungi**					
284		Fruit rot	*Colletotrichum* sp.; Phoma sp., Fusarium sp., *Cercospora* sp.	Fruit	Medium	+	31
	Jamrul (*Syzygium samarangense*)						
285		Leaf spot	*Pestalotia* sp	Leaf	Medium	+	30
286		Leaf spot	*Colletotrichum* sp.	Leaf	Low	+	30
	Rambutan (*Nephelium lappaceum*)						
287		Leaf spot	*Pestalotia* sp	Leaf	Medium	+	30
	Kauphal (*Garcinia cowa*)						
288		Leaf spot	*Pestalotia* sp	Leaf	Medium	+	30
	Bilatigab (*Diospyros blancoi)*			Leaf	Medium	+	30
289		Leaf spot	*Pestalotia* sp	Leaf	Medium	+	30
	Nashpati (*Pyrus communis*)			Leaf	Medium	+	30
290		Leaf spot	*Pestalotia* sp	Leaf	Medium	+	30
	Bilimbi (*Avverhoa bilimbi*)			Leaf	Low	+	30
291		Leaf spot	*Pestalotia* sp.; *Alternaria* sp.	Leaf	Low	+	30

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3.9 Recording Diseases of Spices Crops

Details of the diseases of 18 spice crops growing in Bangladesh are shown in Table 22. Altogether records of 129 diseases were found on 18 spice crops. Among these 96 were caused by fungi, four by bacteria, four by virus and 21 by nematode pathogens. The highest number of diseases (30) was found on onion, which was followed by chilli (27), garlic (16) and coriander (9). On other spice crops number of diseases ranged 1-7. Among the 30 diseases on onion, 20 were fungal disease, two bacterial, two viral and five nemic diseases. Number of fungal diseases on chilli, garlic and coriander was 19, 9 and 6 respectively. Bacterial diseases were found only two on of onion and ginger. Records of nematode disease were found on five crops namely onion, garlic, chilli, coriander and cardamom. Majority of the diseases occurred on leaf, bulb and roots. Out of 129 disease, the status of 21 diseases was high with common to wide distribution (Table 22).

Table 22. Diseases of Spice Crops

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
	Onion (*Allium cepa*)	**Fungi**					
1		Purple blotch complex	*Alternaria porri; Stemphylium vesicarium*	Leaf	High	+++	11
2		Seed rot	*Alternaria* sp.	Seed	Medium	++	6
3		Germination reduction	*Aspergillus flavus; A. glaucus*	Bulb	Low	++	6
4		Black mould	*Aspergillus niger*	Bulb	Medium	++	6
5		Seed rot, germination failure	*Fusarium* spp.	Seed	Low	+	6
6		Germination reduction	*Rhizopus* sp.	Seed	Low	+	6
7		White rot	*Sclerotium cepivorum*	Leaf, bulb	Medium	++	18
8		Downy mildew	*Peronospora destructor*	Leaf, fruit	Low	+	18
9		Botrytis leaf blight	*Botrytis squamosa; Botrytis cinerea*	Leaf	High	++	11

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
10		Stem/Bulb rot	*Scleroium rolfsii; Fusarium* sp.	Stem, bulb	Low	++	11
11		Basal rot	*Fusarium oxysporum*	Leaf, bulb	Low	++	1
12		Smut	*Urocystis cepulae*	Leaf	Low	++	11
13		Grey mould-rot	*Botryotinia fuckeliana*	Bulb	Low	++	1
14		Grey mould-rot	*Botrytis aclada*	Bulb	Low	++	1
15		Leaf spot	*Colletotrichum dematium*	Leaf	Low	++	1
16		Anthracnose	*Glomerella cingulata*	Leaf	Low	++	1
17		Charcoal rot	*Macrophomina phaseolina*	Bulb	Low	++	1
18		Cottony soft rot	*Sclerotinia sclerotiorum*	Bulb	Low	++	1
19		Rust	*Puccinia allii*	Leaf	Low	++	1
20		Stemphylium blight	Stemphylium botryosum; Stemphylium vesicari	Leaf, Umbell	High	+++	19
		Bacteria					
21		Bacterial canker or blast	*Pseudomonas syringae pv. syringae*		Medium	++	1
22		Bacterial soft rot	*Erwinia carotovora* subsp. *carotovora*; *Erwinia chrysanthemi*, *Burkholderia cepacia*	Bulb	Medium	++	16
		Virus					
23		Yellow stripe	Leek yellow stripe poty virus (LYSP)	Leaf	Medium	++	1
		Phytoplasma					
24		Aster yellows	Phytoplasma	Leaf	Medium	++	11
25		Iris Yellow Spot	Iris Yellow spot Virus	Leaf	Medium	++	11
		Nematode					
26		Stem and bulb damage	*Ditylenchus dipsaci*	Root	High	++	11
27		Root decay	*Helicotylenchus dihystera*	Root	Low	+	1
28		Root tip galling	*Longidorus micoletzky*	Root	Low	+	1
29		Root knot	*Meloidogyne graminicola*	Root	Medium	++	15
30		Stunting	*Hoplolaimus sp.*	Root	Low	+	4
	Garlic (*Allium sativum)*	**Fungi**					
31		White rot	*Sclerotium cepivorum*	Leaf, bulb	Medium	++	18
32		Purple blotch	*Alternaria porri* *Stemphylium vesicarium*	Leaf	High	+++	1
33		*Stemphylium* leaf blight	*Stemphylium* sp.	Leaf	High	+++	19
34		Rust	*Puccinia porri*	Leaf, stem	Medium	++	1

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
35		Black mould	*Aspergillus niger*	Bulb	Medium	++	1
36		Anthracnose	*Glomerella cingulata*	Leaf	Medium	++	1
37		Charcoal rot	*Macrophomina phaseolina*	Leaf, Bulb	Low	+	1
38		Cottony soft rot	*Sclerotinia sclerotiorum*	Bulb	Medium	++	1
39		Basal rot	*Fusarium oxysporum*	Base of plant	Low	+	1
		Virus					
40		Leek yellow stripe poty virus	Leek yellow stripe virus		Low	+	1
41		Mosaic	Garlic mosaic virus (GarMV)	Leaf	Low	+	1
		Nematode					
42		Stem nematode	*Ditylenchus dipsaci*	Leaf, bulb	High	++	14
43		Root lesion	*Helicotylencus dihystera*	Root, bulb	Low	+	14
44		Root knot	*Meloidogyne incognita*	Root	High	++	14
45		Root knot	*Meloidogyne javanica*	Root	High	++	14
46		Root lesion	*Pratylenchus* sp.	Root, bulb	Low	+	14
	Chilli (*Capsicum frutescens)*	**Fungi**					
47		Fruit rot	*Macrophomina phaseolina*	Fruit	Low	+	6
48		Wilt	*Fusarium annum*	Base of plant	High	+++	6
49		Fruit rot	*Drechslera sp.*	Fruit	Low	+	6
50		Fruit rot	*Fusarium equiseti; F. moniliforme; F. oxysporum; F. semitectum*	Fruit	High	+++	6
51		Fruit rot	*Curvularia geniculata' C. lunata*	Fruit	Low	+	6
52		Fruit rot	*Phomopsis capsici*	Fruit	Low	+	6
53		Fruit rot	*Curvularia sp.*	Fruit	Low	+	6
54		Fruit rot	*Botryodiplodia theobromae*	Fruit	Low	+	6
55		Fruit rot	*Periconia byssoides*	Fruit	Medium	++	6
56		Black Fruit rot	*Alternaria capsici* *Alternaria tenuis*	Fruit	Medium	++	6
57		Ripe fruit rot	*Colletotrichum gloeosporioides*	Fruit	Low	+	6
58		Sclerotinia rot	*Sclerotinia sclerotiorum*	Stem, crown	Medium	++	17
59		Die-back	*Colletotrichum capsici*	Fruit	High	+++	18
60		Seed discolouration	*Aspergillus flavus* *Aspergillus* spp.	Seed	Medium	++	6
61		Leaf spot	*Cercospora capsici*	Leaf, Fruit	High	+++	18
62		Leaf spot	*Corynespora cassiicola*	Leaf	Low	+	6

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
63		Soft rot	*Choanephora cucurbitarum*	Leaf	High	+	18
64		Anthracnose	*Colletotrichum nigrum; C. capsici*	Leaf, branch, flower, fruit	High	++	18
65		Damping-off	*Fusarium annuum*	Seed, seedling, stem, root.	Low	+	13
			Virus				
66		Mosaic	Cucumber mosaic virus (CMV)	Leaf	High	+++	13
67		Mosaic	Potato virus Y	Whole plant	Medium	++	13
68		Leaf curl	Tobacco leaf curl virus	Whole plant	High	+++	13
			Nematode				
69		Root injury	*Helicotylenchus sp.*	Root	Medium	++	14
70		Stunting	*Hoplolaimus sp.*		Low	+	14
71		Root knot	*Meloidogyne incognita*	Root	Medium	++	14
72		Root knot	*Meloidogyne javanica*	Root	Medium	++	14
73			*Ditylenchus dipsaci*	Root	Medium	++	14
	Ginger (*Zingiber officinale*)		**Fungi**				
74		Rhizome rot/Soft rot	*Pythium aphanidermatum , Fusarium oxysporum*, *Sclerotium rolfsii,*	Rhizome	Medium	++	7
75		Leaf spot	*Phyllosticta sp.*	Leaf	Low	+	18
76		Yellows of ginger	*Fusarium oxysporum* f.sp. *zingiberi; Fusarium solani*	Leaf	Medium	++	10
77		Leaf blight	*Colletotrichum zingiberis*	Leaf	High	++	10
78		Leaf blight	*Myrothecium* sp.				5
			Bacteria				
79		Bacterial wilt	*Ralstonia solanacearum*	Rhizome	High	+++	8
80		Bacterial soft rot	*Ralstonia solanacearum*	Rhizome			7
	Turmeric (*Curcuma longa*)		**Fungi**				
81		Leaf spot	*Taphrina maculans*	Leaf	High	+++	18
82		Leaf spot	*Phyllosticta* sp.	Leaf	Low	+	18
	Coriander (*Coriandrum sativum*)		**Fungi**				
83		Stem gall	*Protomyces macrosporus*	Seed, stem	Low	+	18
84		Mildew	*Erysiphe polygoni*	Leaf	Low	+	18
85		Powdery mildew	*Erisyphe heraclei*	Leaf, flower	Medium	++	2
86		Stem blight	*Alternaria brassicicola*	Stem	Medium	++	3

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
87		Root rot	*Fusarium* sp.	Root	Low	+	3
88		Inflorescence blight	*Alternaria brassicicola; Stemphylium* sp.	Inflorescence	Low	+	3
		Nematode					
89		Root knot	*Meloidogyne incognita*	Root	Medium	++	13
90		Root knot	*Meloidogyne javanica*	Root	Medium	++	13
91		Root lesion	Tylenchus *sp.*	Root	Low	+	13
	Cardamon (*Elletaria cardamomum)*	**Nematode**					
92		Root knot	*Meloidogyne incognita*	Root	Medium	++	13
93		Root knot	*Meloidaogyne javanica*	Root	Medium	++	13
94		Root lesion	*Tylenchus* sp.	Root	Low	+	13
	Black pepper (*Piper nigram)*	**Fungi**					
95		Leaf spot	*Cephaleuros parasitica*	Leaf	High	++	18
96		Leaf spot	*Phyllosticta* sp.	Leaf	Low	++	18
97		Anthracnose	*Colletotrichum gloeosporoides*	Spike & berries	Low	++	18
98		Leaf blight	*Colletotrichum gloeosporoides*	Leaf	Medium	++	3
	Cinnamon (*Cinnamomum verum)*	**Fungi**					
99		Leaf spot	*Glomerella cingulata*	Leaf	Medium	++	12
100		Leaf spot	*Cercospora* sp	Leaf	Low	++	3
101		Leaf spot	*Pestalotia* sp.	Leaf	Low	++	3
102		Stem spot	*Pestalotia* sp.	Stem	Low	++	3
	Celery (*Apium graveolens*)	**Fungi**					
103		Inflorescence blight	*Alternaria* sp.	Inflorescence	Low	++	3
	Fennel (*Foeniculum vulgare*)	**Fungi**					
104		Leaf spot	*Alternaria solani; A. brassicicola; A. tenuis*	Leaf	Low	+	3
105		Umbel blight	*Alternaria solani; A. brassicicola; A. tenuis*	Umbel	Low	+	3
106		Alternaria leaf and umbel blight	*Alternaria brassicicola*	Entire foliage	Medium	++	9
	Fenugreek (*Trigonella foenum-graecum*)	**Fungi**					
107		Powdery mildew	*Oidium* sp.	Leaf	Medium	++	3
108		Root rot	*Fusarium solani*	Root	Low	++	3
109		Leaf spot/blight	*Alternaria tenuis; A. brassicicola*	Leaf	Low	++	3

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
110		Stem blight	*Alternaria* spp.		Low	++	3
111		Whorl blight	*Alternaria* spp.		Low	++	3
112		Pod blight	*Alternaria* spp.		Low	++	3
113		Wilt	*Fusarium* sp.		Low	++	3
	Ajwan (*Trachyspermum ammi*)	**Fungi**					
114		Root rot	*Fusarium solani*	Root	Medium	++	3
115		Leaf blight	*Alternaria tenuis; A. brassicicola*	Leaf	Medium	++	3
116		Stem rot	*Macrophomina* spp.	Stem	Medium	++	3
117		Inflorescence blight	*Alternaria tenuis; Alternaria* spp.	Inflorescence	Medium	++	3
	Indian bay leaf (*Cinnamomum tamala*)	**Fungi**					
118		Leaf spot	*Cephaleuros parasitica*	Leaf	Low	+	18
119		Leaf spot	*Phyllosticta cinnamomi*	Leaf	Low	+	18
120		Leaf spot/blight	*Phomopsis* sp.; *Colletotrichum gloeosporoides*	Leaf	Low	+	3
	Cumin (*Cuminum cyminum)*	**Fungi**					
121		Powdery mildew	*Oidium* sp.	Whole plant	Low	+	18
	Kababchini *(Piper cubeba)*	**Fungi**					
122		Leaf spot	*Phomopsis* sp.; *Colletotrichum* sp.	Leaf	Low	+	3
	Black cardamom (*Amomum sabulatum;A. costatum*)	**Fungi**					
123		Leaf spot	*Colletotrichum* sp.	Leaf	Low	+	3
124		Fruit spot	*Fusarium oxysporum*	Fruit	Low	+	3
	Black cumin (*Nigella sativa*)	**Nematode**					
125		Root lesion	*Hoplolaimus indicus*	Root	Low	+	13
126		Root knot	*Meloidogyne incognita*	Root	Low	+	13
127		Root knot	*Meloidogyne javanica*	Root	Low	+	13
128		Root tip galling	*Longidorus maximus*	Root	Low	+	13
129		Root decay	*Xiphinema* sp.	Root	Low	+	13

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3.10 Recording Diseases of Flower Plants

Records of diseases on 25 species of flowers growing in Bangladesh were obtained from secondary sources. Details of the information are shown in Table 23. It reveals from the table that altogether 68 diseases were recorded on 25 flower species. Number of diseases on each crop species varied from 1-12. The highest number of diseases (12) was found on rose followed by tuberose (8), gerbera (7), marigold (6) and champa (6). Record of only one disease was observed on each of chrysanthemum, gardenia, calendula, lalpata, lupin, krishnachura, polash, balsam, bakful, carnation, aster, orange jasmine and sephali. Among the 68 diseases 58 were caused by fungal pathogens, five caused by virus, one by bacterial pathogen and four by parasitic plants. Bacterial disease was recorded only on tuberose (Table 23). Parasitic plants were recorded on champa, golden jasmine and sephali (Table 23). For most of the diseases leaf is the site of infection and in some cases root, flower bud, flower, stem of the plant and corm are affected. The status of 11 diseases was high, 25 medium and rests of the diseases were with low status. Only a limited number of diseases had wide distribution.

Table 23. Diseases of Flower and Ornamental Plants

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
	Hollyhock (*Althea rosea*)	**Fungi**					
1		Leaf spot	*Cercospora* sp.	Leaf	Low	+	18
2		Rust	*Puccinia malvacearum.*	Leaf	Low	+	18
	China rose (*Hibiscus rosasinesis*)	**Fungi**					
3		Anthracnose	*Colletotrichum* sp.	Leaf	High	++	18
4		Flower-rot	*Choanephora infundibulifera*	flower	Low	+	18
	Chrysanthemum (*Chrysanthemum sinense)*	**Fungi**					
5		Leaf spot	*Septoria chrysanthemella*	Leaf	High	++	18
	Gardenia (Gardenia jasminoides)	**Fungi**					
6		Leaf spot	*Cercospora* sp.	Leaf	Low	+	18
	Dahlia (*Dahlia* sp.)	**Fungi**					
7		Leaf spot	*Cercospora* sp., *Alternaria* sp.	Leaf	Low	+	18
8		Powdery mildew	*Oidium* sp.	Leaf	High	+++	18
		Virus					
9		Leaf curl	Virus	Leaf	Low	+	18
	Marigold (*Tagetes* spp.)	**Fungi**					
10		Leaf spot	*Alternaria* sp.	Leaf	Low	+	16,
11		Petal spot	*Alternaria* sp.	Leaf	Low	+	18

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
12		Alternaria blight	*Alternaria alternata*	Leaf	Medium	++	3,
13		Foliage blight	*Aspergillus fumigatus*	Leaf, bud, flower	Medium	++	4
14		Grey mold	*Botrytis* sp.	Leaf	High	++	16
15		White mold	*Sclerotinia sclerotiorum*	Stem	Medium	++	2
	Zinnia (*Zinnia elegans*	**Fungi**					
16		Leaf spot	*Cercospora* sp.	Leaf	High	++	18
		Virus					
17		Leaf curl	Virus	Leaf	Low	+	18
	Calendula (*Calendula officinalis*)	**Virus**					
18		Mosaic	Virus	leaf	Low	+	18
	Lalpata (*Amarantus oleraceus*)	**Fungi**					
19		Root-rot	*Sclerotium rolfsii*	Root	Low	+	18
	Lupin (*Lupinus* sp.)	**Fungi**					
20		Leaf spot	*Cercospora* sp.	Leaf	Low	+	18
	Krishnachura (*Cesalpina pulcherrima*)	**Fungi**					
21		Leaf spot	*Glomeralla cingulata*	Leaf	Low	+	18
	Palash (*Butea frondosa*)	**Fungi**					
22		Leaf spot	*Phyllosticta* sp., *Pestalozzia* sp.	Leaf	Low	+	18
	Balsam (*Impatiens balsamina*)	**Fungi**					
23		Leaf spot	*Cercospora impatentis*	Leaf	Low	+	18
	Bakphul (*Sesbania grandiflora*)	**Fungi**					
24		Leaf spot	*Phoma* sp.	Leaf	Low	+	18
	Rose (*Rosa* sp.)	**Fungi**					
25		Black spot	*Diplocarpon rosae*	Leaf	Low	+	18
26		Leaf spot	*Cercospora* sp.	Leaf	Low	+	9
27		Powdery mildew (on flower bud)	*Oidium* sp.	Leaf, flower bud	Low	+	18
28		Botrytis blight	*Botrytis* sp.	Leaf, bud	Medium	++	16
29		Downy mildew	*Peronospora sparsa*	Stem, leaf	Medium	+++	5
30		Rust	*Phragmidium mucronatum*	Leaf	Medium	++	5
31		Black spot	*Pestalotiopsis guepinii*	Leaf	Medium	++	13

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
32		Black spot	*Marsonina rosea*, *Pestalotiopsis guepinii, C. cladosporioides, C. oxysporum*. and *Penicillium* sp.	Leaf	Medium	++	13
33		Blight	*Penicillium* sp., *A. alternata*, *A. flavus*, *C. cladosporioides, P. guepinii* and *T. viride*.	Leaf	Medium	++	10
34		Anthracnose	*A. alternata, A. saccharicola, B. allii*, *C. cladosporioides, C. oxysporum, Colletotrichum* sp.1 (straight spored), *N. sphaerica*, *P. guepinii*. P. *guepinii*1 (culture type 1) and *Rhizopus stolonifer*	Leaf, flower	Medium	++	10
35		Leaf spot	*A. niger*, *C. cladosporioides, C. oxysporum*, C. *pallescens*, *Gibberella* sp,. *Penicillium* sp., *P*. *guepinii*, *P*. *guepinii*1 (culture type 1), *P. guepinii2* (culture type 2) and *T. viride.*	Leaf	Low	++	10
36		Leaf spot	*Cercospora* sp.	Leaf	Low	++	16
	Carnation *(Dianthus caryophyllus)*	**Fungi**					
37		Rust	*Uromyces caryophyllium*	Leaf	Low	+	18
	Button flower (*Cephalenthus occidentales*)	**Fungi**					
38		Leaf spot	*Cercospora* sp.	Leaf	Low	+	18
		Virus					
39		Leaf curl	Virus	Leaf	Low	+	18
	Century plant (*Agave* sp.)	**Fungi**					
40		Anthracnose	*Colletotrickum agave*	Leaf	Low	+	18
41		Leaf spot	*Diplodia agaves.*	Leaf	Low	+	18
	Aster (*Callistephus hortensis)*	**Virus**					
42		Mosaic	Virus		Low	+	18

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
	Gladiolus	**Fungi**					
43	(*Gladiolus hortulanus*)	Botrytis blight	*Botrytis gladiolorum*	Leaf flower Bud, stem inflorescence,	High	++	15, 17
44		Corm rot	*Fusarium* sp.	Corm	High	++	16
45		Fusarium wilt	*Fusarium oxysporum* f. sp. *gladioli*	Root, stem base	Medium	++	20
	Tuberose	**Fungi**					
46	(*Polianthes tuberosa*)	Blossom blight	*Fusarium equiseti*	Blossom	Medium	++	12
47		Stem rot	*Sclerotium rolfsii*	Stem	Medium	++	19
48		Foot & Tube rot	*Sclerotium rolfsii*	Tube, stem base	Medium	+++	11
49		Leaf spot/ blight	*Fusarium graminearum*	Leaf	Medium	++	8
50		Anthracnose/ leaf spot	*Colletotrichum* sp.	Leaf	High	++	8
51		Alternaria leaf spot	*Alternaria alternata*	Leaf	High	++	8
52		Tuber rot	*Fusarium* sp.	Tube	Low	+	16
		Bacteria					
53		Bacterial leaf blight	*Xanthomonas campestries*	Leaf	Medium	++	1
	Gerbera	**Fungi**					
54	*(Gerbera jamesonii)*	Leaf blight	*Alternaria citrii, A. tennuissima,*	Leaf	Low	+	21
55		Anthracnose	*Colletotrichum gloeosporioides, C. dematium*	Leaf	Medium	++	21
56		Powdery mildew	*Erysiphe cichoracearum*	Leaf, flower	Medium	++	7
57		Botrytis blight	*Bitrytis cinerea*	Leaf	Medium	++	7
58		Stemphyllium blight	*Stemphyllium* sp.	Leaf	High	++	7
59		Leaf spot/ blight	*Pestalotia* sp.	Leaf	Medium	++	6
60		Alternaria leaf spot	*Alternaria alternata*	Leaf	High	++	6
	Champa	**Fungi**					
61	*(Michelia champaca)*	Seed rot	*Fusarium* sp.	Seed	Medium	++	14
62		Seed rot	*Mucor* sp.	Seed	Medium	++	14
63		Seed rot	*Penicillium* sp.	Seed	Low	++	14
64		Seed rot	*Pestalotia* sp.	Seed	Medium	++	14
		Parasitic plants					
65			*Macrosolen cochinchinensis*	Branch, stem	Low	++	14

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
66			*Scurrula gracilifolia*	Branch, stem	Medium	++	14
	Orange jasmine	**Parasitic plants**					
67	*(Murraya paniculata)*		*Scurrula pulverulenta*	Branch, stem	Medium	++	14
	Sephali	**Parasitic plants**					
68	*(Nyctanthes arbor-tristis)*		*Dendrophthoe pentandra*	Branch, stem	Medium	++	14

3.10.1 Reference

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3.11 Recording Diseases of Forest trees

Earlier records indicated that altogether 920 diseases occurred on 239 plant species along with 62 unidentified logs. Plant species included both standing plants and seedlings in the nursery. Most of the diseases (818) were caused by 395 species of fungal pathogens representing 150 genera (Table-24). About more than 90% works were reported from Bangladesh Forest Research Institute, Chittagong. Only three diseases were found to cause by three species of bacteria under a single genus, *Pseudomonas*. Eight species of parasitic plants reffered to as mistletoe represented four genera was involved with 99 cases. Among the species of mistletoe the most dominant one was *Macrosolen cochinchinensis* followed by *Scurulla parasitica*. Wood decaying fungi were found to cause damage to both the standing tree as well as plant product such as logs. There were as high as 62 different unidentified logs found to damage by different fungal species. Wood was found to be the preffered site of infection by different wood decaying fungi. Other plant parts include leaf, seed, root etc.

Table 24. Diseases of Forest trees

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
	Acacia	**Fungi**					
1	*(Acacea* sp.)	White rot	*Lenzites repanda*	Wood	Medium	++	19
	Australian acacea *(Acacea*	**Fungi**					
2	*auriculiformis)*	Leaf rust	*Uromyces* sp.	Leaf	Low	++	19
3		Leaf spot	*Glumerella cingulata*	Leaf	Low	++	19
	Cutch tree						
4	*(Acacea catechu)*	White spongy rot	*Fomes badius*	Wood	Medium	++	19
5		White pocket rot	*F. fastuosus*	Wood	Low	++	19
6		White stringy rot	*F. lividus*	Wood	Low	++	19
7		Yellow spongy rot	*F. rimosus*	Wood	Low	++	19
8		Brown cuboidal rot	*Lenzites striata*	Wood	Medium	++	19
	Mangium	**Fungi**					
9	*(Acacea mangium*)	Heart rot	*Fomes* sp	Heart wood,	High	++	19
10		Powdery mildew	*Oidium* sp.	Top shoot, leaf, stem	Medium	++	3
	Babul	**Fungi**					
11	*(Acacea nilotica*)	White spongy rot	*Fomes badius*	Wood	Medium	++	19
12		Root rot	*Ganoderma lucidum*	Root	Medium	++	19
	Indian Ash	**Fungi**					
13	*(Acrocarpus fraxinifolius)*	White spongy rot	*Ganoderma lucidum*	Wood	High	++	19
14		White spongy rot	*Trametes betulina*	Wood	Medium	++	19
	Paowlay	**Mistletoe**					
15	*(Acronychia pedunculata*)		*Scurrula parasitica*	Trunk, branch	Low	++	19
	Bangnola	**Mistletoe**					
16	*(Actinodaphne angustifolia*)		*Scurrula parasitica*	Trunk, branch	Low	++	19
	Haldu	**Fungi**					
17	*(Adina cordifolia)*	White spongy rot	*Fomes badius*	Wood	Medium	++	18

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
	Boilam	**Fungi**					
18	(*Anisoptera scaphula)*	White rot	*Polyporus* sp.	Wood	Medium	++	18
19		Damping off	*Fusarium* sp.	Seedling	Low	++	19
20		Wood decay	*Polyporus* sp.	Wood	Medium	++	19
	Koroi species	**Fungi**					
21	*(Albizia* sp.)	Die-back	*Pestalotiopsis versicolor*	Branch, twig	Medium	++	
22		White rot	*Fomes* sp	Wood	Low	++	18
23		White spongy rot	*Schizophyllum commune*	Wood	Low	++	18
24		White rot	*Trametes* sp.	Wood	Medium	++	18
	Silk tree	**Fungi**					
25	*(Albizia chinensis*)	White spongy rot	*Irpex flavus*	Wood	Low	++	18
26		White spongy rot	*Polyporus hirsutus*	Wood	High	++	18
27		White spongy rot	*Polystictus hirsutus*	Wood	Medium	++	18
	Moluccan albizia	**Fungus**					
28	(*Albizia falcataria*)	Twig canker	*Pestalotiopsis versicolor*	Twig	Medium	++	19
		Mistletoe					
29			*Scurrula gracilifolia*	Trunk, branch	Low	++	19
30			*Scurrula parasitica*	Trunk, branch	Medium	++	19
	Black siris	**Fungi**					
31	*(Albizia lebbeck)*	Fruit rot	*Ravenelia sessilis*	Fruit	Low	++	19
32		Leaf rust	*Ravenelia sessilis*	Leaf	Low	++	19
33			*Daedalea stereoides*	Wood	Medium	++	19
		Mistletoe					
34			*Scurrula gracilifolia*	Trunk, branch	Low	++	19
	Black siris	**Fungi**					
35	*(Albizia odoratissima)*	Leaf spot	*Endodothella albizziae*	Leaf	Low	++	19
	White siris	**Fungi**					
36	*(Albizia procera)*	Seed rot	*Alternaria* sp	Seed	Low	++	19
37			*Aspergillus* sp	Seed	Low	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
38			*Aspergillus flavus*	Seed	Low	++	19
39			*A. glaucas*	Seed	Low	++	19
40			*A. niger*	Seed	Medium	++	19
41			*A. ochraceous*	Seed	Medium	++	19
42			*Curvularia* sp.	Seed	Low	++	19
43			*Fusarium* sp.	Seed	Low	++	19
44			*Macrophomina* sp.	Seed	Medium	++	19
45			*Penicillium* sp.	Seed	Low	++	19
46			*Rhizopus* sp.	Seed	Low	++	19
47		White rot	*Lenzites repanda*	Wood	Medium	++	19
	Raintree	**Fungi**					
48	*(Albizia saman)*	Die-back	*Colletotrichum gloeosporioides, Botryodiplodia theobromae, Chaetomella raphigera*	Leaf, bud, stem, branch, twig	Medium	++	8
49		Wilt	*Verticillium* sp., *Fusarium* sp.	Root, plant base	Medium	++	7
	Nepalese alder	**Fungus**					
50	(*Alnus nepalensis)*	Wood decay	*Polyporus caparatus*	Wood	Medium	++	19
	Devil's tree	**Fungi**					
51	*(Alstonia scholaris)*	White rot	*Pleurotus* sp.	Wood	Low	++	18
	Ichhri	**Mistletoe**					
52	*(Anogeissus acuminate)*		*Viscum orientale*	Trunk, branch	Low	++	19
	Dhaura	**Fungi**					
53	*(A. latifolia)*	Yellow pocket rot	*Fomes durissimus*	Wood	High	++	19
	Kadam	**Fungi**					
54	(*Anthocephalus chinensis*)	White rot	*Pleurotus squarrosulsus*	Wood	Medium	++	18
55		White rot	*Pleurotus* sp.	Wood	Medium	++	18
56		White sap rot	*Polystictus licnoides*	Wood	High	++	18
57		White rot	*Trametes* sp.	Wood	Low	++	18

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
		Mistletoe					
58			*Viscum monoicum*	Trunk, branch	Medium	++	19
	Pitraj (*Aphanamixis polystachya*)	**Fungi**					
59			*Fomes* sp.	Wood	Medium	++	19
60			*Fomes geotropus*	Wood	High	++	19
		Mistletoe					
61			*Dendrophthoe falcata*	Trunk, branch	Medium	++	19
	Eaglewood *(Aquilaria agallocha)*	**Fungi**					
62		Fungi associated with agaru deposits	*Aspergillus caesillus*		Low	++	19
63			*A. chevalieri*		Low	++	19
64			*A. flavus*		Low	++	19
65			*A. restrictus*		Medium	++	19
66			*A. rubber*		Low	++	19
67			*A. sejunctus*		Low	++	19
68			*A. tamari*		Low	++	19
69			*Botryodiplodia theobromae*		Medium	++	19
70			*Cunninghamella echinulata*		Low	++	19
71			*Fusarium solani*		Low	++	19
72			*Penicillium citrinum*		Low	++	19
73			*Phialophora parasitica*		Low	++	19
74			*Trichoderma viridae*		Low	++	19
75			*Phomopsis aquillariae*		Medium	++	19
	Agarwood *(Aquilaria malaccensis)*	**Fungi**					
76		Root rot of seedling	*Fusarium solani, Rhizoctonia solani, Fusarium oxysporum, Pythium spp., Pseudomonas solanacearum*	Root	High	+++	3
	Hoop pine *(Araucaria cunninghamii)*	**Fungi**					
77		Damping off	*Fusarium* sp.	Seedling	Medium	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
78			*Rhizoctonia* sp.	Seedling	Medium	++	19
	Chaplaish	**Fungi**					
79	*(Artocarpus chaplasha)*	White mottles rot	*Daldinia concentrica*	Wood	High	++	18
80		White fibrous rot	*Hexagonia tenuis*	Wood	Medium	++	18
81		Brown mottled rot	*Pholiota adiposa*	Wood	Medium	++	18
82		Brown mottled rot	*Pholiota muricata*	Wood	Low	++	18
83		Heart rot	*Pholiota* sp.	Wood	Low	++	18
84		White spongy rot	*Polyporus hirsutus*	Wood	High	++	18
85		White spongy rot	*Polyporus xanthopus*	Wood	High	+++	18
86		White rot with black zone lines	*Poria* sp.	Wood	Medium	++	18
87		White rot	*Stereum cf. papyrinum*	Wood	Low	++	18
88		White mottled rot	*Trametes suaveolens*	Wood	Medium	++	18
		Mistletoe					
89			*Macrosolen cochinchinensis*	Trunk, branch	Low	++	19
90			*Scurrula parasitica*	Trunk, branch	Low	++	19
	Monkey jack	**Fungi**					
91	*(Artocarpus lacucha)*	Leaf spot	*Pestalotia* sp.	Leaf	Low	++	19
	Neem	**Fungi**					
92	*(Azadirachta indica)*	Leaf spot	*Cercospora subsessilis*	Leaf	Medium	++	3
	Bamboo	**Fungi**					
93	*(Bambusa* sp.)	White spongy rot	*Irpex flavus*	Wood	Medium	++	18
94		White rot	*Irpex lacteus*	Wood	Medium	++	18
95		Blight	*Acremonium strictum*	Leaf	Low	++	19
96		Blight	*Sarocladium oryzae*	sheath	High	++	19
97		Associated with blight	*Coniothyrium fuckelli*	Sheath	Low	++	19
98			*Acremonium terricola*	Sheath	Medium	++	19
99			*Apiospora camptospora*	Sheath	Medium	++	19
100			*Arthrinium piospora*	Sheath	Medium	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
101			*Ascochyta bambusina*	Sheath	Low	++	19
102			*Chaetomium globosum*	Sheath	Low	++	19
103			*Fusarium diversisporum*	Sheath	Low	++	19
104			*Gongronella butlleri*	Sheath	Medium	++	19
105			*Haplobasidium lelebae*	Sheath	Low	++	19
106			*Periconia* sp.	Sheath	Low	++	19
107			*Pestalozziella* sp.	Sheath	Low	++	19
108			*Phialophora richardsiae*	Sheath	Medium	++	19
109			*Phoma* sp.	Sheath	Low	++	19
110			*P. beveillei*	Sheath	Medium	++	19
111			*P. sorghina*	Sheath	Medium	++	19
112			*Phomopsis* sp.	Sheath	Low	++	19
113			*Pteroconium* sp.	Sheath	Low	++	19
114			*Pyrenochaeta terrestris*	Sheath	Low	++	19
115			*Pyricularia* sp.	Sheath	Low	++	19
116			*Ramichloridium* sp.	Sheath	Low	++	19
117			*Rhizoctonia lamellifera*	Sheath	Low	++	19
118			*Scedosporium* sp.	Sheath	Low	++	19
119			*Stachybotrys bisbi*	Sheath	Low	++	19
120			*Verticillium psalliotae*	Sheath	Low	++	19
121		Culm disease	*Fusarium* sp.	Culm	Low	++	19
122			*Hypoxylon rubiginosum*	Culm	Medium	++	19
123		Unclassified leaf diseases	*Cytospora bambusae*	Leaf	Low	++	19
124			*Phylachora bambusae*	Leaf	Low	++	19
125		Root disease	*Polyporus anthelminticus*	Root	Low	++	19
126		Leaf disease	*Isaria* sp.	Leaf	Medium	++	19
127		On decaying leaf	*Marasmius ferrugineus*	Leaf	Low	++	19
128		Withering of branches	*Konradia bambusina*	Branch	Medium	++	19
129		Wood decay	*Clitocybe* sp.	Wood	Low	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
130			*Daedalea* sp.	Wood	High	++	19
131			*Flammula penetrans*	Wood	Low	++	19
132			*Fomes lividus*	Wood	Low	++	19
133			*Fomes pactinatus*	Wood	Low	++	19
134			*Hexagonia rubiginosum*	Wood	Low	++	19
135			*Irpex flavus*	Wood	Low	++	19
136			*Irpex lacteus*	Wood	High	++	19
137			*Lentinus* sp.	Wood	Low	++	19
138			*Lentinus cochleatus*	Wood	Low	++	19
139			*Lenzites adusta*	Wood	Low	++	19
140			*Marasmius* sp.	Wood	Low	++	19
141			*Marasmius ferrugineus*	Wood	Low	++	19
142			*Panus* sp.	Wood	Low	++	19
143			*Polyporus anthelminticus*	Wood	High	++	19
144			*P. durus*	Wood	High	++	19
145			*P. friabilis*	Wood	Medium	++	19
146			*P. zonalis*	Wood	High	++	19
147			*Polystictus sanguineus*	Wood	High	++	19
148			*P. steinheilianus*	Wood	Medium	++	19
149			*Poria diversispora*	Wood	Low	++	19
150			*Schizophyllum* sp.	Wood	Low	++	19
151			*S. commune*	Wood	Low	++	19
152			*Stereum petaloides*	Wood	Low	++	19
153			*Tametes cingulata*	Wood	Medium	++	19
154			*Tametes devexa*	Wood	Medium	++	19
	Thorny bamboo	**Fungi**					
155	*(Bambusa arundinacea)*	Wood decay	*Ganoderma applanatum*	Wood	Medium	++	19
156			*Guepinia spathularia*	Wood	Medium	++	19
157			*Irpex flavus*	Wood	Medium	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
158			*Polyporus zonalis*	Wood	Medium	++	19
159			*Schizophyllum alneum*	Wood	Low	++	19
160			*Schizophyllum commune*	Wood	Low	++	19
161			*Thelephora palmata*	Wood	Low	++	19
	Bora Bamboo (*Bambusa balcooa*)	**Fungi**					
162		Blight	*Acremonium strictum*	Leaf	Low	++	19
163		Associated with blight	*Coniothyrium fuckelii*	Leaf	Low	++	19
164			*Fusarium equiseti*	Leaf	Low	++	19
165			*Fusarium moniliforme*	Leaf	Low	++	19
166			*Melanospora* sp.	Leaf	Low	++	19
167			*Penicillium spiculisporum*	Leaf	Low	++	19
168			*Pteroconium* sp.	Leaf	Low	++	19
169			*Stachybotrys bisbi*	Leaf	Low	++	19
	Talla Bamboo (*Bambusa tulda*)	**Fungus**					
170		Wood decay	*Hypoxylon rubiginosum*	Wood	Medium	++	19
	Golden bamboo *(Bambusa vulgaris)*	**Fungi**					
171		Blight	*Acremonium strictum*	Leaf	Low	++	19
172		Culm disease	*Coniothyrium fuckelii*	Culm	Low	++	19
173		White rot	*Irpex* sp.	Wood	Medium		18
174		White rot with black zone lines	*Poria* sp.	Wood	Low	++	18
	Indian oak (*Barringtonia acutangula)*	**Fungi**					
175		Leaf spot	*Pestalotia paraguariensis*	Leaf	Medium	++	19
176		Unclassified leaf disease	*Meliola indica*	Leaf	Low	++	19
		Mistletoe					
177			*Viscum monoicum*	Trunk, branch	Low	++	19
	Mahua (*Bassia latifolia*)	**Fungi**					
178		Leaf spot of seedling	*Pestalotia paraguariensis*	Leaf	Medium		19
179		Unclassified leaf disease	*Uromyces echinulatus*	Leaf	Medium	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
	Ebony	**Fungus**					
180	(*Bauhinia* sp.)	Leaf spot	*Phylosticta* sp.	Leaf	Low	++	19
	Mountain ebony						
	(Bauhini purpurea)	**Mistletoe**					
181			*Scurrula pulverulenta*	Trunk, branch	Low	++	19
	Chungri	**Fungi**					
182	(*Beilschmiedia pseudomicrocarpus)*	White mottled rot	*Stereum cf.gausapatum*	Wood	Low	++	18
	Salkachra	**Mistletoe**					
183	(*Bhesa robusta*)		*Viscum monoicum*	Trunk, branch	Low	++	19
	Red silk cotton	**Fungi**					
184	(*Bombax ceiba)*	Damping off	*Fusarium oxysporum*	Seedling	Medium	++	19
185			*Macrophomina phaseolina*	Seedling	Medium	++	19
186			*Rhizoctonia solani*	Seedling	Medium	++	19
187		Leaf blight	*Glomerella cingulata*	Leaf	Medium	++	19
188			*Robillarda sessilis*	Leaf	Medium	++	19
189		Leaf spot	*Colletotrichum capsici*	Leaf	Medium	++	19
190			*Thanatephorus cucumeris*	Leaf	Medium	++	19
191			*Colletotrichum capsici*	Leaf, twig	Medium	++	19
192		Seed rot	*Alternaria tenuis*	Seed	Medium	++	19
193			*Aspergillus flavus*	Seed	Medium	++	19
194			*A. glaucas*	Seed	Medium	++	19
195			*A. niger*	Seed	Medium	++	19
196			*A. ochraceus*	Seed	Medium	++	19
197			*Curvularia lunata*	Seed	Medium	++	19
198			*Rhizopus sp.*	Seed	Medium	++	19
199			*Penicillium* sp.	Seed	Medium	++	19
200		Wood decay	*Trametes personii*	Wood	Medium	++	19
201		White rot with black zone lines	*Poria* sp.	Wood	Medium	++	18

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
		Mistletoe					
202			*Scurrula gracilifolia*	Trunk, branch	Medium	++	19
203			*Scurrula parasitica*	Trunk, branch	Medium	++	19
204			*S. pulverulenta*	Trunk, branch	Medium	++	19
205			*Viscum monoicum*	Trunk, branch	Medium	++	19
	Mindri	**Fungus**					
206	(*Bridelia tomentosa*)	Unclassified leaf spot	*Schroeteriaster cingens*	Leaf	Low	++	19
	Masjot	**Mistletoe**					
207	(*Brownlowia elata*)		*Macrosolen cochinchinensis*	Trunk, branch	Low	++	19
	Upriver orange mangrove	**Mistletoe**					
208	(*Bruguiera sexangula*)		*Scurrula parasitica*	Trunk, branch	Low	++	19
	Bastard Teak	**Fungi**					
209	(*Butea monosperma*)	Unclassified leaf disease	*Pestalotia* sp.	Leaf	Low	++	19
210			*Phyllosticta* sp.	Leaf	Medium	++	19
	Gutjuttya	**Fungus**					
211	(*Bursera serrata*)	White rot	*Polyporus* sp.	Wood	Medium	++	18
	Cane	**Fungus**					
212	(*Calamus* sp.)	Unclassified leaf disease	*Diplodia calami*	lEAF	Low	++	19
	Sundri Cane	**Fungi**					
213	*(Calamus guruba)*	Leaf blight	*Guignardia calami*	Leaf	Medium	++	3
214		Leaf spot	*Corynespora cassiicola*	Leaf	Low	++	7
	Chachi cane						
215	(*Calamus tenuis*)	Unclassified leaf disease	*Melanops calami*	Leaf	Low	++	19
	Alexandrial laurel						
216	(*Callophyllum inophyllum*)	Leaf blight	*Pestalotia* sp.	Leaf	Low	++	19
217		Brown rot	*Fomes dochmius*	Wood	Low	++	19
	Kamdeb						
218	(*Callophyllum polyanthum*)	Seed rot	*Mycelia sterilia*	Seed	Low	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
	Dhup (*Canarium resiniferum*)	**Fungi**					
219		White fibrous rot	*Hexagonia* sp.	Wood	Medium	++	18
220		White stringy rot	*Lentinus praerigidus*	Wood	Medium	++	18
221		White mottled rot	*Trametes versiformis*	Wood	Medium	++	18
	Roskao (*Carallia brachiata*)	**Mistletoe**					
222			*Dendrophthoe falcata*		Medium	++	19
	Wild guava (*Careya arborea*)	**Fungi**					
223		Leaf blight of seedling	*Coniella diplodiella*	Leaf	Low	++	19
224		Wood decay	*Pleuroyus squarrosulus*		Medium	++	19
	Karanda (*Carissa carandus*)	**Fungus**					
225		Unclassified leaf disease	*Stigmina* sp.		Low	++	19
	Karanda species (*Cassia* sp.)	**Fungus**					
226		Unclassified leaf disease	*Cercospora* sp.	Leaf	Low	++	19
	Indian laburnum (*Cassia fistula)*	**Fungi**					
227		Unclassified leaf disease	*Stagonospora* sp.	Leaf	Low	++	19
228		White rot	*Fomes* sp	Wood	Low	++	18
229		White fibrous rot	*Polystictus affinis*	Wood	Medium	++	18
230		White rot with black zone lines	*Poria* sp.	Wood	Low	++	18
	Apple cassia (*Cassia javanica)*	**Fungus**					
231		White rot	*Fomes senex*	Wood	Medium	++	19
	Pink cassia *(Cassia nodosa)*	**Fungus**					
232		Top dying	*Colletotrichum gloeosporioides*	Seedling tip	Low	++	8
		Mistletoe					
233			*Dendrophthoe pentandra*	Trunk, branch	Low	++	19
	Cassia (*Cassia siamea*)	**Fungi**					
234		White rot	*Fomes* sp	Wood	Medium	++	18

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
	Batna	**Fungus**					
235	(*Castanopsis tribuloides*)	White spongy rot	*Ganoderma lucidum*	Wood	Medium	++	18
	Kapok	**Mistletoe**					
236	*(Ceiba pentandra)*		*Dendrophthoe pentandra*	Trunk, branch	Medium	++	19
	Goran	**Fungi**					
237	(*Ceriops decandra*)	White spongy rot	*Hymenochaete* sp.	Wood	Low	++	18
238			*Fomes* sp.	Wood	Low	++	19
239		White spongy rot	*Polyporus ochroleucus*	Wood	Medium	++	19
	Garan	**Fungus**					
240	*(Ceriops roxburghiana)*	Top dying	*Colletotrichum gloeosporioides*	Seedling tip	Medium	++	8
	Bulkokra	**Mistletoe**					
241	(*Chaetocarpus castanocarpus*)		*Scurrula parasitica*	Trunk, branch	Low	++	19
	Chittagong wood	**Fungus**					
242	(*Chickrasia tabularis*)	White rot	*Fomes senex*	Wood	Medium	++	19
	Bhaint	**Fungi**					
243	(*Clerodenron infortunatum*)	Unclassified leaf disease	*Meliola clerodendricola*	Leaf	Medium	++	19
244			*Synchytrium collapsum*	Leaf	Medium	++	19
	Barum	**Fungi**					
245	(*Crataeva religiosa*)	White spongy rot	*Polyporus xanthopus*	Wood	Medium	++	18
246		White rot	*Polyporus* sp.	Wood	Medium	++	18
247		Unclassified leaf disease	*Aecidium crataevae*	Leaf	Medium	++	19
	Sissoo	**Fungi**					
248	*(Dalbergia sissoo)*	Mortality	*Fusarium solani*	Root and feeder root	High	+++	5
249		Anthracnose	*Colletotrichum gloeosporioides*	Leaf, pod	Medium	++	14
250		Powdery mildew	*Ovulariopsis sissoo*	Leaf	Medium	++	14
251		Angular leaf spot	*Gibberella* sp.	Leaf	Medium	++	14

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
252		Leaf spot	*Mycospharella dalbergiae*	Leaf	Medium	++	16
253		Leaf spot	*Pseudocercospora dalbergiae*	Leaf	Medium	++	14
254		Leaf blight	*Halara* sp., *Cylindrocladium* sp., *Fusarium solani, Lasiodiplodia theobromae, Memnoniella* sp., *Tetrapola* sp.	Leaf	Low	++	14
255		Rust	*Urediospor*	Leaf	Low	++	14
256		Leaf rust	*Maravalia pterocarpi*	Leaf	Low	++	19
257		Wilt	*Fusarium solani*	Root, base of plant	Low	++	19
258		Unclassified leaf disease	*Phyllachora dalbergiae*	Leaf	Medium	++	19
259		Root rot	*Fusarium oxysporum*	Root	Medium	++	16
260		Damping off	*Pythium* spp., Fusarium spp., Phytophthora spp., Rhizoctonia solani	Seedling base	Medium	++	11
261		Mortality under flooded situation	*Fusarium solani f. dalbergiae*	Root	Medium	++	6
262		Die-back	*Colletotrichum gloeosporioides, Botryodiplodia theobromae, Chaetomella raphigera*	Leaf, bud, stem, branch, twig	Medium	++	8
263		White rot	*Daedalea flavida*	Wood	High	++	8
264		White rot	*Ganoderma lucidum*	Wood	Medium	++	8
265		White rot	*Ganoderma applanatum*	Wood	Medium	++	19
266		White rot	*Irpex flavus*	Wood	Medium	++	19
267		**Bacteria**					
		Die-back	*Pseudomonas* sp.	Branch	Low	++	1
268		**Mistletoe**					
			Dendrophthoe pentandra	Trunk, branch	Low	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
269			*Macrosolen cochinchinensis*	Trunk, branch	Low	++	19
	Karanja						
270	(*Derris indica*)	Unclassified leaf disease	*Phyllosticta pongamae*	Leaf	Low	++	19
271		Scab	*Fusicladium pongamae*	Leaf	Low	++	19
	Miringa	**Mistletoe**					
272	(*Derris robusta*)		*Dendrophthoe falcata*	Trunk, branch	Low	++	19
273			*Viscum monoicum*	Trunk, branch	Low	++	19
	Katillupei						
274	(*Dichopsis elliptyica*)		*Ganoderma applanatum*	Wood	Low	++	19
	Royal poinciana	**Fungi**					
275	(*Delonix regia*)	White rot	*Fomes* sp	Wood	Low	++	18
	Elephant apple	**Fungi**					
276	*(Dillenia indica)*	White spongy rot	*Polyporus xanthopus*	Wood	Low	++	18
277		White spongy rot	*Polystictus xanthopus*	Wood	Low	++	18
		Mistletoe					
278			*Scurrula pulverulenta*	Trunk, branch	Low	++	19
	Hargaza	**Fungi**					
279	(*Dillenia pentagyna*)	White spongy rot	*Fomes ostreiformis*	Wood	Low	++	18
280		White stump rot	*Polyporus grammocephalus*	Wood	Low	++	18
	Gab	**Mistletoe**					
281	*(Diospyros melanoxylon)*		*Macrosolen cochinchinensis*	Trunk, branch	Low	++	19
292			*Viscum monoicum*	Trunk, branch	Low	++	19
	Garjan species	**Fungi**					
283	(*Dipterocarpus* sp.)	White spongy rot	*Daedalea confragosa*	Wood	Medium	++	19
284		White rot	*D. flavida*	Wood	Low	++	19
285			*Fomes albomarginatus*	Wood	Low	++	19
286			*Polyporus snaguineus*	Wood	Medium	++	19
287		White spongy rot	*Fomes sublinteus*	Wood	Low	++	18
288		Streaked with black	*Daldinia concentrica*	Wood	Low	++	18

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
289		White rot	*Fomes* sp	Wood	Low	++	18
290		Brown rot	*Fomitopsis dochmius*	Wood	Low	++	18
291		White rot	*Ganoderma* sp.	Wood	Medium	++	18
292		White fibrous rot	*Hexagonia* sp.	Wood	Low	++	18
293		White rot	*Irpex* sp.	Wood	Low	++	18
284		White spongy rot	*Polyporus anebus*	Wood	Medium	++	18
295		White spongy rot	*Polyporus auricularis*	Wood	Medium	++	18
296		White stump rot	*Polyporus grammocephalus*	Wood	Medium	++	18
297		White spongy rot	*Polyporus xanthopus*	Wood	Medium	++	18
298		White rot	*Polyporus* sp.	Wood	Medium	++	18
299		White spongy rot	*Polystictus sanguineus*	Wood	Medium	++	18
300		White rot	*Schizophyllum* sp.	Wood	Low	++	18
301		White spongy rot	*Trametes corrugata*	Wood	Low	++	18
302		White spongy rot	*Trametes lactinea*	Wood	Low	++	18
303		White rot	*Trametes* sp.	Wood	Medium	++	18
	Shil garjan *(Dipterocarpus pilosus)*						
304		White rot	*Ganoderma applanatum*	Wood	Medium	++	19
305		White spongy rot	*G. leucopheus*	Wood	Medium	++	19
306		White pocket rot	*Polyporus versatalis*	Wood	Medium	++	19
	Wood oil tree (*Dipterocarpus turbinatus)*	**Fungi**					
307		Wilt/damping off	*Fusarium* sp., *Pythium* spp., *Phytophthora* spp., *Rhizoctonia solani*	Seedling base	High	+++	3
308		Leaf necrosis	*Colletotrichum gloeosporioides*	Leaf	Low	++	3
309		Top dying	*Colletotrichum gloeosporioides*	Seedling tip	Medium	++	8
310		White spongy rot	*Daedalea confragosa*	Wood	Low	++	8
311		White rot	*Fomes albomarginatus*	Wood	Low	++	8
312		White pocket rot	*Polyporus versatalis*	Wood	Medium	++	8

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
313		White mottled rot	*Fomes applanatus*	Wood	Medium	++	18
314		White mottled rot	*Ganoderma applanatum*	Wood	Medium	++	18
315		White rot	*Polyporus* sp.	Wood	Medium	++	18
316		White spongy rot	*Polystictus xanthopus*	Wood	Low	++	18
317		White rot	*Trametes* sp.	Wood	Low	++	18
318			*Daedalea cf. hobsoni*	Wood	Medium	++	19
319		**Mistletoe**					
320			*Macrosolen cochinchinensis*	Trunk, branch	Low	++	19
	Banderhola (*Duabanga grandiflora*)	**Fungi**					
321		White rot	*Polyporus* sp.	Wood			18
322		White spongy rot	*Daedalea* sp.	Wood			18
	Pitraj (*Dysoxylum binectariferum*)	**Fungi**					
324		White rot	*Polyporus* sp.	Wood			18
	Heliotrope tree (*Ehretia acuminate*)						
325		Unclassified leaf disease	*Schroeteriaster ehretiae*	Leaf	Low	++	19
	African oil palm *(Elaeis guineensis)*	**Fungi**					
326		Anthracnose	*Glomerella cingulata*	Leaf			19
327		Seedling leaf blight	*Curvularia erarostidis*	Seedling	Low	++	19
328			*Colletotrichum* sp.	Seedling	Low	++	19
329		Seed rot	*Mucor* sp.	Seed	Low	++	19
330		Sheath rot	*Glomerella cingulata*	Sheath			19
	Olive group (*Elaeocarpus* sp.)	**Fungi**					
331		White fibrous rot	*Hexagonia tenuis*	Wood			18
332		White rot	*Polyporus* sp.	Wood			18
333		White rot	*Poria tenuis*	Wood			18
334		White pocket rot	*Fommes albomarginatus*	Wood			19
	Olive tree *(Elaeocarpus rugosus*)	**Mistletoe**					
335			*Macrosolen cochinchinensis*	Trunk, branch			19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
	Belfoi (*Elaeocarpus varunna*)	**Mistletoe**					
336			*Dendrophthoe falcata*	Trunk, branch			19
337			*Macrosolen cochinchinensis*	Trunk, branch			19
338			*Viscum monoicum*	Trunk, branch			19
	Jhumka bhadi (*Engelhardtia spicata*)	**Fungi**					
339		White fibrous rot	*Polystictus affinis*	Wood			18
	Bean type (*Erythrina* sp.)						
340		Unclassified leaf disease	*Uredo erythrinae*	Leaf			19
	Variegated coral bean *(Erythrina variegate)*						
			Agaricus sp.	Wood			19
341		White rot	*Polyporus anibus*	Wood			19
	Indian Coral Tree *(Erythrina indica)*						
342		**Fungi**					
343		White rot	*Agaricus* sp.	Wood			18
	Red gum tree *(Eucalyptus camaldulensis)*	**Fungi**					
344		Top dying of seedling	*Shizophyllum commune*	shoot	Medium	++	3
345		Leaf spot and twig blight	*Colletotrichum gloeosporioides*	Leaf, twig	Medium	++	15
346		Damping off	*Fusarium* sp.	Seedling	Medium	++	19
347			*Pythium* sp.	Seedling	High	++	19
348			*Rhizoctonia solani*	Seedling	Medium	++	19
349		Leaf & twig blight	*Colletotrichum gloeosporioides*	Leaf, twig	Low	++	19
350		Pink disease	*Corticium salmonicolor*	Stem	Low	++	19
351		Powdery mildew	*Oidium eucalypti*	Top shoot, Leaf and stem	Medium	++	19
352		Seedling wilt	*Fusarium solani*	Seedling base	Low	++	19
	Lemon scented gum tree *(Eucalyptus citrodora)*	**Fungi**					
353		Seed rot	*Aspergillus flavus*	Seed	Low	++	19
354			*A. glaucas*	Seed	Low	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
355			*A. niger*	Seed	Low	++	19
356			*A. ochraceous*	Seed	Low	++	19
357			*Curvularia* sp.	Seed	Low	++	19
358			*Macrophomina* sp.	Seed	Low	++	19
359			*Penicillium* sp.	Seed	Low	++	19
	Rose gum tree	**Fungi**					
360	(*Eucalyptus grandis*)	Seedling leaf spot	*Curvularia lunata*	Leaf	Low	++	19
361		Root rot	*Acremonium strictum*	Root	Low	++	19
	Forest red gum	**Mistletoe**					
362	*(Eucalyptus tereticornis)*		*Macrosolen cochinchinensis*	Trunk, branch			19
	Chagoler bori	**MIstletoe**					
363	(*Eurya acuminate*)		*Scurrula parasitica*	Trunk, branch			19
	Bliding tree	**Fungi**					
364	*(Excoecaria agallocha)*	Root rot and Die-back	*Hexagonia tenuis*	Stem, branch	Medium	++	19
365		White rot	*Daedalea flavida*	Wood	Medium	++	8
366		White rot	*D. cf hobsoni*	Wood	Medium	++	19
367		White rot	*D. cf quercina*	Wood	Medium	++	18
368		Brown cubical rot	*Daedalea quercina, Hexagonia tenuis*	Wood	Medium	++	8
369		White rot	*Hypoxylon hypomiltum*	Wood	Low	++	19
370		White stringy rot	*Lenzitespalisoti*	Wood	Low	++	19
371		White rot	*Polyporus thawaitesii*	Wood	Medium	++	19
372		White rot	*Polyporus sanguineus*	Wood	Medium	++	19
373		White spongy rot	*Polyporus xanthopus*	Wood	Medium	++	19
374		White pocket rot	*Polyporus zonalis*	Wood	Medium	++	19
375		White fibrous rot	*Polystictus hirsutus*	Wood	Medium	++	19
376		White spongy rot	*Polystictus leoninus*	Wood	Medium	++	19
377		White rot	*Trametes lactinea*	Wood	Low	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
	Dumur species (*Ficus* sp.)	**Fungi**					
378		Unclassified leaf disease	*Phyllachora catervaria*	Leaf	Low	++	19
379			*P. fimbristylicola*	Leaf	Low	++	19
380		Wood decay	*Fomes* sp.	Wood	Medium	++	19
381			*Irpex* sp	Wood	Medium	++	19
382			*Lenzites adusta*	Wood	Low	++	19
383			*Polyporus* sp.	Wood			19
384			*Trametes* sp.	Wood	Low	++	19
385			*T. floccosus*	Wood	Low	++	19
386			*T. meyani*	Wood	Low	++	19
	Banyan tree *(Ficus bengalensis)*	**Fungi**					
387		Leaf spot	*Cephaleuros mycoidea*	Leaf	Medium	++	20
388		White rot	*Agaricus* sp.	Wood	Medium	+	18
389		White spongy rot	*Daedalea* sp.	Wood	Medium	+	18
390		White rot	*Fomes* sp	Wood	Medium	+	18
391		White rot	*Polyporus* sp.	Wood	Medium	+	18
392			*Polyporus luzonensis*		Medium	+	19
393		White rot	*Trametes persoonii*		Medium	+	19
394		Root rot	*Polyporus zonalis*		Medium	+	19
		Mistletoe					
395			*Scurrula pulverulenta*	Trunk, branch	Medium	+	19
	Fig (Ficus carica*)*	**Fungi**					
396		Unclassified leaf disease	*Cerotilium fici*	Leaf	Medium	++	19
497		Blotchy white rot	*Daldinia eschscholzii*	Wood	Medium	++	19
	Fig *(Ficus dichotoma)*						
398		Unclassified leaf disease	*Phyllachora fimbristylicola*	Leaf	Low	+	19
	Ban dumar (*Ficus hirta*)	**Mistletoe**					
399			*Scurrula parasitica*	Trunk, branch	Medium	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
	Opposite leaf fig (*Ficus hispidia*)	**Fungi**					
400		Unclassified leaf disease	*Cercospora annulata*	Leaf	Low	++	19
401			*Phyllachora catervaria*	Leaf	Low	++	19
402			*Phytophthora* sp.	Leaf	Low	++	19
	Peepul tree (*Ficus religiosa)*	**Fungi**					
403		Epiphytic on leaf	*Catacauma infectorium*	Leaf	High	++	19
404		Unclassified leaf disease	*Catacauma infectorium*	Leaf	Medium	+	19
405			*Catacauma repens*	Leaf	Low	+	19
406		White rot	*Irpex flavus*	Wood	Medium	++	19
		Mistletoe					
407			*Scurrula pulverulenta*	Trunk, branch	Medium	++	19
	Smyrna fig (*Ficus roxburghii*)	**Fungi**					
408		White mottled rot	*Fomes applanatus*	Wood	Medium	++	18
409		White spongy rot	*Fomes senex*	Wood	Medium	++	18
410		White mottled rot	*Ganoderma applanatum*	Wood	Medium	++	18
	Governors plum (*Flacourtia indica)*	**Mistletoe**					
411			*Macrosolen cochinchinensis*	Trunk, branch	Medium	++	19
	Puneala plum (*F. jangomas)*	**Mistletoe**					
412			*Macrosolen cochinchinensis*	Trunk, branch	Medium	++	19
	Rukam (*F. sepiaria)*	**Mistletoe**					
413			*Scurrula parasitica*	Trunk, branch	Medium	++	19
	Tomal species (*Garcinia* sp.)	**Fungi**					
414		White stringy rot	*Lentinus praerigidus*	Wood	Medium	++	18
	Dephal (*Garcinia xanthochymus*)	**Fungi**					
415		Wood decay	*Poria* sp.	Wood	Medium	++	19
	Kanyari (*Gardenia coronaria*)	**Mistletoe**					
416			*Scurrula parasitica*	Trunk, branch	Medium	++	19
417			*Viscum monoicum*	Trunk, branch	Medium	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
	Jiga	**Fungi**					
418	(*Garuga pinnata*)	Yellow stringy rot	*Flammula alnicola*	Wood	Medium	++	18
	Kakra species	**Mistletoe**					
419	(*Glochidion* sp.)		*Macrosolen cochinchinensis*	Trunk, branch	Medium	++	19
	Kakra	**Mistletoe**					
420	(*G. lanceolarium*)		*Dendrophthoe pentandra*	Trunk, branch	Medium	++	19
	Panyaturi	**Mistletoe**					
421	(*G. multilocularae*)		*Scurrula parasitica*	Trunk, branch	Medium	++	19
	White teak	**Fungi**					
422	*(Gmelina arborea)*	Wilt/damping off	*Fusarium* sp., *Pythium* spp., *Phytophthora* spp., *Rhizoctonia solani*	Seedling base	High	+++	3
423		Root rot of seedling	*Fusarium solani, Rhizoctonia solani, Fusarium oxysporum, Pythium spp., Pseudomonas solanacearum*	Root	High	+++	3
424		Root rot	*Fusarium solani*	Root, foliage, shoot, leaf	High	+++	12
425		Root rot	*Poria rhozomorpha*				
426		Root rot	*Fusarium* sp., *Pseudomonas solanacearum*	Root	High	++	8
427		White spongy rot	*Trametes corrugata*	wood	Medium	++	18
428		White rot	*Pleurotus* sp.	Wood	Medium	++	18
429		White spongy rot	*Polyporus hirsutus*	Wood	Medium	++	18
430		White spongy rot	*Trametes lactinea*	Wood	Medium	++	18
431		White rot	*Trametes* sp.	Wood	Medium	++	18
432		Brown rot	*Fomes roseus*	Wood	Medium	++	19
433		White rot	*Polyporus xanthopus*	Wood	Medium	++	19
434		White rot	*Polystictus xanthopus*	Wood	Medium	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
435		Brown cuboidal rot	*Poria rhozomorpha*	Wood	Medium	++	19
		Mistletoe					
436			*Scurrula gracilifolia*	Trunk, branch	Medium	++	19
	Silky Oak	**Mistletoe**					
437	*(Grevillea robusta)*		*Dendrophthoe falcata*	Trunk, branch	Medium	++	19
		Fungi					
438		Sap rot	*Stereum petaloides*	Trunk, branch	Low	++	19
439			*Trametes cingulata*	Trunk, branch	Low	++	19
440			*T. persoonii*	Trunk, branch	Low	++	19
	Kathbimla species	**Mistletoe**					
441	*(Grewia* sp.)		*Macrosolen cochinchinensis*	Trunk, branch	Low	++	19
	Kathbimla	**Mistletoe**					
442	*(G. glabra)*		*Scurrula gracilifolia*	Trunk, branch	Medium	++	19
443			*Viscum monoicum*	Trunk, branch	Medium	++	19
	Dhamani	**Fungi**					
444	*(G. subinaequalis)*	White rot	*Polyporus gilvus*	Wood	Medium	++	19
	Olat	**Mistletoe**					
445	*(G. tilifolia)*		*Scurrula pulverulenta*	Trunk, branch	Low	++	19
	Sundri	**Fungi**					
446	*(Heriteria fomes)*	Gall canker	*Botryosphaera ribis*	Stem, branch	Medium	++	19
447		Sap and heart rot	*Fomes badius*	Heart wood	Medium	++	19
448		White spongy rot	*Fomes conchatus*	Wood	Medium	++	18
449		Top dying	*Botryosphaeria ribis*	Branch, twig	High	++	8
450		Dieback associate	*Phialophora bubakii*	Branch	Low	++	19
451		Horse hair blight	*Marasmius equicrinis*	Leaf	Low	++	19
452		Leaf blight	*Pestalotia* sp.	Leaf	Low	++	19
453			*Marasmiellus scandens*	Leaf	Low	++	19
454		Root rot associate	*Ganoderma lucidum*	Root	Low	++	19
455		Seedling root rot	*Acremonium strictum*	Root	Low	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
456		Twig gall canker	*Botryosphaeria ribis*	Stem, branch	Low	++	19
457		White delignifying decay of the sap wood	*Daedalea zonata*	Wood	Medium	++	19
458		White rot	*Fomes budius*	Wood	Medium	++	19
459		White spongy rot	*Fomes conchatus*	Wood	Medium	++	19
460		White rot	*Fomes rimosus*	Wood	Medium	++	19
461		White rot	*Hymenochaete cf. tabacina*	Wood	Medium	++	18
462		White spongy rot	*Hymenochaete cf. tabacina*	Wood	Medium	++	18
463		Canker	*Hypoxylon* sp.	Stem, branch	Low	++	18
464			*Polyporus luteo-umbrinus*	Stem, branch	Medium	++	
465		White rot with black zone lines	*Poria* sp.	Wood	Low	++	18
466		White spongy rot	*Schizophyllum commune*	Wood	Low	++	18
467		White rot	*Stereum hirsutum*				
468		White rot	*Trametes* sp.	Wood	Medium	++	18
		Bacteria					
469		Angular leaf spot	*Pseudomonas syringae*	Leaf	Medium	++	Ashaduzzaman KU
	Barela	**Fungi**					
470	*(Holigarna caustic)*	White spongy rot	*Ganoderma lucidum*	Wood	Medium	++	18
	Rubber	**Fungi**					
471	*(Hevea brasiliensis*)	Root rot of seedling	*Fusarium solani, Rhizoctonia solani, Fusarium oxysporum, Pythium spp., Pseudomonas solanacearum*	Root	High	+++	3
472		Root rot	*Fomes lignosus, Ganoderma pseudoferreum,*	Root	Low	++	19
473		Pod rot	*Phytophthora palmivora*	Pod	Low	++	19
474		Leaf rot	*Colletotrichum*	Leaf and stem	Medium	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
			gloeosporioides				
475		Leaf spot	*Corynespora cassicola, Drechslera* sp.,	Leaf and stem	Medium	++	3
476		Bird's eye spot	*Drechslera heveae*	Leaf	Low	++	20
477		Large leaf spot	*Phoma* sp.				19
478		Die-back	*Phomopsis heavae, Colletotrichum gloeosporioides Botryodiplodia theobromae, Chaetomella raphigera*	Leaf, bud, stem, branch, twig	Medium	++	8
479		Mouldy rot	*Ceratosystis fimbriata*	Stem	Medium	++	19
480		Panel necrosis	*Botryodiplodia theobromae*	Stem	Medium	++	19
481			*Fusarium solani*	Stem	Medium	++	19
482		Patch canker	*Phytophthora palmivora, P. ansmeadii, Pythium vax*	Stem	Medium	++	19
483		Black thread & leaf fall	*Phytophthora meadii*	Leaf	Medium	++	20
484		Pink disease	*Corticium salmonicolor*	Stem, branch	Low	++	20
485		Brown root	*Hymenochaete noxia*	Root	Medium	++	20
486		Anthracnose	*Glumerella cingulata*	Leaf, branch	Medium	++	20
487		White fan blight	*Marasmius palmivorus*	On bark	Medium	++	19
	Cork wood	**Mistletoe**					
488	*(Hibiscus tiliaceus)*		*Scurrula gracilifolia*	Trunk, branch	Medium	++	19
	Ivory tree	**Fungi**					
489	*(Holarrhena antidysenterica*)	Unclassified leaf disease	*Meliola simillima*	Leaf	Low	++	19
490			*Hemileia holarrhenae*	Leaf	Low	++	19
491		White rot	*Trametes suaveolens*	Wood	Medium	++	19
		Mistletoe					
492			*Macrosolen cochinchinensis*	Trunk, branch	Medium	++	19
	Jhawa	**Fungus**					
493	*(Holigarna caustic)*	White spongy rot	*Ganoderma lucidum*	Wood	Medium	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
	Indian elm	**Fungus**					
	(Holoptelia integrifolia)	White rot	*Lenzites adusta*	Wood	Medium	++	19
	Telsur	**Fungi**					
494	*(Hopea odorata)*	Seed rot	*Fusarium* sp.	Seed	Medium	++	19
495			*Penicillium* sp.	Seed	Medium	++	19
496			*Pestalotia* sp.	Seed	Low	++	19
		Mistletoe					
497			*Macrosolen cochinchinensis*	Trunk, branch	Medium	++	19
	Chalmoogra tree	**Fungi**					
498	*(Hydnocarpus kurzii)*	Seed rot	*Fusarium* sp.	Seed	Low	++	19
499		Seed rot	*Penicillium* sp.	Seed	Medium	++	19
500		Seed rot	*Pestalotia* sp.	Seed	Medium	++	19
501		White rot	*Irpex* sp	Wood	Medium	++	18
502		White rot	*Polyporus* sp.	Wood	Medium	++	18
503		Brown cuboidal rot	*Poria rhizomorpha*	Wood	Medium	++	19
	Gura	**Fungi**					
504	*(Kandalia rehedii)*	Top dying	*Colletotrichum gloeosporioides*	Seedling tip	Medium	++	8
	Jarol species	**Fungi**					
505	*(Lagerstroemia sp.)*	White rot	*Fomes* sp	Wood	Medium	++	18
506		White spongy rot	*Polyporus hirsutus*	Wood	Medium	++	18
507		White spongy rot	*Polyporus xanthopus*	Wood	Medium	++	18
508		White rot	*Trametes* sp.	Wood	Medium	++	18
	Jarol						
	(Lagerstroemia parviflora)	**Fungi**					
509		White rot	*Polyporus xanthopus*	Wood	Moderate	++	8
510		Brown rot	*Fomes ribis*	Wood	Moderate	++	18
511		White rot	*Fomes fastusus*	Wood	Medium	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
512		White rot	*Fomes rimosus*	Wood	Medium	++	19
	Pride of India						
	(Lagerstroemia speciosa)	**Fungi**					
513		Seed rot	*Alternaria* sp.	Seed	Low	++	19
514			*Aspegillus* sp.	Seed	Medium	++	19
515			*Curvularia* sp.	Seed	Low	++	19
516			*Fusarium* sp.	Seed	Medium	++	19
517			*Penicillium* sp.	Seed	Medium	++	19
518			*Rhizophus*	Seed	Medium	++	19
519		White spongy rot	*Daedalea* sp.	Wood	Medium	++	18
520		White rot	*Fomes ribis*	Wood	Medium	++	18
521		Brown cubical rot	*Merulius* sp.	Wood	Medium	++	18
522		White spongy rot	*Polystictus xanthopus*	Wood	Medium	++	18
523		White rot	*Trametes* sp.	Wood	Medium	++	18
	Bhadi						
	(Lannea coromandelica)	**Wood decay**					
524			*Auricularia* sp.	Wood	Medium	++	19
525		White rot	*Lentinus* sp.	Wood	Medium	++	18
	Ipil ipil	**Fungi**					
526	*(Leucaena leucocephala)*	Root rot of seedling	*Fusarium solani, Rhizoctonia solani, Fusarium oxysporum, Pythium spp., Pseudomonas solanacearum*	Seedling base	High	+++	3
	Kukurchita	**Mistletoe**					
527	*(Litsaea chinensis)*		*Macrosolen cochinchinensis*	Trunk, branch	Low	++	19
	Boura	**Fungi**					
528	*(Macaranga denticulate)*	White sap rot	*Deadalea corrugate*	Wood	Medium	++	18
529		White rot	*Polyporus* sp.	Wood	Medium	++	18
530		White sap rot	*Polystictus proteus*	Wood	Medium	++	18

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
	Mahua	**Fungi**					
531	*(Madhuca indica)*	Wood decay	*Polystictus steinheilianus*	Wood	Medium	++	19
	Kamala tree	**Fungi**					
532	*(Mallotus philippinensis)*	White rot	*Fomes rimosus*	Wood	Medium	++	19
533		White rot	*Ganoderma applanatum*	Wood	Medium	++	19
534		White rot	*G. leocopheus*	Wood	Low	++	19
535		White rot	*Polyporus adustus*	Wood	Medium	++	19
536		Brown rot	*Polystictus steinheilianus*	Wood	Medium	++	19
537		White rot	*Trametes persoonii*	Wood	Low	++	19
		Mistletoe					
538			*Scurrula parasitica*	Trunk, branch	Medium	++	19
	Nimpooteli	**Mistletoe**					
539	*(M. roxburghianus)*		*Marcosolen cochinchinensis*	Trunk, branch	Low	++	19
540			*Scurrula parasitica*	Trunk, branch	Medium	++	19
	Indian rhododendron	**Mistletoe**					
541	*Melastoma malabathricum*		*Dendrophthoe pentandra*	Trunk, branch	Medium	++	19
	Persian lilac						
	(Melia azedarch)	**Fungi**					
542		Collar rot	*Phytophthora* sp.	Collar	Medium	++	19
543		Heart rot	*Acramonium* sp.	Wood	Medium	++	4
544		Heart rot	*Phellinusm* sp.	Stem	Medium	++	19
545			*Dendrophthoe pentandra*	Wood	Medium	++	19
546			*Macrosolen cochinchinensis*	Wood	Low	++	19
	Ghora neem	**Fungi**					
547	*(Melia sempervirens)*	White rot	*Fomes senex*	Wood	Medium	++	19
	Bamboo	**Fungi**					
548	*(Melocanna baccifera)*	Culm spot	*Apiospora moantagnei*	Culm	Low	++	19
549		Root rot	*Poria rhizomorpha*	Root	Medium	++	19
550		Brown cuboidal rot	*Poria rhizomorpha*	Culm	Low	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
551		Brown rot	*Fomes dochmius*	Culm	Medium	++	19
	Nageswar	**Fungi**					
552	*(Melocanna nagassarium)*	Seed rot	*Fusarium* sp.	Seed	Low	++	19
553		Seed rot	*Penicillium* sp.	Seed	Medium	++	19
554		Seed rot	*Pestalotia* sp.	Seed	Low	++	19
555		Brown rot	*Fomes dochmius*	Wood	Medium	++	19
556		White rot	*Ganoderma lucidum*	Wood	Medium	++	19
557		White spongy rot	*Trametes cingulata*	Wood	Medium	++	18
558		White rot	*T. versatilis*	Wood	Medium	++	19
	Assar	**Mistletoe**					
559	*(Microcos)paniculata*		*Macrosolen cochinchinensis*	Trunk, branch	Low	++	19
560			*Scurrula graciliflia*	Trunk, branch	Medium	++	19
	Gandhi gazari	**Mistletoe**					
561	*(Milisa vetulina)*		*Macrosolen cochinchinensis*	Trunk, branch	Low	++	19
	Bakol	**Fungi**					
562	*(Mimusops elengi)*	Root rot of seedling	*Fusarium solani, Rhizoctonia solani, Fusarium oxysporum, Pythium spp., Pseudomonas solanacearum*	Root	High	+++	3
	White mulberry	**Fungi**					
563	*(Morus alba)*	Unclassified leaf disease	*Aecidium mori*	Leaf	Medium	++	19
564			*Phyllactinia corylea*	Leaf	Medium	++	19
		Wood decay					
565		White rot	*Ganoderma applanatum*	Wood	Medium	++	19
566		White rot	*Trametes badius*	Wood	Medium	++	19
	Indian mulberry	**Fungus**					
567	*(Morus indica*)	Unclassified leaf disease	*Phyllactinia corylea*	Leaf	Medium	++	19
568	*(Murraya* sp.)	**Wood decay**					
569		White rot	*Fomes fastuosus*	Wood	Medium	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
	Am barela	**Mistletoe**					
570	*(Myristica linifolia)*		*Macrosolen cochinchinensis*	Trunk, branch	Medium	++	19
	Nagassor	**Fungus**					
571	*(Ochrocarpus longifolius)*	Root rot	*Fusarium solani*	Root	High	+++	19
	Horhuta	**Mistletoe**					
572	*(Oreocnide integrifolia)*		*Scurrula parasitica*	Trunk, branch	Medium	++	19
	Tinis	**Fungus**					
573	(Ougeinia dalbergioides)	White rot	*Trametes versatilis*	Wood	Medium	++	19
574	*Phoenix* sp.						
		Fungus					
575		Unclassified leaf disease	*Phoma* sp.	Leaf	Low	++	19
	Date palm	**Fungi**					
576	*(Phoenix dactylifera)*	Smut	*Graphiola phoenicis*	Leaf	Medium	++	19
577		Unclassified leaf disease	*Graphiola phoenicis*	Leaf	Low	++	19
578			*Pestalotia phoenicis*	Leaf	Medium	++	19
		Wood decay					
579		Blotchy white rot	*Daldinia eschscholzii*	Trunk, branch	Medium	++	19
580		White root rot	*Flammula dilepsis*	Trunk, branch	Medium	++	19
	Wild date palm						
	(Phoenix sylvestris)	**Fungi**					
581		Unclassified leaf disease	*Coniothyrium* sp.	Leaf	Low	++	19
582			*Meliola palmicola*	Leaf	Low	++	19
583			*Glomerella cingulata*	Leaf	Low	++	19
584			*Graphiola applanata*	Leaf	Low	++	19
585			*G. phoenicis*	Leaf	Low	++	19
	Loda						
	(Phyllanthus distichus)	**Fungus**					
586		Unclassified leaf disease	*Phakopsora phyllanthi*	Leaf	Medium	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
	West Himalayan spruce	**Fungi**					
587	*(Picea smithiana)*	White rot	*Fomes geotropus*	Wood	Medium	++	19
588		Brown rot	*Fomes roseus*	Wood	Medium	++	19
589		Brown rot	*Lenzites subferrugenea*	Wood	Low	++	19
	Canary	**Fungi**					
590	Island pine	Damping off	*Fusarium* sp.	Seedling base	Low	++	19
591	*(Pinus canariensis)*		*Fusarium solani*	Seedling base	Medium	++	19
592			*Pythium* sp.	Seedling base	Low	++	19
593			*Rhizoctonia* sp.	Seedling base	Medium	++	19
594			*Rhizoctonia solani*	Seedling base	Medium	++	19
	Pitch pine						
	(P. caribaea)	**Fungi**					
595		Damping off	*Fusarium* sp.	Seedling base	Low	++	19
596			*Pythium* sp.	Seedling base	Medium	++	19
597			*Rhizoctonia* sp.	Seedling base	Medium	++	19
598		Brown needle disease	*Mycosphaerella gibsonii*	Needle	Medium	++	19
	Slash pine						
	(P. elliottii)	**Fungi**					
599		Damping off	*Fusarium* sp.	Seedling	Low	++	17
600		Damping off	*Pythium* sp.	Seedling	Low	++	17
601		Damping off	*Phytophthora* sp.	Seedling	Medium	++	17
602		Damping off	*Rhizoctonia solani*	Seedling	Medium	++	17
603		Needle cast	*Botryodiplodia theobromae*	Seedling	Medium	++	17
604		Needle cast	*Pestalotia macrotricha*	Needle	Low	++	17
	Khasia pine						
	(P. khashya)	**Fungi**					
605		Damping off	*Fusarium* sp.	Seedling	Low	++	19
606			*Fusarium solani*	Seedling	Medium	++	19
607			*Pythium* sp.	Seedling	Low	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
608			*Rhizoctonia* sp.	Seedling	Medium	++	19
609			*Rhizoctonia solani*	Seedling	Medium	++	19
	Ocote pine						
	(P. oocarpa)	**Fungi**					
610		Damping off	*Fusarium* sp.	Seedling	Low	++	19
611			*Rhizoctonia solani*	Seedling	Medium	++	19
	Monterey pine						
	(P.radiata)	**Fungi**					
612		Damping off	*Fusarium* sp.	Seedling	Low	++	19
613			*Fusarium solani*	Seedling	Medium	++	19
614			*Pythium* sp.	Seedling	Low	++	19
615			*Rhizoctonia* sp.	Seedling	Medium	++	19
616			*Rhizoctonia solani*	Seedling	Medium	++	19
	Banspata						
	(Podocarpus nerifolia)	**Fungi**					
617		Damping off	*Fusarium* sp.	Seedling	Low	++	19
	Gold mother tree						
	(Poinciana regia)	**Wood decay**					
618		White rot	*Ganoderma lucidum*	Wood	Medium	++	19
	Indian fir						
	(Polyalthia longifolia)	**Fungi**					
619		Leaf spot of seedlings	*Fusarium equiseti*	Leaf	Low	++	19
620		White rot	*Polyporus zonalis*	Wood	Medium	++	19
	Karanja						
	(Pongamia pinnata)	**Fungus**					
621		Leaf spot	*Colletotrichum*	Leaf	Middle	+	9

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
			gloeosporioides				
	Mashuna	**Mistletoe**					
	(Premna latifolia)						
622			*Macrosolen cochinchinensis*	Trunk, branch	Medium	++	19
623			*Scurrula parasitica*	Trunk, branch	Medium	++	19
	Kanak champa	**Fungi**					
624	*(Pterospermum acerifolium)*	White rot	*Fomes* sp.		Medium	++	18
625		White stringy rot	*Fomes pachyphloeus*		Medium	++	18
		Wood decay					
626			*Daedalea* sp.		Medium	++	19
	Buddha's coconut						
	(Pterygota alata)	**Fungus**					
627		White rot	*Trametes persoonii*		Medium	++	19
	Nashpati –Pear						
	(Pyrus communis)	**Wood decay**					
628		White rot	*Fomes senex*		Medium	++	19
	Batangi						
	(P. pashia)	**Wood decay**					
629		White rot	*Fomes fastuosus*		Medium	++	19
630		White rot	*F. rimosus*		Medium	++	19
631		White rot	*F. senex*		Medium	++	19
	Oak group						
	(Quercus sp.)	**Fungi**					
632		Seed rot	*Penicillium* sp.	Seed	Low	++	19
633			*Pyrenochaetina* sp.	Seed	Low	++	19
634		Wood decay	*Fomes* sp.		Low	++	19
635			*Polyporus* sp.		Medium	++	19
636			*P. grammocephalus*		Medium	++	19
637		White rot	*Polystictus versicolor*		Medium	++	19
	Holly Oak						

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
	(Q. dilatata)	**Fungus**					
638		White rot	*Polystictus versicolor*		Medium	++	19
	Grey Oak						
	(Q. incana)	**Fungi**					
639		White rot	*Fomes senex*		Medium	++	19
640		White rot	*Polystictus versicolor*		Medium	++	19
	Rai batna	**Mistletoe**					
641	*(Q. lanceaefolia)*		*Scurrula parasitica*	Trunk, branch	Medium	++	19
	Brown Oak						
	(Q. semicarpifolia)	**Fungi**					
642		White rot	*Fomes rimosus*		Low	++	19
643		White rot	*Fomes senex*		Medium	++	19
	Bara batna						
	(Q. spicata)	**Fungus**					
644		White rot	*Hymenochaete rubiginosa*	Wood	Medium	++	19
	(Randia sp.)						
		Fungus					
645		Unclassified leaf disease	*Meliola* sp.	Leaf	Low	++	19
	Malabar bandia						
	(R. dumentorum)	**Fungus**					
646		Wood decay	*Irpex* sp.		Medium	++	18
	Bhara						
	(Rhizophora conjugate)	**Fungus**					
647		Top dying	*Colletotrichum gloeosporioides*	Seedling tip	Low	++	8
	Castor oil plant	**Fungus**					
648	*(Ricinus communis)*	Unclassified leaf disease	*Cercospora ricinella*	Leaf	Low	++	19
	Silk cotton tree						

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
	(Salmalia malabarica)	**Fungus**					
649		Dieback of seedling	*Botryodiplodia theobromae*		Low	++	19
	Raintree	**Mistletoe**					
650	*(Samanea saman)*		*Scurrula pulverulenta*	Trunk, branch	Low	++	19
	Sandal	**Fungus**					
651	*(Santalum album)*	Root rot	*Fusarium moniliforni*	Leaf, stem, branch	Medium	++	19
	Chamfata						
	(Sapium baccatum)	**Mistletoe**					
652			*Viscum monoicum*	Trunk, branch	Medium	++	19
	Kanak						
	(Schima wallichii)	**Fungus**					
653		White rot	*Fomes* sp.	Wood	Low	++	18
		Mistletoe					
654			*Macrosolen cochinchinensis*	Trunk, branch	Low	++	19
	Malay lac tree						
	(Schleichera oleosa)	**Fungus**					
655		White rot	*Irpex flavus*		Medium	++	19
656	Sal						
	(Shorea robusta)	**Fungi**					
657		Leaf spot	*Cephaleuros mycoidea*		Low	++	20
658		Leaf spot	*Cylindrocladium floridanum*		Low	++	13
659		Top dying	*Colletotrichum gloeosporioides*	Seedling tip	Medium	++	8
660		Leaf blight	*Cylindrocladium scoparium*		Low	++	13
661		White pocket rot	*Fomes pseudosenex*	Wood	Medium	++	19
662		Butt rot	*Fomes fastuosus*		Medium	++	19
663		Leaf blight of seedling	*Fusarium* sp.		Low	++	19
664		Leaf spot	*Asterina lowsoniae*		Low	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
665		Root rot	*Fomes fastuosus*		Low	++	19
666			*Fomes roseus*		Low	++	19
667		Stem rot	*Fomes caryophylli*		Low	++	19
668		Wood decay	*Aurichularia auricular-judae*	Wood	Medium	++	19
669		White spongy rot	*Daedalea flavida*		High	++	19
670			*D. stereoides*		Medium	++	19
671		White pocket rot	*F. albomarginatus*		Medium	++	19
672		Spongy white rot	*F. caryophylli*		Medium	++	19
673		Brown rot	*F. dochmius*		Medium	++	19
674			*F. durissimus*		Medium	++	19
675			*F. fastuosus*		Medium	++	19
676			*F. lamaensis*		Medium	++	19
677		White spongy rot	*F. lividus*		Medium	++	19
678			*F. melanoporus*		Medium	++	19
679			*F. pseudosenex*		Medium	++	19
680			*F. rimosus*		Medium	++	19
681		Brown cuboidal rot	*F. roseus*		Medium	++	19
682		White spongy rot	*F. tricolor*		Medium	++	19
683		Fibrous butt rot	*Gramothele effuse-reflexa*		Medium	++	19
684			*Guepinia spathularia*		Medium	++	19
685		White rot	*Hexagonia discopoda*		Medium	++	19
686		White rot	*H. sulcata*		Medium	++	19
687		White rot	*Hymenochaete rubiginosa*		Medium	++	19
688		White rot	*Irpex flavus*		Medium	++	19
689		White rot	*Lentinus praerigidus*		Low	++	19
690		Spongy sap rot	*L. subnudus*		Low	++	19
691		White rot	*Lenzites adusta*		Low	++	19
692		White rot	*L. repanda*		Low	++	19
693		Brown rot	*L. striata*		Low	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
694		Brown rot	*Pleurotus squarrosulus*		Low	++	19
695		White rot	*Polyporus anebus*		Medium	++	19
696		White rot	*P. gilvus*		Medium	++	19
697		Brown rot	*P. ostreiformis*		Medium	++	19
698		White rot	*P. shoreae*		Medium	++	19
699		White fibrous rot	*Polystictus hirsutus*		Medium	++	19
700		White rot	*P. sanguineus*		Medium	++	19
701		Brown rot	*P. steinheilianus*		Medium	++	19
702		White rot	*P. versicolor*		Medium	++	19
703		White spongy rot	*P. xanthopus*		Medium	++	19
704		White spongy rot	*Schizophyllum commune*		Low	++	19
705			*Stereum fuscum*		Low	++	19
706		White rot	*S. percome*		Low	++	19
707		White rot	*Trametes badia*		Medium	++	19
708		White rot	*T. cingulata*		Medium	++	19
709		Brown rot	*T. cubensis*		Medium	++	19
710		White rot	*T. lactinea*		Low	++	19
711		White spongy rot	*T. persoonii*		Low	++	19
712		White rot	*T. versatilis*		Low	++	19
	Keora						
	(Sonneratia apetala)	**Fungi**					
713		Collar rot	*Chaetomella raphigera*	Stem, foliage, shoot and leaves	High	+++	3
714		Die-back	*Chaetomella raphigera*	Leaf, bud, stem, branch, twig	Medium	++	2
715		Die-back associate	*Cytospora* sp.	Branch, twig	Medium	++	19
716		Wood decay					
717		White rot	*Fomes sp.*	Wood	Medium	++	18

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
718		White spongy rot	*Trametes persoonii*				
		Mistletoe					
719			*Dendrophthoe falcata*	Trunk, branch	Medium	++	19
	Ora *(S. caseolaris)*						
		Mistletoe					
720			*Macrosolen cochinchinensis*	Trunk, branch	Low	++	19
	Othaheite apple *(Spondias dulcis)*						
		Fungi					
721		Leaf rust	*Cerotellium alienum*		Medium	++	19
722		Wood decay	*Hypocrella discoidea*		Medium	++	19
	Saimese rough bush *(Streblus asper)*						
		Fungus					
723		White spongy rot	*Polystictus xanthopus*		Medium	++	18
	Bon narenga *(Suregada multiflora)*						
		Mistletoe					
724			*Macrosplen cochinchinensis*	Trunk, branch	Medium	++	19
	Mahogany group *(Swietenia* sp.)						
		Fungus					
725		Wood decay	*Fomes roseus*		Medium	++	19
	HondurasMahogany *(Swietenia macrophylla)*						
		Fungi					
726		Wilt/damping off	*Fusarium* sp., *Pythium* spp., *Phytophthora* spp., *Rhizoctonia solani*	Seedling base	Medium	++	3
727		Root rot of seedling	Fusarium solani, Rhizoctonia solani, Fusarium oxysporum, Pythium spp., Pseudomonas solanacearum	Root	High	+++	3

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
728		Die-back	*Colletotrichum gloeosporioides, Botryodiplodia theobromae, Chaetomella raphigera*	Leaf, bud, stem, branch, twig	Medium	++	8
729		Root rot resulting die-back	*Ganoderma lucidum*		Medium	++	19
730		Wood decay	*Fomes durissimus*		Medium	++	19
731		White rot	*Lentnus badius*	Wood	Low	++	8
732		White rot	*Lentinus cf. badius*	Wood	Low	++	18
733		White rot	*Lentinus infundibuliformis*	Wood	Medium	++	18
734		White stringy rot	*Lentinus praerigidus*	Wood	Low	++	18
735		White fibrous rot	*Polysictus hirsutus*	Wood	Medium	++	8
	West Indies mahogony *(S. mahagoni)*						
		Fungi					
736		Butt rot	*Fomes fastuosus*		Medium	++	19
737		Leaf spot	*Cercospora subsessilis*		Low	++	19
738			*Colletotrichum gloeosporioides*		Low	++	19
739			*Pestalotia* sp.		Medium	++	19
740		Root rot	*Fomes fastuosus*		Medium	++	19
741		Stem rot	*Dothiorella mahagonia*		Low	++	19
742		Twig blight	*Colletotrichum gloeosporioides*		Medium	++	19
743		Wood decay	*Fomes durissimus*		Medium	++	19
	Civit *(Swintonia floribunda)*						
		Fungi					
744		Seed rot	*Acremonium* sp.		Low	++	19
745			*Candida* sp.		Low	++	19
		Wood decay					
746		White rot	*Fomes sp.*	Wood	Low	++	18
747		Yellow stringy rot	*Fomes anebus*	Wood	Low	++	18

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
748		White rot	*Trametes* sp.	Wood	Medium	++	18
749			*T. cingulata*		Medium	++	
750		White spongy rot	*Xylaria* sp.	Wood	Medium	++	18
	Lodhbholia						
	(Symplocos laurina)	**Fungi**					
751			*Myiocopron orbiculare*		Low	++	19
752			*Vizella conferta*		Low	++	19
753		Unclassified leaf disease	*Sphaerella bhauria*		Low	++	19
	Lodhbholia						
	(S. spicata)	**Mistletoe**					
754			*Scurrula pulverulenta*	Trunk, branch			
	Berry group						
	(Syzygium *sp.)*	**Fungi**					
755		Leaf blight	*Pestalotia* sp.		Medium	++	19
756		Wood decay	*Fomes* sp.		Low	++	19
757			*F. rimosus*		Medium	++	19
758		White rot	*Irpex* sp.		Medium	++	18
759		White stringy rot	*Lentinus praerigidus*				
760			*Polyporus* sp.		Medium	++	18
761		Brwn rot	*Polyporus durescens*		Medium	++	18
762		White stump rot	*Polyporus grammocephalus*		Medium	++	18
763		White fibrous rot	*P. xanthopus*		Medium	++	19
764		White spongy rot	*Trametes lactenea*		Medium	++	18
	Nalijam						
	(S. claviflorum)	**Fungi**					
765		Seed rot	*Fusarium* sp.		Low	++	19
766			*Mucor* sp.		Low	++	19
767			Penicillium *sp.*		Medium	++	19
768			*Pestalotia* sp.		Medium	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
769			*Verticillium* sp.		Low	++	19
		Mistletoe					
770			*Dendrophthoe pentandra*	Trunk, branch	Medium	++	19
	Indian blackberry						
	(S. cumini)	**Fungi**					
771		Red rust of seedlings	*Cephaleuros viriscens*		Low	++	19
772		Unclassified leaf disease	*Capnodiastrum* sp.		Low	++	19
773			*Monochaetia* sp.		Low		
774		Wood decay	*Auricularia cf. petata*		Low		18
775		Wood decay	*Trametes persoonii*		Medium	++	19
		Mistletoe					
776			*Dendrophthoe pentandra*	Trunk, branch	Medium	++	19
777			*Macrosolen cochinchinensis*	Trunk, branch	Low	++	19
	Dhakijam						
	(S. grande)	**Fungi**					
778		Seed rot	*Fusarium* sp.		Low	++	19
779		Seed rot	*Mucor* sp.		Low	++	19
780		Seed rot	Penicillium *sp.*		Medium	++	19
781		Seed rot	*Pestalotia* sp.		Medium	++	19
782			*Verticillium* sp.				
		Mistletoe					
			Dendrophthoe pentandra		Medium	++	19
	Godajam						
	(S. nervosum)	**Mistletoe**					
783			*Scurrula gracilifolia*	Stem, branch	Medium	++	19
	Tamarind						
	(*Tamarindus indica)*	**Fungi**					
784		Foliage Wilt	*Corticium salmonicolor*	Stem, plant base	Medium	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
785		Wood decay	*Fomes* sp.	Wood	Low	++	19
786			*Polyporus calcutensis*	Wood	Medium	++	19
	Teak (*Tectona grandis*)						
		Fungi					
787		Fruit rot	*Alternaria* sp.	Fruit	Low	++	19
788		Fruit rot	*Aspergillus* sp.	Fruit	Low	++	19
789		Fruit rot	*A. niger*	Fruit	Medium	++	19
790		Fruit rot	*A. repens*	Fruit	Low	++	19
791		Fruit rot	*A. ruber*	Fruit	Low	++	19
792		Fruit rot	*Penicillium sp.*	Fruit	Low	++	19
793		Leaf spot	*Pestalotia sp.*	Leaf	Medium	++	19
794		Leaf rust	*Uredo tectonae*	Leaf	Low	++	19
795		Root rot	*Polyporus* sp.	Root	Medium	++	19
796		Root rot associates	*Rhizoctonia solani*	Root	Medium	++	19
797		Seed rot	*Aspergillus repens*	Seed	Low	++	19
798		Seedling colar rot	*Fusarium* sp.	Seed	Low	++	19
799		Unclassified leaf disease	*Phyllosticta tentone*	Leaf	Medium	++	19
800		Wilt/damping off	*Fusarium* sp., *Pythium* spp., *Phytophthora* spp., *Rhizoctonia solani*	Seedling base	Medium	++	3
801		Root rot	*Fusarium solani, Rhizoctonia solani, Fusarium oxysporum, Pythium spp., Pseudomonas solanacearum*	Root	Medium	++	8
802		White pocket rot	*Sterium petaloides*	Wood	Low	++	8
803		White rot	*Daedalea zonata*	Wood	Medium	++	18
804		White spongy rot	*Daedalea* sp.	Wood	Medium	++	18
805		White spongy rot	*Irpex flavus* *Irpex cf. flavus*	Wood	Medium	++	18

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
806		White stump rot	*Polyporus grammocephalus*	Wood	Medium	++	18
807		White rot	*Polyporus* sp.	Wood	Medium	++	18
		Bacteria					
808		Bacterial wilt	*Pseudomonas solanacearum*	Stem, roots	High	++	19
	Arjun (*Terminalia arjuna*)	**Fungus**					
809		White fibrous rot	*Polystictus affinis*	Wood	Medium	++	19
	Bohera (*T. bellerica*)	**Fungus**					
810			*Fomes rimosus*		Medium	++	19
		Mistletoe					
811			*Macrosolen cochinchinensis*	Trunk, branch	Low	++	19
	Kath Badam (*T. catappa*)						
		Fungi					
812			*Polyporus calcutensis*	Trunk, branch	Medium	++	19
		Mistletoe					
813			*Macrosolen cochinchinensis*	Stem, branch	Low	++	19
	Hoaritaki (*T. chebula*)						
814		**Fungi**					
815		Seed rot	*Fusarium* sp.	Seed	Low	++	19
816			*Penicillium* sp.	Seed	Medium	++	19
817			*Pestalotia* sp.	Seed	Medium	++	19
818			*Trichoderma* sp.	Seed	Low	++	19
819	Hasna (*T. tomentosa)*						
		Fungi					
820		Seed rot	*Fusarium* sp.	Seed	Low	++	19
821			*Penicillium* sp.	Seed	Medium	++	19
822			*Pestalotia* sp.	Seed	Medium	++	19
823		White rot	*Daedalea flavida*	Wood	Medium	++	19
824		White rot	*Fomes melanoporus*	Wood	Medium	++	19
825		White rot	*F. rimosus*	Wood	Medium	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
826		White rot	*Gamoderma lucidum*	Wood	Medium	++	19
827		White rot	*Irpex flavus*	Wood	Medium	++	19
828		White rot	*Polyporus gilvus*	Wood	Medium	++	19
829		White rot	*Trametes versatilis*	Wood	Medium	++	19
	Chundul	**Mistletoe**					
830	(*Tetrameles nudiflora*		*Dendrophthoe falcata*	Stem, branch	Medium	++	19
	Paras	**Mistletoe**					
831	(*Thespesia populnea*)		*Macrosolen cochinchinensis*	Stem, branch	Low	++	19
	Toon						
	(*Toona ciliata*)	**Fungi**					
832		Seed rot	*Fusarium* sp.	Seed	Low	++	19
833			*Penicillium* sp.	Seed	Medium	++	19
834			*Pestalotia* sp.	Seed	Medium	++	19
835		Seedling disease	*Pestalotia macrochaeta*	Seedling	Medium	++	19
836			*Rhynchophoma* sp.	Seedling	Low	++	19
837		Wood decay	*Daedalea* sp	Wood	Medium	++	19
838			*Fomes senex*	Wood	Medium	++	19
	Charcoal tree						
	(*Trema orientalis*)	**Mistletoe**					
839			*Scurrula pulverulenta*	Stem, branch	Medium	++	19
	Pitali						
	(*Trewia polycarpa*)	**Fungus**					
840			*Fomes* sp.	Wood	Low	++	19
	Unidentified logs						
		Fungi					
841			*Auricularia* sp.	Wood	Low	++	19
842			*A. auricula-judae*	Wood	Low	++	19
843			*A. polytricha*	Wood	Low	++	19
844			*Clavicorona* sp.	Wood	Low	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
845			*Clitocybe* sp.	Wood	Low	++	19
846			*C. dealbata*	Wood	Low	++	19
847			*Coprinus micaceus*	Wood	Low	++	19
848			*Coriolopsis telfarii*	Wood	Low	++	19
849			*Daedalea* sp.	Wood	Medium	++	19
850		White stringy rot	*D. ambigua*	Wood	Medium	++	19
851			*D. corrugata*	Wood	Medium	++	19
852			*D. indica*	Wood	Medium	++	19
853			*Flammula* sp.	Wood	Low	++	19
854			*Fomes* sp.	Wood	Medium	++	19
855			*F. badius*	Wood	Medium	++	19
856		White rot	*F. fomentarius*	Wood	Medium	++	19
857		White stringy rot	*F. pachyphloeus*	Wood	Medium	++	19
858		White spongy rot	*F. pallidus*	Wood	Medium	++	19
859		White rot	*F. senex*	Wood	Medium	++	19
860			*Ganoderma* sp.	Wood	Medium	++	19
861			*Hexagonia cf. hirta*	Wood	Low	++	19
862			*H. kurzii*	Wood	Low	++	19
863			*Hydnum udum*	Wood	Low	++	19
864			*Irpex sp.*	Wood	Medium	++	19
865			*Lentinus* sp.	Wood	Low	++	19
866			*L. coadunatus*	Wood	Low	++	19
867			*L. cochleatus*	Wood	Low	++	19
868		White spongy rot	*L. subnudus*	Wood	Medium	++	19
869		White rot	*Lenzites adusta*	Wood	Medium	++	19
870			*Lepiota cepaestipes*	Wood	Low	++	19
871			*Marasmius* sp.	Wood	Low	++	19
872			*M. ferrugineus*	Wood	Low	++	19
873			*Omphalia* sp.	Wood	Low	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
874			*Panus* sp.	Wood	Medium	++	19
875			*P. rudis*	Wood	Medium	++	19
876			*Phellinus* sp.	Wood	Low	++	19
877			*Pleurotus* sp.	Wood	Low	++	19
878		White flaky rot	*P. ostreatus*	Wood	Low	++	19
879			*P. squarrosulus*	Wood	Low	++	19
880			*P. ulmarius*	Wood	Low	++	19
880			*Polyporus boseii*	Wood	Medium	++	19
881		White rot	*P. conchiodes*	Wood	Medium	++	19
882		White rot	*P. gilvus*	Wood	Medium	++	19
883		White spongy rot	*P. hirsutus*	Wood	High	++	19
884		White rot	*P. lignosus*	Wood	Medium	++	19
885			*P. inzomensis*	Wood	Medium	++	19
886			*P. trichomallus*	Wood	Medium	++	19
887			*Polystictus cervino-gilvus*	Wood	Medium	++	19
888		White spongy rot	*P. sanguineus*	Wood	Medium	++	19
889		White rot	*P. versicolor*	Wood	Medium	++	19
890		White spongy rot	*P. xanthopus*	Wood	Medium	++	19
891		White spongy rot	*P. zonalis*	Wood	Medium	++	19
892			*Poria* sp.	Wood	Low	++	19
893			*P. tenuis*	Wood	Low	++	19
894			*Psathyrella disseminata*	Wood	Low	++	19
895			*Schizophyllum* sp.	Wood	Low	++	19
896		White spongy rot	*S. commune*	Wood	Low	++	19
897			*Trametes* sp.	Wood	Medium	++	19
898		White spongy rot	*T. corrugata*	Wood	Medium	++	19
899			*T. cubensis*	Wood	Medium	++	19
900			*T. devexa*	Wood	Medium	++	19
901			*T. lacinea*	Wood	Medium	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
902			*Trocholoma* sp.	Wood	Low	++	19
903			*Xylaria* sp.	Wood	Low	++	19
	Moyena	**Fungus**					
904	*(Vangueria spinosa)*	Unclassified leaf disease	*Cercospora* sp.	Leaf	Low	++	19
	Sutagola						
905	*(Vatica lanceifolea)*	Wood decay	*Fomes* sp.	Wood	Medium	++	19
	Ashural						
906	*(Vitex glabrata)*	Wood decay	*Microporus xanthopus*	Wood	Low	++	19
	Arsol						
907	*(Vitex peduncularis)*	Wood decay	*Daedalea* sp.	Wood	Medium	++	19
908		Wood decay	*Polyporus* sp.	Wood	Medium	++	19
	Goda						
	(Vitex pubescence)	**Mistletoe**					
909			*Dendrophthoe pentandra*	Trunk, branch	Low	++	19
	Dhas						
910	*(Woodfordia floribunda)*	Leaf spot	Cercospora woodforda	Leaf	Low	++	19
	Hansak						
	(Xanthophyllum flavescens)	**Fungi**					
911		White rot	*Trametes* sp.	Wood	Medium	++	18
	Pyinkado						
	(Xylia kerrii)	**Fungi**					
912		Root rot	*Ganoderma lucidum*	Foliage, collar, root	Moderate	++	11
913		Brown rot	*Polyporus fimbriatus*	Wood	Medium	++	18
	Dhundul						
914	(*Xylocarpus granatum)*	White spongy rot	*Fomes rimosus*	Wood	Medium	++	19
	Passur						
915	*(Xylocarpus molluccensis)*	Die-back & heart rot	*Fomes rimosus*	Stem, branch	Low	++	19

Sl. No	Crop/plant /plant product	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Ratings	References
916		Wood decay	*Fomes rimosus*	Wood	Medium	++	19
		Mistletoe					
917			*Dendrophthoe falcata*	Trunk, branch	Medium	++	19
	Indian plum Boroi						
918	*(Zizyphus mauritiana)*	Wood decay	*Polyporus calcutensis*	Wood	Medium	++	19
	Jonglikol						
919	(*Z. oenoplia*)	Unclassified leaf disease	*Cercospora zizyphi*	Leaf	Low	++	19
	Bonboroi						
920	(*Z. rugosa*)	Unclassified leaf disease	*Cercospora zizyphi*	Leaf	Low	++	19

3.11.1 References

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3.12 Recording Diseases of Narcotics and Beverage crops

Altogether records of 111 diseases were found on seven narcotics and beverage crops in Bangladesh. Among the seven crops the highest number of diseases (33) were recorded on betel nut followed by betel vine (27), tea (26) and tobacco (20). On cacao, coffe and Indian hemp number of disease were 1, 3 and 1 respectively. More than 66% of the diseases were caused by fungal pathogens (74), which was followed by nematode (32) constituted about 29% of the total disease. Leaf was the major site of infection though other parts of the plants were also attacked by the pathogens. Only root infecting nematodes were recorded. Among the plant species of this group betel vine was found most vulnerable to the nematodes where as high as 15 plant parasitic nematode species were recorded. Most of the diseases were rated as common (Table 25)

Table 25. Diseases of Narcotics and Beverage crops

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
	Betelnut (*Areca catechu*)	**Fungi**					
1		Leaf spot	*Colletotrichum catechu* , *Periconia bysiodes, Epicoccum nigrum, Phyllostictina arecae, Helminthosporium* sp.	Leaf	High	+++	19
2		Koleroga	*Phytophthora arecae*	Leaf, bud	Medium	+++	19
3		Leaf & sheath spot	*Botryodiplodia theobromae, Chlamydomyces palmarum*	Leaf, sheath	Low	+++	19
4		Leaf sheath spot	*Gloeosporium* sp., *Phomopsis heteronema*	Leaf sheath	Low	++	19
5		Stem rot & Bleeding	*Thielaviopsis paradoxa, Ceratocystis paradoxa*	stem	Low	++	19
6		Wilting	*Fusarium* sp.	Root, Plant base	Low	++	9
7		Collar rot	*Fusarium* sp.	Collar	High	++	9
9		Cracking & dropping	*Colletotrichum sp.*	Nut	Medium	++	9
11		Leaf spot/blight	*Pestalotia palmarum*	Leaf	Medium	++	14
12		Nut rot/Fruit rot	*Phytophthora arecae*	Fruit	Medium	++	14
13		Fruit rot	*Fusarium* sp.	Fruit	Low	+	9
14		Stem rot	*Ceratostomella paradoxa*	Stem	Medium	++	18
15		Root rot	*Ganoderma lucidum*	Root	High	++	18
		Unclassified leaf diseases					
16			*Ceratostomella paradoxa*	Leaf	Medium	++	18

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
17			*Coniothyrium arecae*	Leaf	Medium	++	18
19			*Epicoccum nigrum*	Leaf	Medium	++	18
19			*Helminthosporium* sp.	Leaf	Low	+	18
19			*Periconia byssoides*	Leaf	Medium	++	18
20			*Phyllostictina* sp.	Leaf	Low	+	18
21			*Phyllostictina arecae*	Leaf	Medium	++	18
22			*Phytophthora arecae*	Leaf	Medium	++	18
23			*Stagnospora arecae*	Leaf	Low	+	18
24			*Thielaviopsis paradoxa*	Leaf	Low	+	18
25		Wood decay	*Fomes badius*	Wood	Medium	++	18
27		Wood decay	*Lenzites striata*	Wood	Mrdium	++	18
28		Wood decay	*Polyporus ostreiformis*	Wood	High	+++	18
29		Inflorescence drying or bud dropping	*Colletotrichum gloeosporioides*	Inflorescence	Medium	++	14
30		Bud rot	*Phytophthora palmivora*	Bud	Low	++	14
		Nematode					
31		Root lesion	*Criconemoides* sp.	Root	Low	++	4
32		Root tip swelling	*Hemicyclophora* sp.	Root	Low	++	4
33		Root decay	*Xiphinema* sp.	Root	Low	++	4
	Betel vine (*Piper betel)*	**Fungi**					
34		Leaf spot	*Phytophthora parasitica* var. *piperina*	Leaf	Low	+	13
35		Leaf spot/ anthracnose	*Colletotrichum piperis, Colletotrichum capsici*	Leaf	Low	+	1
36		Leaf spot	*Colletotrichum capsici*	Leaf	Low	+	11
37		Leaf spot	*Cercospora* sp.	Leaf	Low	++	5
38		Root rot	*Sclerotium rolfsii*	Root	Low	+	19
39		Stem rot	*Sclerotium rolfsii*	Stem	High	++	13
40		Foot & Root rot	*Sclerotium rolfsii*	Root, Base of vine	High	+++	12
41		Stem rot	*Phytophthora palmivora*	Stem	Medium	++	5
42		Root rot	*Rhizoctonia solani*	Root	Medium	+++	13
43		Fusarium wilt	*Fusarium oxysporum*	Base of stem	Medium	++	13
44		Powdery mildew	*Oidium piperis*	Leaf	Low	+++	13
		Nematode					
45		Leaf malformation	*Aphelenchoides fragariae*	Root	Low	+++	15

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
46		Leaf malformation	*Aphelenchoides* sp	Root	Low	+++	15
47			*Aphelenchus sp.*	Root	Low	+++	15
48		Root lesion & stunting	*Belonolaimus longicaudatus*	Root	Low	+++	15
49		Root lesion	*Criconema* sp.	Root	Low	+++	15
50		Root lesion	*Criconemoides* sp.	Root	Low	+++	15
51		Stunting	*Ditylenchus dipsaci*	Root	Low	+++	15
52		Reduction in root system	*Helicotylencus dihystera*	Root	Low	+++	15
53		Root lesion, chlorosis	*Hoplolaimus indicus*	Root	Low	+++	15
54		Root knot	*Meloidogyne incognita*	Root	Low	+++	15
55		Root knot	*Meloidogyne javanica*	Root	Low	+++	15
56		Root lesion	*Pratylenchus* sp.	Root	Low	+++	15
57		Root decay	*Rotylenchulus* sp.	Root	Low	+++	15
58		Root disease	*Scutellonema* sp.	Root	Low	+++	15
59		Poor root growth	*Tylenchus* sp.	Root	Low	+++	15
	Cacao	**Fungi**					
60	(*Theobroma cacao* L.)	Pod rot	*Lasiodiplodia theobromae*	Pod	Low	++	17
	Coffe	**Fungi**					
61	(*Coffea arabica)*	Leaf spot	*Mycosphaerella coffeicola*	Leaf	Low	++	19
62		Brown blight or anthracnose	*Colletotrichum coffeanum*	Leaf, branch	Low	++	19
63		Brown eye spot	*Cercospora coffeicola*	Leaf	Low	++	19
	Indian Hemp	**Fungi**					
64	(*Cannabis sativa*)	Stem rot	*Sclerotium rolfsii*	Stem	Low	++	19
	Tea	**Fungi**					
65	(*Camellia sinensis*)	Gall disease	*Fusarium oxysporum*	Top shoot	Medium	+++	3
66		Die Back	*Colletotrichum gloesporioides*	Top shoot	Medium	+++	3
67		Black rot	*Corticium invisum*	Leaf, shoot	Medium	+++	3
68		Black rot	*Corticium theae*	Leaf, shoot	Medium	+++	3
69		Brown blight	*Colletotrichum camellia*	Leaf	Low	++	3
70		Grey blight	*Pestalozzia theae*	Leaf	Low	+++	3, 19
71		Branch canker	*Macrophoma theicola*	Stem & branch	Medium	+++	3
72		Red rust	*Cephaleuros parasiticus*	Stem & branch	High	+++	3, 19
73		Horse hair blight	*Marasmius equicrinis*	Stem & branch	High	+	3
74		Thread blight	*Marasmius pulcher*	Stem & branch	low	++	3

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
75		Charcoal stump rot	*Ustulina zonata; Ustulina deusta*	Stump & root	High	+++	3
76		Collar rot	*Phomopsis theae*	Collar	High	+++	3
77		Violet root rot	*Sphaerostilbe repens*	Root	Medium	+	3
78		Purple root rot	*Helicobasidium compactum*	Root	Low	+	3
79		Cutting rot	*Cylindrocladium* sp.	Cutting	Low	++	2
80		Leaf spot	*Cercospora theae*	Leaf	Low	++	19
81		Brown blight	*Glomerella cingulata*	Leaf	Low	++	19
82		Internal root disease	*Botryodiplodia theobromae*	Root	Low	++	19
		Nematode					
83		Root decay	*Tylenchus* sp.	Root	Low	++	6
84		Root lesion	*Criconemoides* spp.	Root	Low	++	6
85		Leaf malformation	*Aphelenchoides avenae*	Leaf	Low	++	16
86		Reduction in root system	*Helicotylenchus dihystera*	Root	Low	++	16
87		Stem injury	*Ditylenchus* spp.	Stem	Low	++	16
88		Lesion	*Pratylenchus* spp.	Root	Low	++	16
89		Root decay	*Rotylenchus* spp.	Root	Low	++	16
90		Knot	*Meloidogyne* spp.	Root	Low	++	16
91		Lesion	*Hoplolaimus* spp.	Root	Low	++	16
	Tobacco (*Nicotiana tabacum*)	**Fungi**					
92		Frog eye leaf spot	*Cercospora necotianae*	Leaf	Medium	+++	7
93		Brown spot	*Alternaria longipes*	Leaf	Medium	+++	7
94		Leaf spot	*Alternaria tenuis*	Leaf	Low	++	10
95		Anthracnose	*Colletotrichum tabacum*	Leaf	Medium	++	10
96		Germination reduction	*Aspergillus* sp.	Seed	Low	+	10
97		Germination failure	*Fusarium* sp.	Seed	Low	+	10
98		Germination failure	*Penicillium* sp.	Seed	Low	+	10
99		Frog eye leaf spot	*Cercospora nicotianae*	Leaf spot	High		19
100		Damping off	*Pythium* sp.	Seedling base	High	++	19
101		Foot rot	*Sclerotium rolfsii*	Root, plant base	High	+++	19
		Bacteria					
102		Bacterial wilt	*Pseudomonas solanacearum*	Root, plant base	High	++	7
103		Seedling blight	*Pseudomonas* sp.	Seedling	Low	+	8
		Virus					
104		Mosaic	Tobacco mosaic virus	Leaf	High	++	4

Sl. No.	Plant /plant product with Scientific name	Name of disease	Causal organism	Plant part(s) affected	Status (high/ medium/ low)	Rating	Reference
105		Leaf curl	Leaf curl virus	Leaf	High	++	4
		Nematode					
106		Reduction in root system	*Helicotylenchus* sp	Root	Medium	++	19
107		Root lesion	*Hoplolaimus indicus*	Root			4
108		Root knot	*Meloidogyne incognita*	Root	Medium	++	19
109		Root knot	*Meloidogyne javanica*	Root	Medium	++	9
110		Root decay	*Xiphinema index*	Root	Low	+	4
		Phanerogamic parasite					
111		Orobanche	*Orobanche* sp.	Root	High	++	7

3.12.1 References

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3.13 Recording Diseases of Medicinal Plants

Disease records found on six plant species were collected and compiled. Altogether there were 16 diseases of which 13 were caused by fungal pathogens 2 by bacteria and one by virus.

Table 26: Diseases of Medicinal Plant

Sl. No.	Plants/plant products with scientific name	Name of disease	Causal organism	Plant parts affected	Status (high/ medium/ low)	Rating	Reference
	Orshogondha (*Withania somnifera*)	**Fungi**					
1		Root rot	*Fusarium solani*	Root	Medium	++	6
2		Leaf blight	*Alternaria citri*	Leaf	Medium	++	1
	Choi-jal (*Piper chaba*)	**Fungi**					
3		Stem rot	*Fusarium oxysporum*		Low	++	1
4		Root rot	*Fusarium solani*		Low	++	1
	Alovera (*Aloe indica*)	**Fungi**					
5		Anthracnose	*Colletotrichum gloeosporioides*	Leaf	Medium	++	7
6		Leaf spot	*Epicoccum purpurescens*	Leaf	Low	++	7
7		Leaf spot	*Pestalotiopsis guepinii*	Leaf	Medium	++	7

Sl. No.	Plants/plant products with scientific name	Name of disease	Causal organism	Plant parts affected	Status (high/ medium/ low)	Rating	Reference
8		Leaf spot	*Nigrospora oryzae*	Leaf	Medium	++	3
9		Leaf spot	*Cochliobolus lunatus*	Leaf	Medium	++	1
10		Collar rot	*Rhizopus stolonifer*	Leaf at ground level	Medium	++	1
11		Brown leaf spot	*Fusarium solani*	Leaf	Medium	++	4
12		Brown leaf spot	*Alternaria alternata*	Leaf	Medium	++	4
13		Brown leaf spot	*Pestalotia* spp.	Leaf	Medium	++	4
		Bacteria					
14		Soft rot	*Pectobacterium crysanthemi*	Stem	Medium	++	5
15		Black spot	*Erwinia chrysanthemi*	Leaf	Medium	++	4
	Basak (*Adhatoda vasica*)	**Fungi**					
16		Wilting	*Fusarium solani*	Root	Medium	++	1
	Tulsi (*Ocimum sanctum*)	**Fungi**					
17		Powdery mildew	*Erysiphe* sp.	Top shoot, leaf and stem	Medium	++	1
18		Root rot	*Fusarium oxysporum*	Root and foliage, shoot and leaves	High	+++	1
	Salvia *Salvia splendens*	**Virus**					
19			Leaf chlorosis virus	Leaf	Medium	++	2

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4.0 RECORDED WEEDS OF PLANTS

Weed is a serious pest of growing crops and other plants in Bangladesh. About 250 species of weeds have been identified in the country; these weeds cause roughly 33% of total crop loss in different crops (CIMMYT 2011). Most of the weeds belong to monocotyledons or dicotyledons. Weed control involves high cost but crop loss due to improper management in the farmers field is also high. So, cost of cultivation increases. Now, farmers need appropriate low cost weed control technology. The impact of weeds on major crops, especially, rice, wheat, maize, vegetable and spices crops is comparatively greater than other pests leading to the reduction of yield. For weed management in crops and vegetables, usual practices done are hand weeding, mechanical weeding, chemical control and biological control.

Many weeds are found in rice fields as rice is grown in three seasons round the year. They belong to the family of *Poaceae*, *Cyperaceae*, *Leguminosae*, *Asteraceae*, *Euphorbiaceae*, *Amaranthaceae*, *Solanaceae*, *Scorphulariaceae* and *Acanthaceae*. Weed infestation in rice can cause yield loss of about 43-51% (Rashid *et al.,* 2012). Some of them are terrestrial and some aquatic in nature.

4.1 Recording Weeds of Cereal Crops

Wheat is the second major cereal crop of Bangladesh after rice; although the average yield 3.01t-^{ha} is lower than world average yield3.27t-^{ha} (FAOSTAT, 2013). Weed infestation reducing yield by 24.60-58.46%, is one of the most important reasons that can explain this low yield, (Hossain *et al*., 2010). Similarly yield reduction in maize, the third cereal crops of Bangladesh, by about 49.23%, may be attributed to weeds (Gaffar *et al*., 1988). The major and minor weed of cereal crops are shown in Table 27.

Table 27: Weeds of Cereal Crops

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/ medium /low)	Rating	Ref.
1	Rice *(Oryzae sativa)*	Adinostemma	*Adinostemma lavenia* (Linn.) O. Kunze.	Year round	High	+++	16
2		Chanchi/sessile joy weed	*Alternanthera sessilis*	Year round	High	+++	28
3		Alligator weed	*Alternanthera philoxeroides*	Year round	High	+++	19
4		Khude pana/Azolla	*Azolla pinnata* R.	Summer	Med.	++	11
5		Jhanchi/Coon's tail	*Ceratophyllum dumersum* L.	Year round	High	+++	12
6		Swamp fern	*Ceratopteris thalictroides*	Summer	Med.	++	15

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/ medium /low)	Rating	Ref.
7		Kanai bashi/ Spider wort	*Commelina bengalensis* L.	Year round	High	+++	15
8		Kanainala/ Blue Ears	*Cyanotis axillaris* R & S.	Year round	High	+++	26
9		Durba/Bermuda grass	*Cynodon dactylon* Pers.	Year round	High	+++	12
10		Sabuj nakful/Green flatsedge	*Cyperus deformis* L.	Summer	Med.	++	15
11		Holde mutha/Yellow nutsedge	*Cyperus esculentus* L.	Summer	Med.	++	13
12		Barachucha/Rice flatsedge	*Cyperus iria* L.	Year round	High	+++	15
13		Nakful/Whitehead spike sedge	*Cyperus nemoralis C*herm.	Year round	High	+++	26
14		Mutha/Nutgrass	*Cyperus rotandus* L.	Year round	High	+++	12
15		Satidhara/Flatsedge	*Cyperus sanguinolentus* L.	Year round	High	+++	15
16		Khude angulee/Smooth crab grass	*Digiteria ischaemum* Schreb.	Summer	Med.	++	25
17		Angulee ghas/ Crab grass	*Digiteria sanguinalis* (L.) Scop.	Year round	High	+++	21
18		Khude Shama/ Junglerice	*Echinochloa colonum* (L.) Link.	Year round	High	+++	13
19		Bara Shama/ Barnyard grass	*Echinochloa crus-galli* (L.) P. Beauv.	Year round	High	+++	13
20		Kochuripana/Waterhyacinth	*Eichhornia crassipes*	Summer	Med.	++	15
21		Pani chaise/Purple spike rush	*Eleocharis atropurpurea* Kunth.	Year round	High	+++	9
22		Chapra/ Goose grass	*Elusine indica* L.	Year round	High	+++	13
23		Matichaise/Forked fimbry	*Fimbristylis diphylla* (Retz.) Vahl.	Year round	High	+++	12
24		Kalmi sak/Water spinach	*Ipomoa aquatica*	Year round	High	+++	11
25		Arail/ Swamp rice grass	*Leersia hexandra* Swartz.	Year round	High	+++	12
26		Fulka/Chinese sprangetop	*Leptochloa chinensis* (L.) Nees	Year round	High	+++	13
27		Mona ghas/ Mucanate sprungletop	*Leptochloa panicea* (Retz.) Ohwi	Year round	High	+++	12
28		Kesardam/creepingwater primerose	*Ludwigia adscendense* (L.) Hara.	Any time	Med.	++	13
29		Pani long/winged water primrose	*Ludwigia hyssopifolia* (G. Don) Exell	Year round	High	+++	12
30		Maxican primerose willow	*Ludwigia octavalvis* (Jacq.) P.H.Raven	Year round	High	+++	15
31		Susnisak/4-leaved water clover	*Marcilia quardrifolia* L.	Summer	High	+++	11
32		Pani kachu/Pckerel weed	*Monochoria vaginalis* L.	Year round	High	+++	13

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/ medium /low)	Rating	Ref.
33		Brownbeard rice	*Oryzae rufipogon*	Year round	Low	+	34
34		Amrul/Indian sorrel	*Oxalis europea*	Summer	Low	+	15
35		Moiurleja/ Leptochloa grass	*Panicum dichotomoflorum*	Year round	Med.	++	2
36		Bon cheena/ torpedo grass	*Panicum repens*	Summer	High	+++	9
37		Chela ghas/ sicklegrass	*Parapholis incurve* C.E.Hubb.	Year round	Med	++	2
38		Gaicha/ Paspalum grass	*Paspalum commersoni* Link.	Year round	High	+++	14
39		Gitla grassJoint grass	*Paspalum distichum*	Year round	High	+++	8
40		Topapana/ Water lettuce	*Pistia stratiotes*L.	Summer	Med.	++	6
41		Biskatali/ Smart weed	*Polygonum hydropiper* L.	Winter	Med.	++	2
42		Panimorich/Spotted ladysthumb	*Polygonum persocaria* L.	Year round	High	+++	15
43		Gang palong/Golden dock	*Rumex maritimus*	Summer	Med.	++	14
44		Tilaok pana/Kabira weed	*Salvinia natans*	Year round	High	+++	18
45		Chechra/deer grass	*Scirpus juncoides*	Year round	High	+++	23
\46		Bayonet grass.	*Scirpus maritimus* (Kenna ghas)	Summer	Med	++	32
47		Halud shial leja/Yellow fox tail	*Setaria glauca* (L.) P.Beauv	Year round	High	+++	15
48		Sabuj shial leja/Green fox tail	*Setaria viridis*	Year round	High	+++	10
49	Wheat *(Triticum aestavum)*	Chanchi/ sessile joy weed	*Alternanthera sessils*	Winter	High	+++	28
50		Katanote/ Spiny amaranth	*Amaranthus spinosus* L.	Winter	High	+++	28
51		Akarakara/scarlet pimperne	*Anagalis arvensis*	Winter	Med	++	29
52		Shialkata/ Mexican poppy	*Argemone mexicana* L.	Winter	Med	++	10
53		Kakronda	*Blumea lacera*. (Burn.f.) DC	Winter	Med	++	14
54		Bathua/lamb's quarters	*Chenopodium album* L.	Winter	Med.	++	5
55		climbing dayflower	*Commelina diffusa*	Winter	High	+++	33
56		Durba/Bermuda grass	*Cynadon dactylon* Pers.	Winter	High	+++	12
57		Sola pith plant	*Aeschynomene aspera*	Winter	High	+++	15
58		Khude angulee/Smooth crab grass	*Digiteria ischaemum* Schreb.	Winter	Med	+++	25
59		Angulee ghas/ Crab grass	*Digiteria sanguinalis* (L.) Scop.	Winter	High	+++	21

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/ medium /low)	Rating	Ref.
60		Khude Shama/ Junglerice	*Echinochloa colonum* (L) Link.	Winter	Med	++	13
61		Bhrin grass/False Daisy	*Eclipta alba* (L)	Winter	High	+++	11
62		False daisy	*Eclipta prostrata*	Winter	High	+++	21
63		Chapra/Goose grass	*Elusine indica* L.	Winter	High	+++	13
64		Halencha/Harkush	*Enhydra fluctuans*. Lour.	Winter	Low	+	15
65		Joina/Globe fringe rush	*Fimbristylis miliacea* (L.) Vahl.	Winter	Med	+++	11
66		GangPalong/ Jersey cudweed	*Gnaphalium affine* D. Don	Winter	High	+++	11
67		Lal kakr/ knotted liomera,	*Hedyotisbra chipoda*	Winter	High	+++	15
68		Corymbose Hedyotis	*Hedyotis corymbose* (l.) Lam.	Winter	High	+++	15
69		Kolmishak/ Water spinach	*Ipomoea aquatica* L.	Winter	High	+++	11
70		Dondokalas/Thambai	*Leucas aspera* (Wild.) Link.	Winter	High	+++	31
71		Honeyweed	*Leonurus sibiricus* (MH)	Winter	Med	++	1
72		Bontamak/Wild tobacco	*Nicotiana plumbagin folia* Viv.	Winter	High	+++	15
73		Chelaghas /Sheand grass	*Parapholis strigose* L.	Winter	High	+++	30
74		Foskabegun/Pigmyy ground cherry	*Physalis minima* L.	Winter	Low	+	24
75		Boro biskataliWater Smart weed	*Polygonium coccineum*	Winter	High	+++	14
76		Biskatali/ Smart weed	*Polygonum hydropiper* L.	Winter	Med	++	2
77		Chemtisa/Common knotweed,	*Polygonum plebeium* R. Br.	Winter	Low	+	16
78		Gangpalong/Bitter dock	*Rumex maritimus* L.	Winter	Low	+	14
79		Halud shial leja /Yellowfoxtail	*Setaria glauca* (L.) P.Beauv	Winter	Med	++	15
80		Bonbegun/Black night shade	*Solanum nigrum* L.	Winter	med	++	7
81		Titabegun Turkey berry	*Solanum torvum* Swartz.	Winter	Low	+	3
82		Titlia/common sowthistle	*Sonchus oleraceous*	Winter	Low	+++	16
83		Sadakakr chickweed,	*Stellaria media*.	Winter	High	+++	20
84		Masurchana/Common vetch	*Vicia hirsute* L.	Winter	Med	++	15
85		Bonmasur/ Wild lentil	*Vicia sativa* L.	Winter	High	+++	11
86		Ghagra/ Cocklebur	*Xanthium strumerium* Koenig.	Winter	Med	++	22

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/ medium /low)	Rating	Ref.
87	Maize (*Zea maize*)	Shialkata/ Mexican poppy	*Agrenone maxicana*	YR	High	+++	10
88		Katanote/ Spiny amaranth	*Amaranthus spinosus*	YR	Med	++	28
89		Chapra/Goose grass	*Elusine indica* L.	YR	High	+++	13
90		Choto dudhia/Prostate spurge	*Euphorbia parviflora*	YR	Med	+++	10
91		Hatishur/ Wild clary	*Heliotropium indicum* L.	YR	Med	++	15
92		Bonpalong/	*Mazus rugosus*	Winter	Med	++	11
93		Bon cheena/ torpedo grass	*Panicum repens*	YR	Low	++	9
94		Nunia/Purslane	*Portulaca oleracea* L.	YR	Med	++	16
95		Bon mula/ Wild radish	*Raphanus rephanistruma*	YR	Low	+	15
96		Deergrass	*Scirpus articulatus*	YR	Med	++	27
97		Halud shial leja/Yellow fox tail	*Setaria glauca*	YR	Low	++	15

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4.2 Recording Weeds of Pulse Crops

There are different pulses are cultivated in Bangladesh. Of them except grass pea, the other pulses like lentil, mung bean, chickpea and black gram are sensitive to weed infestation and crop loss also remarkable. Bhuiyan *et al*. (2018) also reported that yield loss of chickpea caused by early weed infestation may be about 40-50%. The weed found in the field of pulse crops are illustrated in Table 28.

Table 28. Weeds of Pulse Crops

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/medium /low)	Rating	Ref
1.	Lentil (*Lens culinaris*)	Katanote/ Spiny amaranth	*Amaranthus spinosus*	Winter	Med.	++	1,12
2.		Wild mustard	*Brassica kaber*	Winter	Med.	++	9
3.		Bathua/lamb's quarters	*Chenopodium album* L.	Winter	High	+++	2
4.		Parthenium *hysterophorus*.	*Parthenium hysterophorus* L	Winter	High	+++	13
5.		Indian Costus root	*Saussurea affinis*	Winter	High	+++	9
		Titlia/common sowthistle	*Sonchus oleraceus*	Winter	High	+++	10
6.	Chickpea (*Cicer arietinum*)	Bindi/Bindweed	*Convolvulus arvensis*	Winter	High	+++	11,15
7.		Nutgrass	*Cyperus rotundus*L.	Winter	Med.	++	3
8.		Wild lentil	*Vicia sativa*.L.	Winter	Med.	++	10
9.	Mungbean (*Vigna radeiata*)	Spiny amaranth	*Amaranthus spinosus*	Winter	Med.	++	11,12
10.		Bermuda grass	*Cynodon dactylon* Pers.	YR	Med	++	3

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/medium /low)	Rating	Ref
11.		Dondokalos/ 'Thumbai'	*Leucas aspera* Spreng.	Winter	High	+++	13
12.		Thatch grass	*Saccharum spontaneum* L.	Summer	Low	++	7
13.		Masurchana/Common vetch	*Viciahirsute* L.	Summer	Med.	++	9
14.	Blackgram (*Vigna mungo*)	Nutgrass	*Cyperusrotundus*L.	Winter	Med.	++	3
15.		Goose grass	*Eleusine indica* L.	YR	High	+++	4
16.		Torpedo grass	*Panicum repens*L	Winter	Low	+	5
17.		Green foxtail	*Setaria viridis* Beauv.	Winter	Med	++	6
18.	Kheshari (*Lathyrus sativus*)	Foshka begun/Clammy ground cherry	*Physalis heterophylla* L.	Winter	Low	+	9
19		Bon palong/ Bitter dock	*Rumex maritimus* L.	Winterr	Low	+	8

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4.3 Recording Weeds of Oilseed Crops

Among the oilseeds crops like mustard, ground nut, sesame, sunflower, safflower and soybean, mustard is the most important among those cultivated in Bangladesh. Although oilseeds crops are sensitive to weed infestation but the farmers pay less attention on it. As a result, sometimes drastic yield reduction occurrs. The major weeds of oilseeds crops are shown in Table 29.

Table 29. Weeds of Oilseed Crops

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/ medium/low)	Rating	Ref.
1.	Mustard *(Brassica napus)*	Lamb's quarters	*Chenopodium album*	Winter	Medium	+++	2
2.		Bermuda grass	*Cynodon dactylon* Pers.	YR	High	+++	6,9
3.		Goose grass	*Elusine indica*	YR	High	+++	5
4.		Witch weed	*Orovanche ramosa*	Winter	Medium	++	8
5.		Purslane	*Portulaca oleracea*	Winter	Medium	++	9,14
6.	Groundnut (*Arachis*	Sleeper weed	*Lantana camera*	Summer	Medium	++	12
7.		Purslane	*Portulaca oleracea*	YR	Medium	++	9

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/ medium/low)	Rating	Ref.
8.	*hypogaea*)	Bermuda grass	*Cynodon dactylon* Pers.	YR	High	+++	6,9
9.		Goose grass	*Elusine indica* L.	YR	High	+++	5
10.	Sesame (*Sesamum indicum*)	Bermuda grass	*Cynodon dactylon*	YR	Medium	++	3,7
11.		Nutsedge	*Cyperus esculentus*	Sunner	High	+++	5
12.		Pigweed	*Amaranthus acanthochiton*	Summer	High	+++	11
13.		Spiny pigweed	*Amaranthus spinosus*	Sunner	Medium	++	11
14.		Cock's comb	*Celosia argentea* L.	Summer	High	++	3
15.		Bermuda grass	*Cynodon dactylon* Pers.	YR	High	+++	6,9
16.		Henry's Crab grass	*Digitaria ciliaris*(Retz.) Koeler	Summer	Medium	++	1
17.		Goose grass	*Eleusine indica* (L.)	Summer	Medium	++	5
18.		Wild calary	*Heliotropium indicum* L.	Winter	High	+++	7
19.		Parthenium weed	*Parthenium hysterophorus* L.	YR	Low	+	13
20.		Black nightshade	*Solanum nigrum* L.	Winter	Medium	++	4
21.	Sunflower (*Helianthus annuus*).	Spiny pigweed	*Amaranthus spinosus*	Sunner	Medium	++	10
22.		Bermuda grass	*Cynodon dactylon* Pers.	Summer	Low	+	6,9
23.		Goose grass	*Elusine indica* L.	Summer	Low	+	5
24.		Phagphate	*Spilanthes paniculata*	Summer	Low	+	7
25.	Saflower (*Carthamus tinctorius*)	Pigweed	*Amaranthus acanthochiton* Sauer.	Summer	Low	+	10
26.		Spiny pigweed	*Amaranthus spinosus*	Summer	Medium	++	10
27.		Bermuda grass	*Cynodon dactylon* Pers.	Summer	Low	++	6
28.		Goose grass	*Elusine indica*	Summer	Low	+	5
29.	Soybean (*Glycine max*)	Pigweed	*Amaranthus acanthochiton* Sauer.	Summer	Medium		10
30.		lamb's quarters	*Chenopodium album*	Summer	Medium	++	2
31.		Bermuda grass	*Cynodon dactylon* Pers.	Summer	Low	+	6,9

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4.4 Recording Weeds of Fibre Crops

The fibre crops in Bangladesh consist of jute and kenaf and cotton but jute is considered to be the major and important one. Monsoon with high temperature ensure establishment of crop as well as boost up crop weed competition; causes severe yield losses up to 75-80% (Sahoo and Saraswat, 1988). Cotton also suffered severely reduced yield due to early weed-crop competition but farmers pay less attention to it. The weeds prevailing in fibre crops in Bangladesh are elaborated in Table 30.

Table 30. Weeds of Fibre Crops

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/ medium /low)	Rating	Reference
1.	Jute & Kenaf (*Corchorus olitorius*) (*Hibiscus cannabinus*)	Bermuda grass	*Cynodon dactylon*Pers.	April-May	High	+++	17
2.		Nutgrass	*Cyperus rotundus*	April-May	High	+++	14, 17
3.		Jungle rice	*Echinochloa colonum*	April-May	Medium	++	15
4.		Goose grass	*Elusine indica* L.	April-May	Medium	++	15
5.		Milk weed	*Euphorbia hirta*	April-May	Medium	++	20
6.		Prostate spurge	*Euphorbia microphilla*	April-May	Medium	+	17
7.		Water wisteria	*Hygrophila deformis*	April-May	Low	++	11
8.		Keteli/creeping thistle	*Cirsium arvense*	April-May	Medium	++	3
9.		Joint grass	*Paspalum distichum*	Summer	Low	+	15
10.		Clammy ground cherry	*Physalis heterophylla*	April-May	Medium	++	9,16
11.		Bansket grass	*Ponieun javanicum*	April-May	High	++	10
12.		Common Purslane	*Portulaca quadrifida*	April-May	Low	+	5,17
13.	Cotton (*Gossypium herbaceum*)	DwarfCopperleaf	*Alternanthera sessilis*	Feb	Med	++	22
14.		Prostratepigweed	*Amaranthus blitoides*	Jan	Med	++	21
15.		Slenderamaranth	*Amaranthus viridis*	Jan-March	Med	++	21
16.		Pimpernel	*Anagallis arvensis*	Oct-January	Med	++	23
17.		Kakronda	*Blumea lacera*.	Jan-March	Med	++	7
18.		Hoarycress	*Cardaria draba*	Jan-March	High	+++	4
19.		Lamb's-quarters	*Chenopodium album*	Oct-January	Med	++	3
20.		Bermudagrass	*Cynodon dactylon* Pers.	Oct-January	Low	+	18
21.		Nutgrass	*Cyperus rotundus*	Jan-March	Med	++	14, 17

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/ medium /low)	Rating	Reference
22.		Small crabgrass	*Digitaria ischaemum*	Jan-March	High	+++	18
23.		Hairycrabgrass	*Digitaria sanguinalis*	Oct-January	Med	++	14
24.		Jungle rice	*Echinochloa colonum*	Nov-Mar	Low	+	15
25.		Barnyardgrass	*Echinochloa crus-galli*	Jan-March	Low	+	15
26.		FalseDaisy	*Eclipta alba*	Oct-January	Med	++	7
27.		Hoorah grass	*Fimbristylis miliacea*	Jan-March	Low	+	7
28.		Prime willow	Jussiaea decurrens	Jan-March	High	+++	9
29.		Thumbi	*Leucas aspera*	Jan-March	Low	++	22
30.		Curled-leaved tobacco	*Nicotiana plumbaginfolia*	Oct-January	Med	++	11
31.		Sourgrass	*Oxalis europaea*	Jan-March	Low	+	8
32.		Parthenium weed	*Parthenium hysterophorus*.	Oct-January	Med	++	22
33.		Clammy ground. cherry	*Physalis heterophylla*	Oct-January	Low	+	9,16
34.		Water-pepper	*Polygonum hydropiper*	Oct-January	Med	++	1
35.		Smallknotweed	*Polygonum plebeium*	Nov-Mar	High	+++	10
36.		Goldendock	*Rumex maritimus* L	Nov-Mar	Med	++	10
37.		Yellowfoxtail	*Setaria glauca*	Jan-March	Low	+	8
38.		Green foxtail	*Setaria viridis*	Jan-March	Low	+	6
39.		TurkeyBerry	*Solanum torvum*	Oct-January	Med	++	2
40.		Commonsow thistle	*Sonchus oleraceus*	Oct-January	High	+++	10
41.		Goatweed	*Scoparia dulcis*	Nov-Mar	Med	++	9
42.		Pennycress	*Thlaspi arvense*	Oct-January	Med	++	24
43.		Roughcocklebur	*Xanthium strumariun*	Nov-Mar	Low	+	15

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4.5 Recording Weeds of Sugar Crops

Sugarcane and sugar beets are the sugar crops cultivated in Bangladesh. Sugarcane remains in the field about 12 months. So, many weeds may infest the crop and about 20% yield reduction may occur (SRTI, 1978). Therefore, it needs one early weeding to minimize yield reduction for both sugarcane and sugar beet. The weeds found in sugar crops are listed below in Table 31.

Table 31. Weeds of Sugar Crops

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/ medium/ low)	Rating	Reference
1.	Sugarcane (*Saccharum officinarum*)	Spiny amaranth	*Amaranthus spinosus*	January - April	Medium	++	23
2.		Slender amaranth	*Amaranthus viridis*	March. – April	Medium	++	23
3.		Shialkantha/Mexican prickly poppy	*Argemone mexicana*	Rabi	Low	+	12
4.		Blumea	*Blumea mollis* (D. Don) E.D. Merr	Year round	Med	++	25
5.		Dudhia/broad button weed	*Borreria laevis* (Lam) Griseb.	Rabi	Low	+	3
6.		Sickle pod	*Cassia tora*	Jan. – March.	High	+++	22
7.		Lamb's-quarters	*Chenopodium album*	Dec.r – March.	High	+++	3
8.		False beardgrass	*Chrysopogoa aciculetus*	March. – April	Medium	++	17
9.		Stripped rotolaria	*Crotolaria striata*	January - April	Low	+	17
10.		Telkucha/Cantaloupe	*Curcumis melo*	Rabi	Low	+	23
11.		Bermuda grass	*Cynodon dactylon* Pers.	Nov. – April	High	+++	15
12.		Straw-colored flatsedge	*Cyperus strigosus*	Rabi	Low	+	17
13.		Yellow nut grass	*Hydrolia zeylanica*	March. – Oct.	Medium	++	26

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/ medium/ low)	Rating	Reference
14.		Nutgrass	*Hygrophila deformis*	Jan – March.	High	++	19
15.		Cat's ear	*Hypochaeris radicata*	Rabi	Med	++	26
16.		Barnyardgrass	*Echinochloa crus-galli*	March. – Oct.	Low	+	14
17.		Asian penny wort	*Hydrocotyl asiatica*	March. – April	Low	+	6
18.		Kalmisak/Water spinach	*Ipomea aquatica*	March– Oct.	Low	+	13
19.		Bell vine	*Ipomea plebeia* R. Br.	May-Dec.	High	+++	2
20.		Ulu/Cogon grass	*Imperata cylindrica*	Jan. - April	Medium	++	4
21.		Thambai/Dondakalas	*Leucas aspera*	Jan. – March.	Low	+	27
22.		4-leaved water clover	*Marsilea quadrifolia*	March– Oct.r	Med	++	13
23.		Sensitive plant	*Mimosa pudica*	Nov. – April	Low	+	23
24.		Dallis grass	*Paspalam dialatum*	Nov. – April	Med	++	10
25.		Cutleaf ground cherry	*Physalis angulata*	Nov. – April	High	+++	17
26.		Nunia/common purslane	*Portulaca oleracea* L.	Rabi	Low	+	17
27.		Thatch grass	*Saccharum spontaneum*	Dec–March.	Medium	++	17
28.		Wild Tobacco	*Solanum mauritianum*	Dec. – March.	Medium	++	8
29.		Black night shade	*Solanum nigrum*	Nov. – April.	Low	+	5
30.		Turkey berry	*Solanum torvum*	Nov – April	Medium	++	1
31.		Rrat's tail grass	*Sporobolus indicus*	Dec. – March.	Medium	++	17
32.		Bijlee ghas/ Witch weed	*Striga densiflora*	May-Oct.	High	+++	23
33.		Common vetch	*Vicia hirsuta*	Nov. – April	Medium	++	17
34.		BichaphalGhagra	*Xanthium indicum*	May-Oct.	High	+++	16
35.		Cocklebur	*Xanthium italicum*	Nov. – April	high	+++	13
36.	Sugar beet (*Beta vulgaris*)	Katanatey/spiny amaranth	*Amaranthus spinosus*	Novembner-February	Medium	++	23
37.		Shaknate/slender amaranth	*Amaranthus viridis*	Novembner-February	Medium	++	23
38.		Shialkata/Maxican poppy	*Argemone mexicana*	Rabi	Low	+	12
39.		Dudhia/broad button weed	*Borreria laevis* (Lam.) Griseb.	Rabi-season	Medium	++	3
40.		Sickle pod	*Cassia tora*	December -March	High	+++	22

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/ medium/ low)	Rating	Reference
41.		Stripped rotolaria	*Crotolaria striata*	December- March	High	+	17
42.		Bathua/ White Goosefoot	*Chenopodium album*	January- February	Medium	++	3
43.		False beard grass	*Chrysopogoa aciculetus.*	March. – April	Medium	++	17
44.		Telkucha/ Cantaloupe	*Curcumis melo*	Rabi	Low	+	23
45.		Barmuda grass	*Cynodon dactylon* Pers.	November. – April	High	+++	15
46.		Yellow nut grass	*Cyperus esculantus.*	November. – April	Medium	++	14
47.		Mutha/ Nut grass	*Cyperus rotandus .*	November. – April.	High	+++	15
48.		Crow foot grass	*Dactyloctenium aegyptium.*	November. – April	Medium	++	23
49.		Goose grass	*Elusine indica* L.	January – March.	High	+++	14
50.		Dondokalas/Thambai	*Leucas aspera*	Novembner-March	Low	+	27
51.		Grass	*Crysopogon acciculatus*	Rabi	Medium	++	17
52.		Wild Tobacco	*Solanum mauritianum*	Novembner-March	Low	+	8
53.		Titabegun/Turkey berry	*Solanum torvum*	Novembner-March	Medium	++	1
54.		Mashur chana	*Vicia hirsuta*	January-February	Medium	++	17
55.		Green chick weed	*Mollugo verticillata*	December- March	Medium	++	17
56.		Arrowleaf falsepickerelweed	*Monochoria hastata*	Novembner-March	Medium	++	17

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4.6 Recording Weeds of Tuber Crops

Ten weeds are recorded from teh Potato field such as Pigweed, Spiny pigweed, Goosefoot, Bermuda grass, Nutsedge, Barnyard grass, Goatweed, Harkuch, Black nightshade and Parthenium weed. Which are shown in Table 32.

Table 32: Weeds of Tuber Crops

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/ medium/low)	Rating	Ref.
1.	Potato (*Solanum tuberosum*)	Pigweed	*Amaranthus acanthochiton*	Winter	Low	+	9
2.		Spiny pigweed	*Amaranthus spinosus*	Winter	Low	++	8
3.		Goosefoot	*Chenopodium* album L	Winter	Low	+	1
4.		Bermuda grass	*Cynodon dactylon*	Year round	Medium	++	4
5.		Nutsedge	*Cyperus esculentus*	Winter	Low	+	3
6.		Barnyard grass	*Echinochloa colonum*	Summer	Low	+	3
7.		Goatweed	*Croton sparsriflora*	Summer	Low	+	1
8.		Harkuch	*Enhydra fluctuans*	Winter	Low	+	5
9.		Black nightshade	*Solanum nigrum*	Winter	Low	+	2
10.		Parthenium weed	*Parthenium hysterophorus*	Year round	Low	+	10

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4.7 Recording Weeds of Vegetable Crops

A lot of crops belong to vegetable groups is cultivated in Bangladesh. These include Tomato, Eggplant, Cucurbits, Okra, Cucumber, Beans and many leafy vegetables. They are cultivated at different times of a year. So, various weeds are infesting vegetable crops round the year. As for example, a leafy vegetable-Indian Spinach are infested by many weeds and two hand weeding within 30 days after transplanting may achieve maximum benefit (Khan et al., 2008). The weeds found in vegetable crops are listed below in Table 33.

Table 33: Weeds of Vegetable Crops

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/ medium/low)	Rating	Ref.
1	Brinjal (*Solanum melongena*)	Pigweed	*Amaranthus acanthochiton*	Winter	High	++	8
2		Spiny amaranth	*Amaranthus spinosus*	Winter	High	++	8
3		White goosefoot	*Chepodium album*	Winter	Medium	+	9
4		Barmuda grass	*Cynodon dactylon* Pers.	Year round	High	++	4
5		Yellow Nutsedge	*Cyperus esculentus*	Winter	Medium	++	3
6		Nut grass	*Cyperus rotandus*	Winter	Medium	++	4
7		Goose grass	Elusine indica L.	Year round	High	++	3
8		Parthenium weed	*Parthenium hysterophorus*	Year round	Medium	++	10
9		Horse nettle	*Solanum carolinense*.	Winter	Low	+	7
10		Black nightshade	*Solanum nigrum*	Winter	Medium	+	2
11	Tomato (*Lycopersicum esculentum*)	Spiny amarnth	*Amaranthus spinosus*	Winter	Medium	++	8
12		Slenderamarnth	*Amaranthus viridis*	Winter	Medium	++	8
13		Barmuda grass	*Cynodon dactylon*	Year round	High	++	4
14		Goose grass	*Elusine indica* L.	Year round	High	++	3
15		Purslane	*Portulaca oleracea*	Winter	Medium	++	5
16	Bean (*Lablab purpureus*)	Slender amaranth	*Amaranthus viridis*	Winter	Medium	++	8
17		Barmuda grass	*Cynodon dactylon* Pers.	Year round	High	++	4
18		Goose grass	*Elusine indica*	Year round	High	++	3
19		Purslane	*Portulaca oleracea*	Winter	Medium	++	5
20	Cabbage (*Brassica oleracea*) & Cauliflower (*Brassica oleracea* var. *botrytis* L.)	White goosefoot	*Chepodium album*	Winter	Medium	+	1
21		Barmuda grass	*Cynodon dactylon*	Year round	High	++	4
22		Goose grass	*Elusine indica* L.	Year round	High	++	3
23		Purslane	*Portulaca oleracea*	Winter	Medium	++	5
24	Okra (*Abelmoschus esculentus*)	Spiny pigweed	*Amaranthus spinosus*	Summer	Medium	++	8
25		Goose grass	*Elusine indica*	Year round	High	++	3
26	Bottle gourd (*Lagenaria siceraria*)	Barmuda grass	*Cynodon dactylon* Pers.	Year round	High	++	4
27		Goose grass	*Elusine indica* L.	Year round	High	++	3
28		Purslane	*Portulaca oleracea*	Winter	Medium	++	5
29	Ridge gourd	Spiny pigweed	*Amaranthus spinosus*	Winter	Medium	++	8

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/ medium/low)	Rating	Ref.
30	(*Lufa acutangula* roxb)	Slender amaranth	*Amaranthus viridis*	Winter	Medium	++	8
31		Barmuda grass	*Cynodon dactylon*	Year round	High	++	4
32		Goose grass	*Elusine indica* L.	Year round	High	++	3
33		Purslane	*Portulaca oleracea*	Winter	Medium	++	5
34	Snake gourd (*Trichosanthes cucmerina*)	Slender amaranth	*Amaranthus viridis*	Winter	Medium	++	8
35		Barmuda grass	*Cynodon dactylon*Pers.	Year round	High	++	4
36		White goosefoot	*Elusine indica*	Year round	High	++	3
37		Purslane	*Portulaca oleracea*	Winter	Medium	++	5
38	Danta (*Amaranthus caudatus*.)	White goosefoot	*Chenopodium album*	Winter	Medium	++	1
39		Barmuda grass	*Cynodon dactylon*	Year round	High	++	4
40		Goose grass	*Elusine indica*	Year round	High	++	3
41	Bitter gourd (*Momordica charantia*)	Spiny pigweed	*Amaranthus spinosus*	Winter	Medium	++	8
42		Slender amaranth	*Amaranthus viridis*	Winter	Medium	++	8
43		Amrul/sorrel	*Oxalis europaea*	Year round	Medium	++	5

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4.8 Recording Weeds of Fruit Crops

Fruit plants /trees are long-lived**.** Various types of weeds may infest the fruit garden. Grassy weeds are not competing for nutrient because most tree plants are deep-rooted. But some parasitic plants are directly sucking nutrient fron the trunk or branch of the infested plants like *Loranthus* sp. The fruit plant strawberry is sensitive to weed infestation. Polythene mulch/ straw mulch reduce weed infestation and maximize its yield (Karim *et al.,* 2009). The major and minor weeds of fruits crops are shown in Table 34.

Table 34: Weeds of Fruit Crops

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high /medium /low)	Rating	Ref.
1.	Mango (*Mangifera indica*Ll	Loranthus	*Dendrophthae falcate*	Year round	Low	+	1
2.		Parthenium weed	*Parthenium hysterophorus*	Year round	Low	+	16
3.		Bermuda grass	*Cynodon dactylon* Pers.	Year round	Med	++	8
4.	Guava (*Psidium guajava*)	Kakpaya/Crowfoot grass	*Dactyloctenium aegyptium*	Year round	Med	++	15
5.		Joina/Hoorahgrass	*Fimbristylis miliacea*	Year round	Medium	++	6
6.		Thambai	*Leucas aspera*	Year round	High	++	17
7.		Bontamak/Wild tobacco	*Nicotiana plumbaginfolia*	Year round	Med.	++	12
8.		Amrul/Indian sorrel	*Oxalis europaea*	Year round	Medium	++	11
9.		Parthenium weed	*Parthenium hysterophorus*.	Year round	Med	++	16
10.		Clammy ground cherry	*Physalis heterophylla*	Year round	Medium	++	11
11.		Biskatali/Smart weed	*Polygonum hydropiper*	Year round	Medium	++	2
12.		Chemtisa/Common knotweed	*Polygonum plebeium*	Year round	Medium	++	12
13.		Gang palong/Golden dock	*Rumex maritimus*	Year round	High	++	9
14.		Common Purslane	*Setaria glauca*	Year round	Med.	++	11
15.		Purple nut sedge	*Setaria viridis*	Year round	Medium	++	5
16.		Flat sedge	*Solanum torvum*	Year round	Medium	++	3
17.		Yellow nutsedge:	*Sonchus oleraceus*	Year round	Medium	++	12
18.		Small-floweed umbrella sedge	*Thlaspi arvense*.	Year round	Low	+	18

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high /medium /low)	Rating	Ref.
19.	Banana (*Musa acuminate*)	White goosefoot	*Chenopodium album*	Year round	Med	++	4
20.		Bermuda grass	*Cynodon dactylon* Pers.	Year round	Low	+	8
21.		Banyardgrass	*Echinochloa crus-galli*	Winter	Medium	++	7
22.		Goose grass	*Elusine indica*	Year round	High	++	7
23.		Amrul/Indiansorrel	*Oxalis europaea*	Year round	Medium	++	11
24.		Purslane	*Portulaca oleracea*	Winter	Medium	++	11
25.		Kakri/Mullein	*Verbasculum thapsus* L	winter	Med.	++	14
26.	Strawberry (*Fragaria anannasa*)	Shaknote	*Amaranthus viridis*	winter	Med	++	15
27.		Bermuda grass	*Cynodon dactylon* Pers.	Year round	Low	+	8
28.		Nut grass	*Cyperus rotandus*	Winter	Medium	++	8
29.		Purslane	*Portulaca oleracea*	Winter	Medium	++	11

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4.9 Recording Weeds of Spices Crops

A lot of spice crops like onion, garlic, chili, ginger, turmeric, cumin and so on, is grown in the country. Some of the crops are grown in the winter while the others are grown during 10 months from April to January of a year. So, weed infestation also vary among the crops. Most of the farmers of Bangladesh usually rely on hand weeding. As a result, the cost of cultivation increases. In such situation herbicide use is necessary. The weeds that prevail in the spice crops in Bangladesh are listed below in Table 35.

Table 35: Weeds of Spices Crops

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/ medium/low)	Rating	Ref.
1.	Onion (*Allium cepa*)	Common chamomile	*Chamomilla recutita* (L.) Rauschert	Winter	Low	+	10
2.		Barmuda grass	*Cynodon dactylon* Pers.	Year round	High	+++	8
3.		Nutgrass	*Cyperus rotundus*	Year round	High	+++	8
4.		Barnyard grass	*Echinochloa crus-galli*	Winter	Medium	++	6

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/ medium/low)	Rating	Ref.
5.		Goose grass	*Eleusine indica*	Year round	High	+++	I6
6.		Red tassel flower	*Emilia sonchifolia*	Year round	High	+++	15
7.		Garden spurge	*Euphorbia hirta*.	Year round	High	++	13
8.		Bathua	*Chenopodium album*	Any time	Medium	+++	11
9.		Kesardam	*Ludwigia adscendense*	Winter	Medium	++	6
10.		Hogweed	*Polygonum aviculare*	Winter	Medium	++	3
11.		Biskatali/$_{\text{Smart weed}}$	*Polygonum hydropiper*.	Year round	High	+++	1
12.		Green foxtail	*Setaria viridis*	Year round	High	+++	5
13.		Black nightshade	*Solanum nigrum*.	Winter	Medium	++	4
14.	Garlic (*Allium sativum*)	Sourgrass	*Oxaliseuropaea*	Winter	Medium	++	9
15.	Onion & garlic	Parthenium weed	*Parthenium hysterophorus.*	Winter	Medium	++	15
16.	Chili (*Capsicum frutucens*)	Spiny pigweed	*Amaranthus spinosus*	Year round	High	+++	13
17.		Slender amaranth	*Amaranthus viridis*	Year round	High	+++	13, 14
18.		Barmuda grass	*Cynodon dactylon Pers.*	Winter	Medium	++	8
19.		Crab grass	*Digiteria sanguinalis*	Winter	Medium	++	11
20.	Ginger (*Gigiber officinale*)	Spiny pigweed	*Amaranthus spinosus*	Winter	Medium	++	14
21.		Slender amaranth	*Amaranthus viridis*	Winter	Medium	++	14
22.		Bermuda grass	*Cynodon dactylon Pers.*	Year round	High	+++	8
23.		Crabgrass	*Digiteria sanguinalis*	Year round	High	+++	11
24.		Goosegrass	*Elusine indica*	Year round	High	++	7
25.		Purslane	*Portulaca oleracea*	Winter	Medium	++	9
26.	Turmeric (*Cucuma longa*)	Spiny pigweed	*Amaranthus spinosus*	Winter	Medium	++	14
27.		Slender amaranth	*Amaranthus viridis*	Winter	Medium	++	14
28.		Barmuda grass	*Cynodon dactylon Pers.*	Year round	High	+++	8
29.		Crabgrass	*Digiteria sanguinalis*	Year round	High	+++	11
30.		Purslane	*Portulaca oleracea*	Winter	Medium	++	9

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4.10 Recording Weeds of Flower and Ornamental Plants

In Bangladesh, many kinds of flowers and ornamental plants are cultivated in open field, especially, in winter season. Some flowers are grown under shade to protect these from rain in the summer-rainy season. There are various types of weed infestation in the field. To suppress weeds farmers generally use hand weeding. Following Table 36 is showing a list of weeds of flowers and ornamentals in Bangladesh.

Table 36: Weeds of Flower and Ornamental Plants

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/ medium /low)	Rating	Ref.
1.	Flower Rose *(Rosa Santana)* Cosmos *(Cosmos bipinnatus)* Gladiolus *(Gladiolus Natalensis)*	Pigweed	*Amaranthus acanthochiton*	Winter	High	++	11
2.		Spiny pigweed	*Amaranthus spinosus*	Winter	Medium	++	10
3.		Lamb's quarter	*Chenopodium album*	Winter	Medium	++	2
4.		Bermuda grass	*Cynodon dactylon* Pers.	Year round	High	+++	7
5.		Yellow Nutsedge	*Cyperus esculentus*	Winter	Medium	++	4
6.		Parthenium weed	*Parthenium hysterophorus*	Year round	Low	+	8
7.		Golden dock	*Rumex maritimus* L.	Winter	Low	+	6
8.		Horse nettle	*Solanum carolinense*	Summer	Medium	++	9
9.		Black night shade	*Solanum nigrum*	Summer	Medium	++	3
10.	Red Ginger (*Hedychium coronarium*)	Bermuda grass	*Cynodon dactylon* Pers.	Year round	High	+++	7
11.		Mutha/Nutgrass	*Cyperus rotandus* L.	Summer	Low	+	5
12.	Thuza (*Thuza occidentalis*)	Bermuda grass	*Cynodon dactylon* Pers.	Year round	High	+++	7
13.		Mutha/Nutgrass	*Cyperus rotandus* L.	Summer	Low	+	5
14.		Goose grass	*Elsinoe indica*	Summer	Low	+	5
15.	Mussaenda (*Mussaenda glabra*)	Bermuda grass	*Cynodon dactylon* Pers.	Year round	High	+++	7
16.		Goose grss	*Elsinoe indica*	Summer	Low	+	4
17.	Ixora (*Ixora coccinea*)	Bermuda grass	*Cynodon dactylon* Pers.	Year round	High	+++	7
18.		Spiny pigweed	*Amaranthus spinosus*	Winter	Medium	++	10
19.	Calendula (*Calendula officinalis*)	Angulee ghas/ Crab grass	*Digitaria sanguinalis*	Year round	High	+++	7
20.		Angulee ghas/ Crab grass	*Leersia hexandra*	Winter	Medium	++	5
21.		Wingleafprimrose-willow.	*Ludwigia decurrens*	Winter	High	+++	1

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4.11 Recording Weeds of Forest Trees

Forest crops consist of perennial plants. Weeds like grassy plants/sedges grown in the ground are not harmful to forest trees as they are not competed for nutrient with them. Some herbs/creeping weeds hindering photosynthesis and make infested tree weak. Table 37 is showing some weeds of forest pants.

Table 37: Weeds of Forest Trees

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/ medium /low)	Rating	Ref.
1.	Forests Crops Shal *(Shorea robusta),* Rain tree *(Albizia lebbeck),* Babul (*Acacia arabica*), Sundari (*Heritiera fomes*), Amla *(Phyllanthus emblica)*, Akashmoni *(Acacia auriculiformis),* Murray's red gum, Harpoon-handle tree *(Bruguiera gymnorhiza),* Segun *(Agrotoreutus nyongii),* Hijol *(barringtonia acutangula)*	Chagalgacha/ goat weed	*Agaratum conyzoldes*	Year round	High	+++	1,3,9
2.		Telakucha/Ivy gourd	*Cephalandra indica*	Summer	Med	++	10
3.		Bermuda grass	*Cynodon dactylon Pers.*	Year round	High	+++	10
4.		Giant dodder	*Cuscuta reflexa*	Winter	Low	+	13
5.		Fireweed	*Crassocephalum crepidioides*	Winter	Low	++	11
6.		*Loranthus*	*Dendrophthae falcate*	Year round	Low	+	1
7.		Creeping tick trefoi	*Desmodium trifolia*	Year round	High	+++	2
8.		Dekisak/Wood fern	*Dryopteris filix-mas*	Year round	High	+++	7
9.		*Imson weed*	*Dutura stramonium*	Summer	Med	++	10
10.		Lilac tessel flower	*Emilia sonchifolia* L.	Year round	Med	++	12,15
11.		Ulu/Cogon grass	*Imperata cylindrical*	Summer	Low	+	6
12.		Mikani lata /heartleaf hempvine	*Mikania cordata*	Summer	High	+++	14
13.		Giant sensitive plant	*Mimosa invisum*	Summer	High	+++	14
14.		Sensitive plant	*Mimosa pudica* L.	Year round	Med	++	14
15.		Hazardana	*Phylanthus niruri*	Summer	Med	++	1,9
16.		Cut-leaved ground cherry	*Physalis angulata* L.	Year round	Med	++	10
17.		buffalobur nightshade,	*Solanum rostratum*	Year round	Med	++	4

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4.12 Recording Weeds of Narcotics and Beverage Crops

Among the Narcotics & Beverage crops Tea and Tobacco are considered as two major crops in Bangladesh. Betel nut and betel vine are crops minor in nature. Betel vine cultivated in protected areas less prone to weed infestation. Tobaccos are growing mainly in plain land whereas tea is growing in high topography such as in the hilly areas. Tobacco are produced in winter but tea is grown as annual plant. In tea culture, weeds are noxious and perhaps the most vital antagonistic force to tea productivity. The estimated crop loss by weeds in tea about 9-12% in Bangladesh (Sana,1989). The major and minor weed of narcotics and beverage crops are shown in Table 38.

Table 38: Weeds of Narcotics and Beverage Crops

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/ medium/low)	Rating	Reference
1.	Tea (*Comellia sinensis*)	Velvet leaf	*Abutilion indica*	Summer	High	+++	14
2.		Climbing creeper	*Agaratum conyzoldes*	After 1st rain	High	+++	1
3.		Spiny amaranth	*Amaranthus spinosus*	Summer	Low	+	14
4.		Kakronda	*Blumea lacera*	Summer	High	+++	8
5.		Shaggy weed	*Borreria hispida*	Summer	High	+++	14
6.		Giant dodder	*Cuscuta reflexa*	Winter	High	+++	12, 14
7.		Barmuda grass	*Cynodon ductylon* Pers.	After 1st rain	High	+++	8
8.		Nutsedge	*Cypeus kyllinga*	Spring	High	+++	3
9.		Mutha/nutgrass	*Cyperus rotundus*	Spring	High	+++	7
10.		Efloraof/India	*Cyperus tenuspica*	Rainy	High	+++	8
11.		Indiantreepi	*Cyrtococcum patens*	Summer	High	+++	7
12.		Southern Crab grass	*Digiteria carinatus*	Spring	High	+++	13
13.		Anguli ghas/Crab grass	*Digiteria sanguinalis*	Spring	High	+++	10
14.		African cough grass	*Digiteria. scalarum*	Spring	High	+++	13
15.		Barnyardgrass	*Echinochloa crus-galli*	Summer	High	+++	6
16.		Garden spurge	*Euphorbia hirta*	Spring	High	+++	13
17.		Ulu/Cogon grass	*Imperata cylindrica*	After 1st rain	High	+++	4
18.		Lindernia	*Lindernia anagallis*	Summer	High	+++	14
19.		Climbing hempvine	*Mikania scandens*	Summer	High	+++	14
20.		Giant sensitive plant	*Mimosa invisum*	Summer	High	+++	14
21.		Sensitive plant	*Mimosa pudica*	Summer	High	+++	14

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/ medium/low)	Rating	Reference
22.		Texas frogfruit	*Phylla nodiflora L*	Winter	High	+++	5, 8
23.		stonebreaker	*Phyllunthus niruri*	Spring	High	+++	1
24.		Biskatali	*Polygonum hydropiper*	Winter	High	+++	2
25.		Purslane	*Portulaca oleracea*	Spring	High	+++	9
26.		Hawl beard	*Scirpus japonica*	Summer	Medium	++	13
27.		Kureta	*Sidia acuta*	After 1st rain	High	+++	15
28.		Iron weed	*Vernonia cinerea*	After 1st rain	High	+++	14
29.	Tobacco (*Nicotiana tabacum*L)	Spiny amaranth	*Amaranthus spinosus*	Winter	Low	+	13
30.		Bermuda grass	*Cynodon dactylon* Pers.	Winter	Low	+	8
31.		Mutha/nutgrass	*Cyperus rotundus*	Spring	Low	+	7
32.		Goose grass	*Eleusine indica*	Winter	Low	+	6
33.		Bijlee ghas/ Witch weed	*Striga densiflora*		Medium	++	14
34.	Betel nut (*Areca catechu*)	Barmuda grass	*Cynodon ductylon* Pers.	After 1st rain	High	++	8
35.		Goose grass	*Eleusine indica*	Summer	High	++	6
36.		Ulu/Cogon grass	*Impereta cylindrical* (L.) P. Beauv.	Summer	High	+++	4
37.	Betel leaf (*Piper betle* L.)	Barmuda grass	*Cynodon ductylon* Pers.	After 1st rain	Low	+	8
38.		Chapra'Goose grass	*Eleusine indica*	Summer	Low	+	6

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4.13 Recording Weeds of Medicinal Plants

Medicinal plants are cultivated by different Allopathic, Ayurveda and Unani institutions for producing herbal and other medicine. Recently Aloe-vera is widely cultivated in Natore. There are some weeds for medicinal plants. Table 39 show a list of weed in some medicinal plants of Bangladesh.

Table 39: Weeds of Medicinal Plants

Sl. No.	Plant with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/ medium /low)	Rating	Ref.
1.	Sonapata/Senna (*Cassia angustifolia* Vahl)	Bermuda grass	*Cynodon dactylon* Pers.	Year round	Medium	++	6
2.		Goose grass	*Elsinoe indica*	Year round	High	+++	I4
3.	*Tulsi/Basil* (*Ocimum sanctum*)	Bermuda grass	*Cynodon dactylon* Pers.	Year round	Medium	++	6
4.		Giant dodder	*Cuscuta reflexa*	Winter	Low	++	7, 8
5.	Aparajita (*Clitoria termatea*)	Goose grass	*Elsinoe indica*	Year round	High	+++	4
6.		Ulu/Cogon grass	*Imperata cylindrical*	Summer	Low	+	2
7.		Blue grass	*Poa annua*	Summer	Med	++	5
8.	Chirayata (*Swertin chirata*)	Giant sensitive plant	*Mimosa invisum*	Summer	High	+++	8
9.		Bermuda grass	*Cynodon dactylon Pers.*	Year round	Medium	++	6
10.	Kalmegh (*Andrographis paniculate*)	Hazardana	*Phylanthus niruri*	Summer	Medium	++	1
11.		Cut-leaved ground cherry	*Physalis angulata* L.	Year round	Med	++	6
12.		Blue grass	*Poa annua*,	Summer	Med	++	5
13.	Aloe-vera *(Aloe indica)*	Spiny pigweed	*Amaranthus spinosus*	Winter	Medium	++	8
14.		Bermuda grass	*Cynodon dactylon* Pers.	Year round	Low	+	6
15.	Haritaki (*Terminalia-chebula*)	Bermuda grass	*Cynodon dactylon* Pers.	Year round	Medium	++	6
16.		Goose grass	*Elsinoe indica*	Year round	High	+++	4

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5.0 SUMMARIZED PRESENTATION OF ALL PESTS OF PLANTS AND PLANT PRODUCTS IN BANGLADESH

Table 40. Summary record of Insect and Mite pests, Disease causing pathogens and Weed Species presented alphabatically

A. Insect and Mite pests

Sl. No.	Scientific name	Host plants	Rating	Reference Table
1.	*Abryna regispetri* Paiva	Bamboo	+	11
2.	*Acanthiophillus helianthi* Rossi	Safflower	+	3
3.	*Acaphylla theae* (Watt)	Tea	+	12
4.	*Acaudaleyrodes rachipora* Singh	Tulsi	+	13
5.	*Aceria doctersi* (Nalepa)	Cinnamon	+	9
6.	*Aceria litchi* (Keiger)	Litchi	+++	8
7.	*Aceria mangiferae* Sayed	Mango	+	8
8.	*Achaea janata* (Linneaus)	Karonda	+	8
9.	*Acherontia styx* (Westwood)	Ashwagandha, Sesame	++	3,13
10.	*Acleris epidesma* Lower	Debdaru	+	11
11.	*Acmaeodera aurifera* Laporte & Gory	Babla, Cutch tree	+	11
12.	*Acmaeodera stictipennis* Laporte & Gory	Khumbi, Bandar lathi¸ Iron wood	+	11
13.	*Acrida exaltata* (Walker)	Rice, Lemon grass, Datura, Thankuni	+	1, 13
14.	*Acrocercops calycophthalma* Meyrick	Bohera	+	13
15.	*Acrocercops cathedraea* Meyrick	Mango	+	8
16.	*Acrocercops euthycolona* Meyrick	Mohua	+	11
17.	*Acrocercops niphocremna* Meyrick	Haritoki	+	13
18.	*Acrocercops ordinatella* Meyrick	Camphor	+	11
19.	*Acrocercops ustula* Stainton	Deshi gab	+	8
20.	*Acrocerocops aestiopa* Meyrick	Debdaru	+	11
21.	*Acrocerocops auricilla* Stainton	Mahagoni	+	11
22.	*Acrocerocops desiccata* Meyrick	Jog dumur	+	11
23.	*Acrocerocops gemoniella* Stainton	Jiga	+	11
24.	*Acrocerocops hierocosma* Meyrick	Litchi	+	8

Sl. No.	Scientific name	Host plants	Rating	Reference Table
25.	*Acrocerocops ordinatella* Meyrick	Kanchan	+	11
26.	*Acrocerocops resplendens* Stainton	Aswatha	+	11
27.	*Acrocerocops telestis* Meyrick	Gamari, Indian black berry	+	11
28.	*Acrocerocops terminaliae* Stainton	Arjun	+	11
29.	*Actias selene* (Hübner)	Jiga, Sajina	+	11
30.	*Adisura atkinsoni* Moore	Beans	+	7
31.	*Adoretus bimarginatus* Ohaus	Australian acacia	++	11
32.	*Adoretus caliginosus* Burmeister	Sissoo	+	11
33.	*Adoretus serratipes* Arrow	Rose	+++	10
34.	*Aeolesthes holocericea* Fabricius	Guava, Polash, Banyan tree, White mulberry	+	8, 11
35.	*Aeolothrips collaris* Priesner	Amaranthus	+	7
36.	*Agonoscelis nubila* (Fabricius)	Sugarcane, cucurbit	+	5, 7
37.	*Agrilus acutus* Thumb	Kenaf, mesta	+++	4
38.	*Agrilus elaeocarpi* Thery	Olive	+	8
39.	*Agriotes* sp.	Wheat	+	1
40.	*Agromyza* sp.	Beans	+	7
41.	*Agrotera basinotata* Hampson	Indian black berry	+++	8, 11
42.	*Agrotis ipsilon* (Hufnagel)	Linseed, Sissoo, Maize, Chickpea, Mustard, Groundnut, Soybean, Sugar beet, Brinjal, Potato, Cabbage, Cauliflower, Water melon, Onion, Garlic, Chili, Capsicum, Coriander, Fennel, Tobacco, Hemp, Mint, Wheat, Cotton, Lemon grass	+++	1, 2, 3, 5, 6, 7, 8, 9,10, 11, 12, 13
43.	*Agrotis segetum* (Denis & Schiffermüller)	Tobacco	+	12
44.	*Agrotis* spp.	Sunflower	++	3
45.	*Ahasverus advena* Linneaus	Maize	+	1
46.	*Alcides collaris* Pascoe	Beans	+	7
47.	*Alcidodes affaber* Aurivillius	Silk cotton, Banyan tree	+	4, 11
48.	*Alcidodes crassus* Pascoe	Dholi garjan	+++	11
49.	*Alcidodes frenatus* Faust	Mango	+++	8
50.	*Alcidodes ludificator* Faust	Gamari, Segun	+	11
51.	*Aleurocanthus bambusae* (Peal)	Date palm	+	5

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52.	*Aleurocanthus inceratus* Silvestri	Champa	+	11
53.	*Aleurocanthus nubilans* (Buckton)	Betel leaf	++	12
54.	*Aleurocanthus woglumi* Ashby	Citrus, Sapota	+	8
55.	*Aleurodicus disperses* Russell	Cotton, Guava, Madhabilata, Papaya	++	4, 8, 10,
56.	*Aleurolobus barodensis* (Maskell)	Sugarcane	+	5
57.	*Allisonotum impressicolle* Arrow	Sugarcane	+	5
58.	*Alphitobius piceus* (Olivier)	Rice	+	1
59.	*Altha nivea* Walker	Debdaru	+	11
60.	*Amata pasalis* Fabricius	Beans	+	7
61.	*Amathusia phidippus* Johann	Oil palm	+	11
62.	*Amblyrhinus poricollis* Schoenherr	Australian oak	+	11
63.	*Ambulyx substrigillis* Westwood	Sesame	+	3
64.	*Amradiplosis amraemyia* Rao	Mango	+	8
65.	*Amradiplosis echinogalliperda* Mani	Mango	+	8
66.	*Amrasca* sp.	Aroids	+	6
67.	*Amrasca biguttula* (Ishida)	Sunflower, Muskdana	+	3, 13
68.	*Amrasca biguttula biguttula* (Ishida)	Soybean, Ashwagandha, Cotton, Brinjal, Potato, Lady's finger, Tomato	+	3, 4, 7, 13
69.	*Anarsia ephippias* Meyrick	Soybean, Groundnut	+++	3
70.	*Anatrachyntis philocarpa* Meyrick	Date palm	+	5
71.	*Anomala* sp.	Sugarcane	+	5
72.	*Anomala bengalensis* Blanchard	Mango, Kumbhi, Bandar lathi	+	8, 11
73.	*Anomala antique* (Gyllenhal)	Randi koroi	+	11
74.	*Anomala polita* Blanchard	Pine, Segun, Gozari, Bandar lathi	+	11
75.	*Anomalococcus indicus* Ramakrishna Ayyar	Babla	+++	11
76.	*Anomis flava* (Fabricius)	Cotton, Muskdana	+	4, 13
77.	*Anomis sabulifera* Guenee	Jute	++	4
78.	*Anoplocnemis phasiana* (Fabricius)	Krishnachura	+	11
79.	*Anthaxia phyllanthi* Obenberger	Amloki	+	8
80.	*Antheraea paphia* Linneaus	Arjun, Rubber	+	11

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81.	*Anthophila aegyptiaca Zeller*	Sal	+++	11
82.	*Antigastra catalaunalis* (Duponchel)	Sesame	+++	3
83.	*Antitrygodes cuneilinea* Walker	Kadam	+	11
84.	*Antoba olevacea* (Walker)	Brinjal	++	7
85.	*Aonidiella aurantii* (Maskell)	Citrus, Guava, Pomegranate, Cycas, Rose	+	8, 10, 11
86.	*Aonidiella citrina* Coquillett	Citrus, Kathbel	+	8
87.	*Aonidiella orientalis* Newstead	Guava, Coconut, Ber, Wood apple, Cashew nut, Tamarind, Neem, Kumbhi, Bandar lathi, Mahagoni,	+	8, 11
88.	*Aphannus sordidus* Fabricius	Soybean	+	3
89.	*Aphis craccivora* (Koch)	Lentil, Chickpea, Mungbean, Grasspea, Cowpea, Blackgram, Filed pea, Soybean, Groundnut, Safflower Tomato, Beans Black cumin, Cumin, Fenugreek, Black siris, Kakmachi, Shotomuli	+	2, 3, 7, 9, 11, 13
90.	*Aphis fabae* Scopoli	Sugar beet, Dalia	+++	5, 10
91.	*Aphis gossypii* Glover	Cotton, Jute, Aroids, Brinjal, Cucurbits, Lady's finger, Potato, Guava, Water melon, Capsicum, Chili, Chinese rose, Jasmine, Marigold, Gladiolus, Rose, Sunflower, Tuberose, Zinnia Segun, Betel leaf, Isabgol, Muskdana, Tulsi, Aloevera, Ashwagandha,	+++	4, 6, 7, 8, 9, 11, 12, 13,
92.	*Aphis medicaginis* Koch	Beans	+++	7
93.	*Aphis nerii* Boyer de Fonscolombe,	Asoka tree, Dodi	++	13
94.	*Aphrophora* sp.	Tulsi	+	13
95.	*Aphrophora saratogensis* (Fitch)	Ber	+++	8
96.	*Apion corchori* Marshall	Jute	+++	4
97.	*Apoderus* sp.	Lotkon	+	8
98.	*Apoderus tranquebaricus* Fabricius	Amaranthus	+	7
99.	*Apomecyna neglecta* Pascoe	Cucurbits	+	7
100.	*Apomecyna saltator* Fabricius	Cucurbits	+	7
101.	*Aporina germari* Linneaus	Litchi,Jackfruit, Khoksha dumur, Chapalish	+++	8, 11
102.	*Aproaerema nerteria* Meyrick	Groundnut	+++	3
103.	*Aproarema modicella* Deventer	Groundnut	+++	3
104.	*Apsylla cistellata* Buckton	Mango	++	8
105.	*Araecerus suturalis* Boheman	Neem	+++	11

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106.	*Araecerus fasciculatus* De Geer	Ipil-ipil, Burma shimul, Kanchan, Betel nut	+++	11, 12
107.	*Araecerus intangens Walker*	Pomegranate	+	8
108.	*Archips micaceanus* (Walker)	Silk cotton, Guava, Mango, Indian black berry, Elephant apple, White mulberry, Sissoo, Kumbhi, Bandar lathi, Krishnachura, Gamari, Champa, Randi koroi, White siris	+++	4, 8, 11
109.	*Archips oporana* (Linnaeus)	Rose	+	10
110.	*Argyroploce illepedia* (Butler)	Litchi	+	8
111.	*Argyroploce tonica* Meyrick	Olive	+	8
112.	*Aristobia approximator* Thompson	Iron wood, Jarul	+++	11
113.	*Arthroschista hilaralis* Walker	Kadam	+++	11
114.	*Ascotis infixaria Walker*	Thuja	+	11
115.	*Ascotis selenaria* (Denis & Schiffermüller)	White siris	+	11
116.	*Asphondylia phyllanthi* Felt	Amloki	+	8
117.	*Aspidiella* sp.	Tulsi	+	13
118.	*Aspidiotus destructor* Signoret	Guava, Coconut, Papaya, Clove, Rubber Rose, Orchid	+	8, 9, 10
119.	*Aspidiotus hartii* Cockrell	Termeric	+	9
120.	*Aspidomorpha dorsata* Fabricius	Sweet potato	+	6
121.	*Aspongopus brunneus* Thunberg	Cucurbits	+	7
122.	*Aspongopus janus* (Fabricius)	Cucurbits, Ashwagandha	+	7, 13
123.	*Aspongopus* sp.	Cucurbits	+	7
124.	*Athalia proxima* (Klug)	Mustard	+	3
125.	*Atherigona excise* Thomas	Potato	+	6
126.	*Atherigona oryzae* Malloch	Rice	+	1
127.	*Atherigona soccata* Rondani	Maize, Millet, Shorghum, Wheat	++	1
128.	*Atmetonychus peregrinus* Olivier	Lady's finger	+++	7
129.	*Atractomorpha crenulata* Fabricius	Rice, Soybean, Groundnut, Cabbage	+	1, 3, 7
130.	*Attractomorpha parasitica* (de Haan)	Rice	+	1
131.	*Atractomorpha psittacine* DeHaan	Brinjal	+	7
132.	*Attacus atlas* Linneaus	Elephant apple, Cinnamon, Camphor, Jarul Randi koroi, Mahagoni	+	8, 11

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133.	*Attatha regalis* Moore	Aswatha, Banyan tree	+	11
134.	*Aulacophora abdominalis* (Fabricius)	Cucurbits, Water melon	+++	7, 8
135.	*Aulacophora foveicollis* (Lucas)	Brinjal, Cucurbits, Water melon	+++	7, 8
136.	*Aulacophora frontalis* Baly	Cucurbits	+	7
137.	*Aularachis miliaris* (Linneaus)	Sugarcane, Banana, Coconut, Rubber, Segun, Polash, Betel nut	+++	5, 8, 11, 12
138.	*Autoba angulifera* Moore	Mango	++	8
139.	*Bactrocera caudata* (Fabricius)	Cucurbits	+	7
140.	*Bactrocera cucurbitae* (Coquillett)	Cucurbits, Water melon	+++	7, 8
141.	*Bactrocera dorsalis* (Hendel)	Mango, Guava, Papaya, Sapota, Citrus, Karonda, Clove	+++	8, 9
142.	*Bactrocera hochii* (Zia).	Cucurbits	+	7
143.	*Bactrocera latifrons* (Hendel)	Cucurbits, Water melon	+	7, 8
144.	*Bactrocera tau* (Walker)	Cucurbits, Guava	+	7, 8
145.	*Bactrocera zonata* (Saunders)	Mango, Pomegranate, Guava	++	8
146.	*Balaninus c-album* Fabricius	Indian black berry	+++	8
147.	*Baliothrips serrate* (Kabus)	Sugarcane	+	5
148.	*Barasa alopha* Hampson	Haritoki	+	13
149.	*Basitropis nitidicutis* Jekel	Mango, Indian black berry, Dewa, Sundari	+	8, 11
150.	*Batocera rubus* (Linnaeus)	Mango	+++	8
151.	*Batocera rufomaculata* (De Geer)	Silk cotton, Burma shimul, Jackfruit, Mango, Indian black berry, Hog plum, Cutch tree, Babla, Black siris, Devil's tree, Hija, Kanchan, Sissoo, Mandar, Banyan tree, Khoksha dumur, Jog dumur, Rubber, Jiga, Sajina, White mulberry, Aswatha	+++	4, 8, 11
152.	*Belionota prasina* Thumberg	Dewa, Guava, Mango	+	8
153.	*Bemisia tabaci* (Gennadius)	Lentil, Chickpea, Mungbean, Blackgram Linseed, Sunflower, Soybean, Cotton, Brinjal, Potato, Aroids, Lady's finger, Chinese rose, Kakmachi, Pudina, Tobacco, Hemp	+++	2, 3, 4, 6, 7, 10, 12
154.	*Biprorulus bibax* Breddin	Citrus	++	8
155.	*Biston suppressaria* Guenee	Tea	++	12
156.	*Blastobasis sparmologa* Meyrick	Debdaru, Sal / Gozari,	+++	11
157.	*Blosyrus asellus* (Olivier)	Sweet potato	+++	6
158.	*Blosyrus oniscus* Olivier	Beans	+	8

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159.	*Bombyx mori* Linneaus	White mulberry	+++	11
160.	*Brachytes bicolar* Westwood	Shotomuli	+	13
161.	*Brachytrypes orientalis* Burmeister	Iron wood	+++	11
162.	*Brachytrupes portentosus* (Lichtenstein)	Cotton, Jute, Brinjal, Potato, Cane, Australian oak, Sissoo, Eucalyptus, Rubber, Segun, Tea	++	4, 6, 7, 11, 12
163.	*Brahmina* sp.	Sugarcane	+	4
164.	*Brevennia rehi* (Lindinger)	Rice	+	1
165.	*Brevicoryne brassicae* (Linnaeus)	Cabbage	+	7
166.	*Brevipalpus phoenicis* (Geijskes)	Tea	+	12
167.	*Bruchidius* sp.	Babla	+++	11
168.	*Bruchidius uberatus* Fabricius	Black siris	+++	11
169.	*Bruchidius uberatus* Fabricius	White siris	+++	11
170.	*Bruchidius uberatus* Fabricius	Mahagoni	+++	11
171.	*Bruchus bilineatopygus* Pic	Cutch tree	+++	11
172.	*Bruchus pisorum* Linneaus	Black siris, Kumbhi, Bandar lathi, Sissoo	+++	11
173.	*Cadera cautella* Walker	Rice	+	1
174.	*Calandra linearis* Herbst	Tamarind	+++	8
175.	*Callosobruchus chinensis* Linnaeus	Lentil, Chickpea, Mungbean, Grasspea, Cowpea, Blackgram, Pigeon pea, Filed pea	+++	2
176.	*Callosobruchus maculatus* Fabricius	Lentil, Chickpea, Mungbean, Grasspea Cowpea, Blackgram, Pigeon pea, Filed pea	+++	2
177.	*Calopepla leayana* Laterille	Gamari	+++	11
178.	*Camponotus* spp.	Groundnut	+	3
179.	*Camponotus compressus* Fabricius	Cotton, Brinjal, Thuja	+	4, 7, 11
180.	*Carea angulata* Fabricius	Silk cotton	+	11
181.	*Carphurus* sp.	Sweet potato	+	6
182.	*Carpomya vesuviana* Costa	Ber	+++	8
183.	*Carpophilus cylindricus* Murzini	Cucurbits	+	7
184.	*Carpophilus hemipterus* (Linneaus)	Groundnut	+	3
185.	*Caryedon gonagra* Fabricius	Tamarind, Black siris, Kanchan, Kumbhi, Bandar lathi, Babla	+++	11

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186.	*Catochrysops pandava* Horsfield	Cycas	+	11
187.	*Catopsilia crocale* Cramer	Belati gab, White siris, Polash, Kumbhi	+	11
188.	*Cavariella aegopodii* (Scopoli)	Coriander, Fennel	+	9
189.	*Celyphus obtectus* Dalman	Beans	+	7
190.	*Centrococcus insolitus* (Green)	Brinjal	++	7
191.	*Cerataphis lataniae* Lichtenstein	Betel nut	+	12
192.	*Ceratovacuna lanigera* (Zehntner)	Sugarcane	++	5
193.	*Ceroplastes ceriferus* Anderson	Banyan tree, Mehendi, Arjun, Neem, Haritoki	+	11, 13
194.	*Ceroplastes floridensis* Comstock	Clove	+	9
195.	*Chaetocnema basalis* Baby	Rice, Wheat	+	1
196.	*Chaetocnema* sp.	Soybean	+	3
197.	*Chalcidomyia atricornis* Malloch	Ginger, Termeric	++	9
198.	*Chelidonium cinctum* Guerin-Meneville	Citrus	+	8
199.	*Cheromettia apicata* Moore	Bok phul	+	11
200.	*Chilasa clytia* Linneaus	Cinnamon	+++	9
201.	*Chilo auricilius* Dudgeon	Sugarcane	+	5
202.	*Chilo infuscatellus* Snellen	Sugarcane	+++	5
203.	*Chilo partellus* (Swinhoe)	Maize, Shorghum	++	1
204.	*Chilo polychrysus* (Meyrick)	Rice, Maize	++	1
205.	*Chilo tumidicostalis* Hampson	Sugarcane	+++	5
206.	*Chloridolum alcmene* Thomson	Citrus	+	8
207.	*Chloropulvinaria psidii* Maskell	Guava, Sapota, Hijal, Mehendi	+	8, 11
208.	*Chrysocoris stolli* (Wolff)	Soybean, Litchi	++	3, 8
209.	*Chrysomphalus aonidum* (Linneaus)	Tea	+	12
210.	*Chrysomphalus ficus* Ashmead	Betel nut	+	12
211.	*Clania cramerii* (Westwood)	Tea	+	12
212.	*Clania sikkima* (Moore)	Tea	+	12
213.	*Cleora cornaria* Guenee	Neem	+	11
214.	*Cletus pugnator* (Fabricius)	Amaranthus	+	7
215.	*Clitea picta* Baly	Wood apple	+++	8

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216.	*Clovia* sp.	Sugarcane	+	5
217.	*Cnaphalocrocis medinalis* (Guen.)	Rice	+++	1
218.	*Coccotrypes dactyliperda* Fabricius	Date palm, Cinnamon, Betel nut	++	5, 11, 12
219.	*Coccotrypes ealeocarpi* Beeson	Olive	+	8
220.	*Coccus elongatus* Signoret	Australian oak, Black siris, Cutch tree	+	11
221.	*Coccus indicus* Green	Sapota	+	8
222.	*Coccus viridis* (Green)	Wood apple, Bok phul, Tea, Coffee	++	8, 1112
223.	*Cofana spectra* (Distant)	Rice, Groundnut	+	1, 3
224.	*Colemania sphenarioides* Bolivar	Maize	+	1
225.	*Colposcelis kanarensis* Jacoby	Beans	+	7
226.	*Componotus compressus* Fabricius	Chili	+	9
227.	*Conocephalus longipennis* (de Hann)	Rice	+	1
228.	*Conopomorpha sinensis* Bradley	Litchi	+++	8
229.	*Coptosoma cribarium* (Fabricius)	Soybean, Beans	+++	3, 7
230.	*Coptotemes heimi* (Wasmann)	Tea	+++	12
231.	*Coptotermes ceyloincus* Holmgren	Rubber	+++	11
232.	*Corcyra cephalonica* (Stainton)	Rice, Wheat, Maize, Shorghum, Millet, Chickpea, Cowpea, Groundnut, Cashew nut	+++	1, 2, 3, 8
233.	*Cosmopolites sordidus* (Germar)	Banana	+	8
234.	*Cosmopteryx* sp.	Beans	+++	7
235.	*Cosmoscaria relata* (Distant)	Jackfruit	+	8
236.	*Creatonotos transiens* Walker	Eucalyptus	+	11
237.	*Cricula trifenestrata* Helfer	Mango, Litchi, Ber, Hog plum, Cashew nut	++	11
238.	*Crioceris* sp.	Shotomuli	+	13
239.	*Crocidolomia binotalis* Zeller	Mustard, Cabbage, Cauliflower, Muskdana	+	3, 7, 13
240.	*Crossotarsus bonvouiloiri* Chapuis	Jiga, Iron wood, Bohera	+++	11, 13
241.	*Crossotarsus latelunatus Beeson*	Dholi garjan	+	11
242.	*Crossotarsus minax Walker*	Arjun, Rubber	+++	11
243.	*Crossotarsus saundersi* Chapuis	Indian black berry, Amloki, Black siris, White siris, Devil's tree, Pitraj, Kumbhi, Bandar lathi, Australian oak, Jog dumur, Aswatha, Sundari,	+++	8, 11

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		Jiga, Sal		
244.	*Crossotarsus squamulatus* Chapuis	Dewa, Pitraj, Sundari, Segun	+++	8, 11
245.	*Crotogonus* sp.	Brinjal	+	7
246.	*Crotogonus trachypterous* (Blanchard)	Lemon grass	+	13
247.	*Cryptolechia nyctiphronas* Meyrick	Hijal	+++	11
248.	*Cryptolestes pusillus* (Schoenherr)	Groundnut	+	3
249.	*Cryptophlebia illepida* (Butler)	Wood apple, Kathbel, Tamarind, Babla	++	8, 11
250.	*Cryptotermes bengalensis* Snyder	Sundari	+++	11
251.	*Cryptothelea cramari* Westwood	Guava, Litchi, Tamarind, Indian black berry, Australian oak, Krishnachura, Mehendi, Pine, Thuja	++	8, 11
252.	*Cryptothelea variegata* Snelen	Camphor, Burma shimul	++	11
253.	*Cryptothrips aculta* Linnaeus	Brinjal	+	7
254.	*Crytozemia dispar* Pasc	Kalomegh, Muskdana	+	13
255.	*Curetis thetis* (Drury)	Meetha neem	+	11
256.	*Cyclas formicarius* (Fabricius)	Sweet potato	+++	7
257.	*Cyclosia papilionaris* Drury	Lotkon	+	11
258.	*Cyrtozemia cognata* Marshall	Groundnut, Soybean	+	3
259.	*Cyrtozemia dispar* Pascoe	Ashwagandha	+	11
260.	*Dactynotus earthami* (Das)	Niger	+	3
261.	*Dacus ciliatus* (Loew)	Cucurbits, Water melon	+	7, 8
262.	*Dacus cucurbitae* (Coquillett)	Tomato	+	7
263.	*Dacus divresa* (Coquillett)	Cucurbits	+	7
264.	*Dacus longicornis* (Wiedemann)	Cucurbits	+	7
265.	*Danaus chrysippus* Linnaeus	Dodi, Akankda	+	13
266.	*Dasychira grotei* Moore	Guava	+	8
267.	*Dasychira mendosa* Hubner	Potato, Mango, Ber, Amloki, Cinnamon, Polash, Sissoo, Jog dumur, Jarul, Sajina, Bohera	++	6, 7, 8, 9,11, 13
268.	*Dasychira obliqua* Walker	Basak, Safed musli	+	13
269.	*Dasyneura lini* Barnes	Linseed	+	3
270.	*Decadarchis scorpiura* Meyrick	Oil palm	+	11

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271.	*Delia antiqua* Meigen	Onion	+	9
272.	*Delias eucharis* (Drury)	Mustard	+	3
273.	*Demonax limoniae* Gardner	Kathbel	+	8
274.	*Deporaus marginatus* Pascoe	Mango	++	8
275.	*Derolus discicollis* Gahan	Sundari	+	11
276.	*Diacrisia obliqua* (Walker)	Blackgram, Marigold, Rose, Chinese rose, Jasmine, Gerbera, Chrysanthemum, Zinnia, Isabgol	+++	2, 10, 13
277.	*Diacrotricha fasciola* (Zeller)	Carambola	+	8
278.	*Dialeurodes citri* Ashmead	Citrus	+	8
279.	*Diaphania indica* (Saunders)	Cucurbits	+	7
280.	*Diaphorina caesalis* (Walker)	Jackfruit	+++	8
281.	*Diaphorina citri* Kuwayana	Citrus	+	8
282.	*Diaphornia dakariensis* Boselli	Dodi	+	11
283.	*Dichocrocis evaxalis* Walker	Elephant apple	+	8
284.	*Dichocrocis punctiferalis* Guenee	Mango, Guava, Elephant apple, Pomegranate, Termeric, White mulberry, Pine, Segun	++	8, 9, 11
285.	*Dicladispa armigera* (Olivier)	Rice	+	1
286.	*Diconocoris hewetti* (Distant)	Black pepper	++	9
287.	*Dihammus cervinus* Hope	Gamari, Segun	+++	11
288.	*Dinoderus brevis* Horn	Bamboo , Polash,Banyan tree, Jiga , Silk cotton	+++	4, 11
289.	*Dinoderus minutus* Fabricius	Silk cotton, Mandar, Sal, Segun, Bohera	++	4, 11, 13
290.	*Disphinctus humeralis* Walker	Guava	+	8
291.	*Disphinctus politus* Walker	Betel leaf	+	12
292.	*Dolycoris indicus* Stal	Soybean, Lady's finger	+	3, 7
293.	*Donda 347irsut* Moore	Silk cotton	+	4
294.	*Dorcathispa 347irsute347347* Maulik	Sugarcane	+	5
295.	*Dorylus orientalis* Westwood	Date palm, Potato, Coconut, Oil palm, Betel nut	++	5, 6, 8, 11, 12
296.	*Downesia tarsata* Baly	Sugarcane	+	5
297.	*Drosicha dalbergiae* Green	Jackfruit, Mango, Indian black berry, Sissoo, Black siris, Polash, Jog dumur	+	8, 11

Sl. No.	Scientific name	Host plants	Rating	Reference Table
298.	*Dysaphis tulipae* (Boyer de Fonscolombe)	Lili	++	10
299.	*Dysdercus cingulatus* (Fabricius)	Soybean, Cotton, Silk cotton, Lady's finger, Australian acacia Kakmachi, Lemon grass, Datura	++	3, 4, 11, 13
300.	*Dysmicoccus brevipes* (Cockerell)	Pineapple	+++	8
301.	*Earias cupreoviridis* Walker	Jute	+	4
302.	*Earias insulana (*Boisduval)	Cotton	+++	4
303.	*Earias vittella* **(**Fabricius)	Cotton, Lady's finger, Muskdana	+++	4, 7, 13
304.	*Elasmolemus sordidus* (Fabricius)	Groundnut	+++	3
305.	*Elygea 348irsute348* Linneaus	Gulancha	+	13
306.	*Emmalocera depressella* Swinhoe	Sugarcane	+++	5
307.	*Empoasca flavescens* Fabricius	Tea	+	12
308.	*Empoasca kerri* Pruthi	Cowpea, Mungbean, Blackgram, Groundnut	++	2, 3
309.	*Empoasca* sp.	Soybean, Thankuni	+	3, 13
310.	*Empoasca terminalis* Distant	Groundnut	+	3
311.	*Endoclita undulifer* Walker	Gamari	+++	11
312.	*Eoeurysa flavocapitata* Muir	Sugarcane	++	5
313.	*Ephestia cautella* (Walker)	Groundnut, Date palm	+	3, 5
314.	*Ephestia* sp.	Tamarind	+++	11
315.	*Epilachna dodecastigma* (Wiedemann)	Soybean, Tomato, Brinjal, Potato, Cabbage Cucurbits, Water melon	++	3, 6, 7, 8
316.	*Epilachna septima* Dieke	Cucurbits	+	7
317.	*Epilachna sparsa* (Herbst)	Cucurbits	+	7
318.	*Epilachna varivestis* Mulsant	Cucurbits	+	7
319.	*Epilachna vigintioctopunctata* (Fabricius)	Brinjal, Potato, Tomato, Cucurbits, Ashwagandha, Datura	++	6, 7, 13
320.	*Ergolis ariadne* Johnson	Castor	+	3
321.	*Eriophyes tulipae* Keifer	Onion, Garlic	++	9
322.	*Eriyophyes guerreronis* Keifer	Coconut	+++	8
323.	*Erosomyia mangiferae* Felt	Mango	+	8
324.	*Estigmene chinensis* Hope	Sweet potato	+	7
325.	*Euborellia stali* (Dohrn)	Groundnut	+	3

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326.	*Euchromia polymena* Linnaeus	Sweet potato	+	7
327.	*Euchrysops cnejus* (Fabricius)	Pigeon pea, Chickpea, Mungbean, Blackgram, Beans	++	2, 7
328.	*Euploea core* (Cramer)	Aswatha, Khoksha dumur, Karonda	+	11, 13
329.	*Euproctis 349irsute349349 Moore*	Ber, Kathbel, Pomegranate, Guava, Amloki Hijal	+	8, 11
330.	*Euproctis lunata* Walker	Amloki, Rose, Chinese rose	+	8, 10
331.	*Euproctis scintillans* Walker	Mango, Tamarind	+	8
332.	*Euproctis* sp	Karonda	+	13
333.	*Euproctis virguncula* Walker	Brinjal	+	7
334.	*Eupterote 349irsute349* Walker	Gamari, Sajina	+	11
335.	*Eupterote undata* Blachard	Gamari, Mandar	++	11
336.	*Eurema blanda silhetana* Wallace	Kumbhi, Bandar lathi	++	11
337.	*Eurema hecabe* Linneaus	White siris	++	11
338.	*Eurydema pulchrum* Westwood	Radish	+	7
339.	*Eusarcocoris* sp.	Soybean, Tulsi	+	3, 13
340.	*Eusarcocoris ventralis* Walker	Sesame	+	3
341.	*Euscyrtus concinnus* (de Haan)	Rice	+	1
342.	*Eutectona machaeralis* (Walker)	Segun	+++	11
343.	*Euzophera perticella* Ragonot	Brinjal	+	7
344.	*Euzophera plumbeifascialla* Haworth	Wood apple, Kathbel	+++	8
345.	*Exitianus indicus* (Distant)	Cucurbits, Sweet potato	+	6, 7
346.	*Exitianus* sp.	Cucurbits	+	7
347.	*Eysarcoris* sp.	Rice	+	1
348.	*Eysarcoris ventralis* Distant	Rice	+	1
349.	*Ferrisia pseudococcus* (Signoret)	Jute	+	4
350.	*Ferrisia virgata* (Cockerell)	Cotton, Citrus, Guava, Jackfruit, Papaya, Kathbel, Bok phul, Black pepper, Betel leaf, Coffee	++	4, 8, 9, 11, 12
351.	*Forficula* sp.	Chrysanthemum	++	10
352.	*Formiconus antiguus* Kerr	Lady's finger	+	7
353.	*Formosina flavipes* Malloch	Ginger, Termeric	++	9

Sl. No.	Scientific name	Host plants	Rating	Reference Table
354.	*Frankliniella intonsa* (Trybom)	Amaranthus	+	7
355.	*Frankliniella occidentalis* (Pergande)	Rose, Orchid, Jasmine, Gladiolus, Gerbera, Tuberose, Chrysanthemum, Mint	+++	10, 13
356.	*Frankliniella schultzei* (Trybom)	Groundnut, Soybean, Citrus	+	3, 8
357.	*Gallobelicus crassicornis* Distant	Tobacco	++	12
358.	*Gangara thyrsis* Fabricius	Cane	+++	11
359.	*Gegines gullatus* Wulp	Cucurbits	+	7
360.	*Geocoris ochopterus* (Fieber)	Dodi	+	13
361.	*Geoica lucifuga* (Zehntner)	Sugarcane, Tomato	+	5, 7
362.	*Glyphodes caesalis* Walker	Chapalish	+++	11
363.	*Glyptotermes dilatatus* (Bugnion & Popoff)	Guava, Sajina	+	7, 11
364.	*Gnorimoschema heliopa* Low	Tobacco	+	12
365.	*Gonocephalum bilineatum* (Walker)	Tobacco	+	12
366.	*Gonocephalum planatum* (Walker)	Iron wood	+++	11
367.	*Gonocephalum tuberculatum* Hope	Tobacco	+	12
368.	*Gracilaria theivora* Walsom	Tea	+	12
369.	*Graphium sarpedon* Linneaus	Champa	+++	11
370.	*Graptostethus servus* Fabricius	Ashwagandha	+	13
371.	*Graptostethus servus* Fabricius	Isabgol	+	13
372.	*Greenidea artocarpi* (Westwood)	Jackfruit	+	8
373.	*Gryllatalpa 350irsute350* Palisot de Beauvois	Rice, Brinjal, Cane, Australian oak, Sissoo, Rubber, Pine, Segun, Tobacco, Tea	++	1, 7, 11, 12
374.	*Gynaikothrips ficorum (*Marchal)	Banyan tree	+++	11
375.	*Haltica cyanea* Weber	Cabbage, Radish, Turnip, Lettuce	+	7
376.	*Hedylepta 350irsute350* (Fabricius)	Beans	+	
377.	*Helicoverp armigera* (Hubner)	Maize, Wheat, Lentil, Chickpea, Mungbean, Grasspea, Blackgram, Pigeon pea, Soybean, Groundnut, Linseed , Sunflower, Safflower, Cotton, Tomato, Beans, Chili, Capsicum, Marigold, Rose, Gerbera, Chrysanthemum, Tobacco, Hemp, Ashwagandha, Lemon grass, Safed musli, Isabgol,Kalomegh, Muskdana	+++	1, 2, 3, 4, 7, 8, 10, 12, 13

Sl. No.	Scientific name	Host plants	Rating	Reference Table
378.	*Helicoverpa assulta* Green	Tobacco	+	12
379.	*Helicoverpa 351irsute351* Fabricius	Hemp	++	12
380.	*Helicoverpa zea* (Boddie)	Maize	+	1
381.	*Heliothrips haemorrhoidalis* (Bouche)	Date palm	+	5, 11
382.	*Heliothrips indicus* Bagnall	Date palm	+	5
383.	*Hellula undalis* (Fabricius)	Cabbage	+	7
384.	*Helopeltis antonii* Signoret	Guava, Cashew nut, Neem, Camphor, Mahagoni	+++	11
385.	*Helopeltis theivora* Waterhouse	Tea	+++	12
386.	*Hemiberlesia lantaniae* Signoret	Tamarind, Cycas	+	8, 11
387.	*Heminodes indicus* Jacoby	Lady's finger	+	7
388.	*Hemitarsonemus latus* Banks	Potato	+	6
389.	*Hendecasis duplifascialis* Hampson	Jasmine	++	13
390.	*Heortia vitessoides* Moore	Agar	+++	11
391.	*Hermolaus typicus* Distant	Isabgol	+	13
392.	*Herse convolvuli* (Linnaeus)	Sweet potato	+	6
393.	*Heterobostrychus aecualis* Waterhouse	Silk cotton, Mango, Kumbhi, Bandar lathi, Sissoo, Dholi garjan, Rubber, Jiga, Ipil-ipil, White mulberry, Gozari, Segun, Tea, Bohera	+++	4, 8, 11, 13
394.	*Heterobostrychus hamatipennis* Lesne	Cutch tree, Gozari	+++	11
395.	*Heteroderes lenis* Candeze	Sugarcane	++	5
396.	*Heteroghaphis bengalella* Rag	Kathbel	+	8
397.	*Heteronychus* sp.	Rice	+	1
398.	*Heteropsylla cubana* Crawford	Ipil-ipil	+++	11
399.	*Hippotion celerio* (Linnaeus)	Aroids	+	6
400.	*Holothrichia* spp.	Coffee, Maize, Sugarcane	+	1, 5, 12
401.	*Holotrichia problematica* Brenske	Kumbhi, Bandar lathi	+	11
402.	*Holotrichia serrata* (Fabricius)	Groundnut, Segun	++	3, 11
403.	*Homona coffearia* Nietner	Guava	+	8
404.	*Hoplocerambyx spinicornis* Newman	Sal / Gozari	+++	11
405.	*Horaga viola* Moore	Olive	+	8
406.	*Hydrellia philippina* Ferino	Rice	++	1

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407.	*Hydronomidus molitor* Faust	Rice	+	1
408.	*Hymenia fascialis* Cramer	Amaranthus	+++	7
409.	*Hymenia recurvalis* Fabricius	Amaranthus	+	7
410.	*Hymenoptychis 352irsut* Zeller	Sundari	+++	11
411.	*Hypatima spathota* Meyrick	Mango	++	8
412.	*Hypolixus truncatulus* (Fabricius)	Amaranthus	+	7
413.	*Hyposidra successaria* Walker	Hijal, Ashwagandha, Isabgol, Lemon grass, Asoka tree	+	11, 13
414.	*Hyposidra talaca* Walker	Silk cotton, Guava, Bandar lathi	+	4, 8, 11
415.	*Hypsipyla robusta Moore*	Mahagoni	+++	11
416.	*Hysteroneura setariae* (Thomas)	Rice	+	1
417.	*Icerya aegyptiaca* (Douglas)	Jackfruit, Pomegranate, Hog plum, Mango Guava, Chinese, rose Hijal, Australian oak, Segun, Banyan tree, Debdaru,	+	8, 10,11
418.	*Icerya formicarum* Newstead	Randi koroi	+	11
419.	*Icerya 352irsute352* Maskell	Krishnachura, Banyan tree, White mulberry, Pine	+	11
420.	*Icerya* sp.	Sugarcane	+	5
421.	*Idiocerus atkinsoni* Lethierry	Mango	+++	8
422.	*Idioscospus clypealis* Lethierry	Mango, Sapota	++	8
423.	*Indarbela quadrinotata* (Walker)	Citrus, Jackfruit, Indian black berry, Amloki, Australian acacia, Cutch tree, Black siris, White siris, Agar, Kumbhi, Australian oak, Sissoo, Krishnachura, Gamari, Jarul, Randi koroi, White mulberry, Segun, Iron wood	+	8, 11
424.	*Indarbela teraonis* Moore	Mango, Guava, Litchi, Pomegranate, Cashew nut Sal / Gozari,	+	8, 11
425.	*Inderbela theivora* (Hampson)	Tea	+	12
426.	*Junonia hierta* (Fabricius)	Vajradanti	+	13
427.	*Junonia orithya* (Linneaus)	Isabgol, Vajradanti	+	13
428.	*Kerria lacca* Kerr	Kathbel, Ber, Australian acacia, Cutch tree, Babla, Mandar, Banyan tree, Khoksha, dumur, Jog dumur, Aswatha, Randi koroi	+	8, 11
429.	*Labeda nobilis* Walker	Sundari	+	11

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430.	*Laemophloeus minutus* (Olivier)	Ric, Wheat, Maize	+	1
431.	*Lamida moncusalis* Walker	Jarul, Sal	+	11
432.	*Lamprosema 353irsute353* Fabricius	Soybean	+++	3
433.	*Lasioderma serricorne* (Fabricius)	Groundnut, Tamarind, Tobacco	+	3, 8, 12
434.	*Lasioptera 353irsute* Felt	Cucurbits	+	7
435.	*Lasioselus* sp.	Lady's finger	+	7
436.	*Laspeyresia heteropa Meyrick*	Polash	+++	11
437.	*Laspeyresia koenigiana Fabricius*	Neem	+++	11
438.	*Laspeyresia pulverula Meyrick*	Sal, Dholi garjan	++	11
439.	*Latheticus oryzae* (Waterhouse)	Rice, Groundnut	+	1, 3
440.	*Lecanium discrepans* Green	Banana	+	8
441.	*Leewenia karnyiana* Priesner	Indian black berry	+	8
442.	*Lema coromendaliana* Fabricius	Cabbage	+	7
443.	*Lema downsei* Baly	Shotomuli	+	13
444.	*Leperisinus indicus* Beeson	Sajina	+++	11
445.	*Lepropus chrysochlorus* Wiedemann	Rubber	+++	11
446.	*Leptocentrus 353irsut* (Fabricius)	Cucurbits, Beans, Ashwagandha	+	7, 13
447.	*Leptocorisa* spp.	Soybean	+	3
448.	*Leptocrisa acuta* (Thunberg)	Rice	+++	1
449.	*Leptocrisa oratorius* (Fabricius)	Rice	+	1
450.	*Leptoglossus australis* (Fabricius)	Cucurbits	+	7
451.	*Lespeyresia leucotoma*	Tea	+	12
452.	*Leucinodes orbonalis* Guenee	Brinjal	+++	7
453.	*Leucinodes sp.*	Basak	+	13
454.	*Lilioceris impressa* (Fabricius)	Yam	+++	6
455.	*Lilioceris lilii* (Scopoli)	Lili	++	10
456.	*Lindingaspis rossi* (Maskell)	Hijal	+	11
457.	*Lipaphis erysimi* (Kaltenbach)	Mustard, Cabbage, Turnip, Cauliflower, Lettuce	+++	3, 7
458.	*Lipaphis pseudobrassicae* (Davis)	Cauliflower, Radish, Turnip	+++	7
459.	*Liriomyza sativae* Blanchard	Brinjal, Tomato, Cucurbits, Beans, Onion, Garlic, Chili, Marigold,	++	7, 9, 10

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		Rose, Gerbera, Chrysanthemum		
460.	*Lixus brachyrhinus* Boheman	Amaranthus	+	7
461.	*Lixus brachyrrhinus* Bohemann	Niger	+	3
462.	*Longiunguis sacchari* (Zehnt.)	Sugarcane	+	5
463.	*Loxostege sticticalis*	Sugarbeet	+	5
464.	*Luperomorpha birmanica* (Jacoby)	Brinjal	+	7
465.	*Luperomorpha vittata* Duvivier	Jute, Brinjal	+	4, 5
466.	*Lyctus africanus* Lesne	Hog plum, Amloki, Black siris, White siris, Devil's tree, Polash, Cane, Khoksha dumur, Gamari, Jiga, Sal, Mahagoni, Segun, Arjun	+++	8, 11
467.	*Lyctus brunneus* Stephens	Mango, Jackfruit, Mandar, Champa, Bohera	+++	8, 11, 13
468.	*Lygus ragulipennis* Poppius	Aster, Zinnia	++	10
469.	*Lymantria 354irsute* Moore	Guava, Indian black berry, Kadam, Arjun	+	8, 11
470.	*Lymantria nigra* Moore	Litchi	+	8
471.	*Macalla carbonifera* Meyrick	Mango	++	8
472.	*Macrosiphum euphorbiae* (Thomas)	Potato, Gladiolus, Aster, Snapdragon	+	6, 10
473.	*Macrosiphum miscanthi* (Takahashi)	Maize, Wheat	+	1
474.	*Macrosiphum rosaeformis* Das	Rose, Orchid, Chrysanthemum	+++	10
475.	*Macrotermes* spp.	Coffee	+	12
476.	*Madurasia obscurella* Jacoby	Cowpea, Blackgram	+	2
477.	*Manophyas* sp.	Sweet potato	+++	6
478.	*Marasmia exigua* (Butler)	Rice	+++	1
479.	*Marasmia patnalis* Bradley	Rice	+++	1
480.	*Marasmia suspicalis* Walker	Sugarcane	+	5
481.	*Maruca testulalis* Geyer	Chickpea, Mungbean,Grasspea,Cowpea, Blackgram,Pigeon pea, Filed pea, Iron wood	+++	2, 11
482.	*Maruca vitrata* (Geyer)	Beans	+++	7
483.	*Megalurothrips distalis* (Karny)	Lentil, Mungbean, Grasspea, Cowpea, Pigeon pea, Groundnut	+++	2, 3
484.	*Megalurothrips usitatus* (Bagnall)	Mungbean	+++	2
485.	*Melanagromyza 354irsut* (Malloch)	Safflower, Soybean	+	3
486.	*Melanaspis glomerata* (Green)	Sugarcane	++	5

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487.	*Melanephthalma distinguenda* (Kaltenbach)	Lady's finger	+	7
488.	*Melanitis leda ismene* Cramer	Rice	+	1
489.	*Melanoplus* spp.	Wheat, Sugarbeet	+	1, 5
490.	*Melanotus* sp.	Wheat	+	1
491.	*Melittia indica* Butler	Cucurbits	+	7
492.	*Melolontha melolontha*	Tea	+	12
493.	*Metanastria hyrtaca* Cramer	Belati gab, Mohua, White mulberry	++	8, 11
494.	*Metriona circumdata* Herbst	Sweet potato	+	6
495.	*Microcerotermes championi* (Snyder)	Tea	+++	12
496.	*Microcolona* Meyrick	Guava	+	8
497.	*Microtermes mycophagus* (Desneux)	Basak	+	13
498.	*Microtemes obesi* (Holmgren)	Tea	+++	12
499.	*Microtermes obesi* Holmergen`	Wheat, Maize, Groundnut, Jute, Cotton, Sugarcane	++	1, 3, 4, 5
500.	*Microtermes* sp.	Cane	+	11
501.	*Mimegralla coerubifrons* Malloch	Ginger, Termeric	++	9
502.	*Minthea rugicollis* (Walker)	Amloki, Jarul, Mandar	+++	8, 11
503.	*Monanthia globulifera* Walker	Tulsi, Pudina	+	13
504.	*Monolepta orientalis* (Jacoby)	Potato, Lady's finger, Mango	+	6, 7, 8
505.	*Monolepta* spp.	Maize	+	
506.	*Monolepta signata* (Olivier)	Rice, Brinjal, Mungbean, Blackgram, Groundnut, Soybean, Potato, Chinese rose	+	1, 2, 3, 6, 10
507.	*Murgantia hirsute* (Hahn)	Cabbage	+	7
508.	*Mylabris* spp.	Maize	+	1
509.	*Mylabris pustulata* Thunberg	Cotton, Rubber, Safed musli	+	4, 11, 13
510.	*Mylleocerus catechu* Marshall	Cutch tree	+	11
511.	*Myllocerus discolor* Boheman	Maize, Soybean, Ber, Cotton, Sugarcane, Mango, Guava, Wood apple, Cashew nut, Sissoo, Segun, Safed musli, Lemon grass	+	1, 3, 4, 5, 8, 13
512.	*Myllocerus dorsatus* (Fabricius)	Neem	+	11
513.	*Myllocerus 11-pustulatus* Faust	Lady's finger	+	7

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514.	*Myllocerus richardi*	Rose	++	13
515.	*Myllocerus setulifer* Desbrochers	Deshi gab	+	8
516.	*Myllocerus severini Marshall*	Sal	+	11
517.	*Myllocerus undecimpustulatus* Marshall	Pomegranate	+	8
518.	*Myocalandra exarta* Boheman	Bamboo	+	11
519.	*Mythimna 356irsute356* (Walker)	Rice, Maize, Wheat, Sugarcane	+	1, 3
520.	*Myzus persicae* (Sulzer)	Mustard, Potato, Papaya, Water melon, Garlic, Chili, Capsicum, Onion, Cumin, Rose, Orchid, Carnation, Snapdragon, Marigold, Chrysanthemum, Zinnia, Tobacco, Mint	+++	3, 6, 7, 8, 9, 10, 12, 13
521.	*Naranga aenessens* Moore	Rice	+	1
522.	*Narosa 356irsute* Walker	Kathbel	+	8
523.	*Neoheegeria indica* Hood	Tobacco	+	12
524.	*Neotermes* (*Kalotermes*) *greeni* Desneux	Rubber	+	11
525.	*Nephantis serinopa* Meyrick	Coconut	+++	8
526.	*Nephopteryx eugraphella* Ragonot	Sapota	+++	8
527.	*Nephotettix bipunctatus* Fabricius	Brinjal, Cabbage	+	7
528.	*Nephotettix cincticeps* (Uhler)	Rice	++	1
529.	*Nephotettix nigropictus* (Stal)	Rice	+++	1
530.	*Nephotettix virescens* (Distant)	Rice	+++	1
531.	*Neptis jumbah* Moore	Iron wood	+	11
532.	*Nesidiocoris* sp.	Cucurbits	+	7
533.	*Nezara viridula* (Linnaeus)	Rice, Maize, Lentil, Mungbean, Cowpea, Chickpea, Grasspea, Sesame, Groundnut, Soybean, Cotton, Brinjal, Ashwagandha, Kalomegh, Lemon grass, Muskdana, Datura	+	1, 2, 3, 4, 7,13
534.	*Nilaparvata lugens* (Stal)	Rice	+++	1
535.	*Nirvana* sp.	Brinjal	+	7
536.	*Nisotra orbiculata* (Motsch)	Kenaf, Mesta	+	4
537.	*Nodostoma viridipennis* Motschulsky	Banana	+++	8
538.	*Nupsera bicolor* (Dutta)	Jute	+	4
539.	*Nymphula depunctalis* (Guenee)	Rice	++	1
540.	*Nymphula responsalis* Walker	Dalia	+	10

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541.	*Nysius inconspicuous* Distant	Amaranthus	+	8
542.	*Oberia brevis* Swed	Soybean	+	3
543.	*Ochyromera artocarpi* (Marshall)	Jackfruit	+	8
544.	*Odites atmopa* Meyrick	Neem	+	11
545.	*Odoiporus longicollis* Olivier	Banana	+	8
546.	*Odontotermes bellahunisensis* Holmgren	Gulancha	+	13
547.	*Odontotermes brunneus* Hagen	Mango	+	8
548.	*Odontotermes feae* (Wasmann)	Aswatha, Tea	+	11, 12
549.	*Odontotermes homi* (Wasmann)	Rubber, Tea	+	11, 12
550.	*Odontotermes obesus* (Rambur)	Wheat, Maize, Groundnut, Jute, Cotton Citrus, Coconut, Ber, Australian oak, Mohua, Sal, Hemp, Betel leaf	++	1, 3, 4, 8, 11, 12
551.	*Odontotermes parvidens* Holmgren	Sugarcane, Pine, Sal, Segun	+	5, 11
552.	*Odontotermes* sp.	Cane	+	11
553.	*Oecophylla smaragdina* Fabricius	Karonda, Agar, Tea	+	8, 11, 12
554.	*Olene mendosa* Hübner	Karonda, Lemon grass, Asoka tree	+	8, 12
555.	*Olenecamptus bilobus* Fabricius	Mango, Banyan tree, Jog dumur	+	8, 11
556.	*Oliarus lodgarti* Distant	Sweet potato	+	6
557.	*Oligonichus oryzae* (Hirst)	Rice	+	1
558.	*Oligonychus coffeae* Nietner	Tea	+++	12
559.	*Oligonychus indicus* Hirst	Sugarcane	+	5
560.	*Ommatolapus haemorrhoidalis* (Wiedemann)	Cane	+++	11
561.	*Omphisa anastomosalis* (Guenee)	Sweet potato, Kangkong	+	6, 7
562.	*Ophiomyia phaseoli* (Tryon)	Mungbean, Blackgram, Soybean, Beans	+++	2, 3, 7
563.	*Ophiusa janata* Linneaus	Mohua	+	11
564.	*Ophiusa melicerta* (Drury)	Castor	+	3
565.	*Orgyia postica* Walker	Belati gab, Mandar, Bohera	+	8, 11, 13
566.	*Orgyia turbata* Butler	Australian acacia	+	11
567.	*Orseolia oryzae* (Wood-Mason)	Rice	+++	1
568.	*Orthacris sp.*	Brinjal	+	7
569.	*Oryctes rhinoceros* Linneaus	Date palm, Palmyra palm, Golpata, Coconut, Cane, Oil palm	+++	5, 8, 11

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570.	*Oryzaephilus surinamensis* (Linnaeus)	Rice, Wheat, Groundnut, Cashew nut	+++	1, 3, 8
571.	*Ostrinia furnacalis* (Gunee)	Maize, Shorghum, Millet	+++	1
572.	*Othreis* spp.	Citrus	++	8
573.	*Otinotus elongates* Distant	Jute	+	4
574.	*Otinotus oneratus* Walker	Kanchan, Ashwagandha, Lemon grass	+	11, 13
575.	*Otiorrhynchus sulcatus* (Fabricius)	Camelia	+++	10
576.	*Oulema* sp.	Soybean	+	3
577.	*Oxya chinensis* (Thunberg)	Rice, Cotton	+	1, 4
578.	*Oxya hyla 358irsute358358* (Stal)	Rice	+	1
579.	*Oxya japonica* (Thunberg)	Rice	+	1
580.	*Oxya japonica japonica* (Thunberg)	Rice	+	1
581.	*Oxycarenus laetus* Kirby	Cotton	+	4
582.	*Oxyrachis mangiferana* Distant	Guava	+	8
583.	*Oxyrhachis taranda* (Fabricius)	Brinjal	+	7
584.	*Oxyrhachis tarandus* Fabricius	Tamarind	+	8
585.	*Ozotomerus maculosus* Perroud	Sundari	+	11
586.	*Pachneophorus bretinghami* Baly	Lady's finger	+	7
587.	*Pagiophloeus longiclavis* Dalla Torre & Schenkling	Mahagoni	+++	11
588.	*Pagyda salvalis* Walker	Segun	+++	11
589.	*Palpita marginata* (Hampson)	Devil's tree	++	11
590.	*Pammene theristis Moore*	Sal	+++	11
591.	*Panchaetothrips indicus* Bagnall	Termeric	+	9
592.	*Papilio demoleus* Linnaeus	Kathbel, Wood apple, Citrus, Meetha neem	++	8, 13
593.	*Papilio polytes* Lnneaus	Citrus	+	8
594.	*Paracoccus marginatus* Williams & Granara de Willink	Papaya, Kakmachi	+++	8, 13
595.	*Parallelia crameri* Moore	Amloki	+	8
596.	*Parasa lepida* Cramer	Palmyra palm, Coconut, Pineapple, Pomegranate, Cashew nut, Kathbel, Hijal, Jog dumur	+	5, 8, 11

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597.	*Parlatoria blanchardi* Targioni	Date palm	+	5
598.	*Parnara guttata* Bremer & Grey	Rice	+	1
599.	*Paromius exiguous* (Distant)	Lady's finger	+	7
600.	*Pauropsylla depressa* Crawford	Cinnamon, Jog dumur	+	9, 11
601.	*Pauropsylla tuberculata* Crawford	Tejpata, Devil's tree	+++	9, 11
602.	*Pectinophora gossypiella* (Saunders)	Cotton	++	4
603.	*Pelopidas mathias* (Fabiricius)	Rice	+	1
604.	*Pentodon bengalens* Arrow	Sugarcane	+	5
605.	*Pericallia recini* Fabricius	Castor, Groundnut, Sesame, Jute, Sweet potato, Sajina, Datura	+	3, 4, 6, 13
606.	*Perina nuda* (Fabricius)	Jackfruit	++	11
607.	*Phaneroptera gracilli* Burmeister	Soybean	+	3
608.	*Phedologeton diversus* (Jerdon)	Cucurbits, Potato	+	6, 7
609.	*Phenacaspis dilatata* Cockerell & Cooley	Palmyra palm, Betel nut	+	5, 12
610.	*Phenacoccus hirsutus* Green	Cotton, Basak	+	4, 13
611.	*Phlogophora meticulosa* (Linnaeus)	Dalia	+	10
612.	*Phthorimaea operculella* (Zeller)	Potato	+++	6
613.	*Phycodes minor* Moore	Khoksha dumur	+	11
614.	*Phyllocnistis chrysophthalma* Meyrick	Cinnamon	+	9
615.	*Phyllocnistis citrella* Stainton	Citrus	+++	8
616.	*Phyllocnistis helicodes* Meyrick	Debdaru	+	11
617.	*Phyllocnistis tectonivora* Meyrick	Segun	+	11
618.	*Phyllophaga* spp.	Wheat	+	1
619.	*Phyllotreta brassicae* Alam	Radish	+	7
620.	*Phyllotreta chotanica* Duvivier	Cauliflower, Cucurbits	+	7
621.	*Phyllotreta cruciferae* (Goeze)	Mungbean, Blackgram, Mustard, Cabbage	+	2, 3, 7
622.	*Phyllotreta* sp.	Cotton, Radish, Tulsi	+	4, 7, 13
623.	*Phyllotreta striolata* Fabricius	Mungbean, Blackgram	+	2
624.	*Phytomyza horticola* Goureau	Cabbage	+++	7
625.	*Pieris brassicae* (Linnaeus)	Cabbage, Cauliflower, Cauliflower	+	7
626.	*Pieris canidia* (Sparman)	Cabbage, Cauliflower	+++	7

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627.	*Pieris hecabe* Linnaeus	Cabbage, Cauliflower	+	7
628.	*Pinnaspis scrobicularum* Green	Olive	+	8
629.	*Plannococcus citri* Risso	Burma shimul, Citrus, Black pepper, Bok phul	+	4, 8, 9, 11
630.	*Planococcus lilacinus* (Cockerell)	Segun	+	11
631.	*Planococcus* sp.	Orchid, Madhabilata, Croton, Ixora, Gardenia	++	10
632.	*Platypeplus aprobola* Meyrick	Cinnamon	+	9
633.	*Platypus cupulatus* Chapuis	Jog dumur, Rubber	10	
634.	*Platypus cupulifer* Wichmann	Pitraj	+	11
635.	*Platypus furcatus* Blandford	Olive	+	8
636.	*Platypus hybridus* Schedler	Chapalish	+	11
637.	*Platypus indicus* Strohmeyer	Hog plum	+++	8
638.	*Platypus piniperda* Beeson	Pine	+++	11
639.	*Platypus solidus* Walker	Silk cotton, Mango, Jackfruit, Cutch tree, Black siris, White siris, Devil's tree, Kadam, Polash, Sissoo, Dholi garjan, Jog dumur, Aswatha, Rubbe, Jiga, Sal, Segun, Bohera	+++	4, 8, 11, 13
640.	*Platypus suffodiens* Sampson	Randi koroi	+++	11
641.	*Platypus uncinatus* Blandford	Gamari, Sundari, Mohua	+++	11
642.	*Plautia fimbriata* Fabricius	Lemon grass	+	13
643.	*Plodia interpunctella* (Hubner)	Rice	+	1
644.	*Plusia orichalcea* (Fabricius)	Soybean, Niger, Cabbage, Beans	+	3, 7
645.	*Plusia signata* (Fabricius)	Chickpea, Sesame, Tobacco, Ulatchandal	+	2, 3, 12, 13
646.	*Plutella xylostella* (Linnaeus)	Cabbage, Cauliflower, Radish, Turnip	+++	7
647.	*Podontia 14-punctata* Linneaus	Hog plum	+++	8
648.	*Poecilocoris latus* Dallas	Tea	+	12
649.	*Pollyphagotarsonemus latus* Banks	Jute, Brinjal, Chili, Capsicum	+++	4, 7, 9
650.	*Polychrisia moneta* (Fabricius)	Delphinium	+++	10
651.	*Polytela gloriosae*	Ulatchandal	+	13
652.	*Prioneris sita* Linnaeus	Cabbage	+	7
653.	*Progonia partonalis* Walker	Dalia	+	10
654.	*Prospalta capensis* (Guenee)	Niger	+	3

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655.	*Proutista moesta (*Westwood)	Sugarcane	+	5
656.	*Psalis pennatula* Fabricius	Rice	+	1
657.	*Pseudaletia unipuncta* (Haworth)	Coriander, Fennel	+	9
658.	*Pseudococcus adonidum* Linneaus	Palmyra palm	+	5
659.	*Pseudococcus comstocki* Kuwana	Camphor	+	11
660.	*Pseudococcus corymbatlus* Green	Soybean	+	3
661.	*Pseudococcus filamentosus* (Cockerell)	Soybean	+	3
662.	*Pseudococcus nipae* Maskell	Potato	+	6
663.	*Pseudococcus* sp.	Orchid, Madhabilata, Croton, Ixora, Gardenia, Basak	+++	10, 13
664.	*Pseudococcus virgatus* (Cockerell)	Tomato, Kenaf, Mesta	+++	4, 7
665.	*Pseudonapomyza asiatica* Spencer	Rice	+	1
666.	*Psorosticha zizyphi* Stainton	Citrus, Wood apple	+	8
667.	*Psylla isitis* Buckton	Silk cotton	+	4
668.	*Pterolophia bambusae* Breuning	Bamboo	+	11
669.	*Ptilinus binodulus* (Motschulsky)	Jiga	+	11
670.	*Ptyelus nebulosus* Fabricius	Lady's finger	+	8
671.	*Pulvinaria azadirachatae* Green	Neem	+	11
672.	*Pulvinaria maxima* Green	Guava	+	8
673.	*Pyrilla perpusilla pusana* Distant	Sugarcane	++	5
674.	*Pyrilla purpusilla* Walker	Wheat, Maize	+	1
675.	*Pyroderces (Labdia) dilatata* Meyrick	Palmyra palm	+	5
676.	*Pyroderces certropecta* Meyrick	Oil palm	+	11
677.	*Rastrococcus iceryodes* Greeni	Mango, Randi koroi	+	8, 11
678.	*Recilia dorsalis* (Motschulsky)	Rice	+	1
679.	*Rhacochlaena cas361irsut*nro	Kumbhi	+++	11
680.	*Rhesala imparata* Walker	Black siris, White siris	+++	11
681.	*Rhipiphorothrips cruentatus* Hood	Mango	+	8
682.	*Rhizoglyphus* sp.	Garlic	+	9
683.	*Rhopalosiphum maidis* (Fitch)	Maize, Tomato	+++	1, 7
684.	*Rhopalosiphum padi* (Linnaeus)	Wheat	+++	1

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685.	*Rhopalosiphum rufiabdominalis* (Sasaki)	Wheat, Tomato	+	1, 7
686.	*Rhopalus macropictus* Distant	Lady's finger	+	7
687.	*Rhynchocoris humeralis* Thunberg	Citrus	+	8
688.	*Rhynchophorus ferrugineus* Olivier	Date palm, Palmyra palm, Coconut, Betel nut	+++	5, 8, 12
689.	*Rhyzopertha dominaca* (Fabricius)	Rice, Wheat, Chickpea, Mungbean, Cowpea	+++	1, 2
690.	*Ricania zebra* (Distant)	Sugarcane	+	5
691.	*Riptortus pedestris* Fabricius	Soybean	+	3
692.	*Riptorus fuscus* (Fabricius)	Beans	+	7
693.	*Sacharicoccus sachari* (Cockerell)	Sugarcane	+	5
694.	*Sagra carbunculus* Hope	Beans	+	7
695.	*Sagrafe morata* (Drury)	Beans	+	7
696.	*Sahyadrassus malabaricus* (Moore)	Gamari	+++	11
697.	*Saissetia nigra* Neitner	Mehendi	+	11
698.	*Saissetia oleae* Bernard	Tamarind	+	8
699.	*Salurnis marginella* (Guérin-*Méneville)*	Bamboo	+	11
700.	*Sambus gmelinae* Thery	Gamari	+	11
701.	*Schistoceros anobioides* Waterhouse	Guava, Mohua	+	8, 11
702.	*Schizaphis minuta* (Fitch)	Tomato	+	8
703.	*Schizotetranychus andropogoni* (Hirst)	Sugarcane	+	5
704.	*Sciara rufithorax* Wulp	Cabbage, Cauliflower, Cucurbits	++	8
705.	*Scirpophaga excerptalis* Walker	Sugarcane	+++	5
706.	*Scirpophaga incertulas* (Walker)	Rice	+++	1
707.	*Scirtothrips dorsalis* Hood	Groundnut, Cotton, Citrus, Chili, Capsicum, Tea	++	3, 4, 8, 9,12
708.	*Scopula emissaria* (Walker)	Groundnut, Jute	+	3, 4
709.	*Scutelleria nobilis* Linneaus	Lemon grass	+	13
710.	*Selenothrips rubrocinctus* Giard	Guava	+	8
711.	*Selepa celtis* Moore	Brinjal, Litchi, Hog plum, Indian black berry, Tamarind, Amloki, Jarul, Jiga, Haritoki		7, 8, 11, 13
712.	*Sesamia inferens* (Walker)	Rice, Wheat, Maize, Shorghum, Sugarcane	+	1, 5
713.	*Sinoxylon anale* Lesne	Mango, Ber, Indian black berry, Australian, acacia, Cutch tree, Babla,	+++	8, 11, 13

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		Black siris, White siris, Polash, Australian oak, Sissoo, Krishnachura, Jog dumur, Aswatha, Gamari, Jiga, Ipil-ipil, White mulberry, Sal, Gozari, Segun, Arjun, Bohera		
714.	*Sinoxylon atratum* Lesne	Amloki, Sajina, Arjun	+++	8, 11
715.	*Sinoxylon crassum* Lesne	Wood apple, Australian acacia , White siris, Bamboo, Kumbhi, Bandar lathi, Sissoo, Pine, Arjun, Haritoki	+++	8, 11, 13
716.	*Sinoxylon pygmaeum* Lesne	Banyan tree	+++	11
717.	*Sinoxylon* sp.	Jarul, Randi koroi	+++	11
718.	*Siphocoryne indobrassicae* Das	Mustard	+++	3
719.	*Sitophilus oryzae* (Linnaeus)	Rice, Wheat, Maize, Millet, Shorghum, Chickpea, Mungbean, Cowpea, Groundnut	+++	1, 2, 3
720.	*Sitophilus rugicollis* Casey	Indian black berry, Dholi garjan, Debdaru, Sal	+++	8, 11
721.	*Sitotroga cerealella* (Olivier)	Rice, Maize, Shorghum, Millet, Wheat	+++	1
722.	*Sogatella furcifera* (Horvath)	Rice	+++	1
723.	*Solenopsis geminata* (Fabricius)	Date palm, Palmyra palm, Coconut, Cane, Oil palm, Betel nut, Hemp	+	5, 8, 11, 12
724.	*Somena scintnillans* Walker	Lemon grass	+	13
725.	*Sphenoptera perotetti* Guenee	Groundnut	+	3
726.	*Spilarctia obliqua* (Walker)	Maize, Mungbean, Groundnut, Sesame, Linseed, Sunflower, Soybean, Groundnut, Cotton, Jute, Sugarbeet, Potato, Sweet potato, Termeric, Champa, White mulberry,	+++	1, 2, 3, 4, 5, 6, 7, 9, 11
727.	*Spilostethus pandurus* (Scopoli)	Ashwagandha, Isabgol	+	13
728.	*Spodoptera exigua* (Hübner)	Groundnut, Sesame, Soybean, Linseed Jute, Onion, Garlic, Chili	++	3, 4,9
729.	*Spodoptera frugiperda* J.E. Smith	Maize	++	1
730.	*Spodoptera litura* (Fabricius)	Chickpea, Groundnut, Linseed, Sunflower, Soybean, Wheat, Jute, Sugarbeet, Cotton, Cabbage, Cauliflower, Radish, Tomato, Guava, Chili, Thuja, Sajina, Tobacco, Hemp, Ulatchandal, Isabgol, Tulsi, Kalomegh, Safed musli, Muskdana, Thankuni, Lili	+++	2, 3, 4, 5, 7, 8, 9, 11
731.	*Spodoptera mauritia acronyctoides* Guenee	Rice	+	1
732.	*Spodoptera mauritia* Boisduval	Rice, Australian oak	+	1, 11
733.	*Stegobium paniceum* (Linnaeus)	Groundnut, Coriander	+++	3, 9
734.	*Stenchaetothrips biformis* (Bagnal)	Rice	+	1

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735.	*Sternocera sternocornis* Linneaus	Babla	+	11
736.	*Sternochaetus frigidus* (Fabricius)	Mango	+++	8
737.	*Sternochaetus mangiferae* (Fabricius)	Mango	+	8
738.	*Stibaraopus tabulatus*	Tobacco	+	12
739.	*Stomopteryx nerteria* Meyrick	Groundnut	+++	3
740.	*Stomopteryx* spp.	Soybean	+	3
741.	*Streblote siva* Lefevre	Debdaru	+	11
742.	*Strepsicrates rhothia* Meyrick	Mango, Eucalyptus	+	8, 11
743.	*Striglina scitaria* Walker	Iron wood	+	11
744.	*Stromatium barbatum* Fabricius	Deshi gab, Olive, Kathbel, Dewa, Carambola, Tejpata	+	8, 9
745.	*Suastus gremius* Fabricius	Date palm, Palmyra palm	+	5
746.	*Sylepta balteata* Fabricius	Sal	+	11
747.	*Sylepta crotonalis* Walker	Mehendi	+	11
748.	*Sylepta der364irsute364*abricius)	Cotton, Burma shimul, Lady's finger	++	4, 7
749.	*Syllepta* sp.	Lady's finger	+	7
750.	*Taeniothrips longistylus Karny*	Neem	+	11
751.	*Tanymecus hispidus* Marshall	Sugarcane	+	5
752.	*Tanymecus indicus* Faust	Rice	+	1
753.	*Tanymecus sciurus* Oliver	Sugarcane	+	5
754.	*Tarache notabilis* (Walker)	Cotton	++	4
755.	*Teleclita strigata Moore*	Haritoki	+	13
756.	*Tenymecus indicus* Faust	Soybean	+	3
757.	*Tessaratoma javanica* (Thunberg)	Litchi	++	8
758.	*Tetramorium guineense* (Fabricius)	Brinjal	++	7
759.	*Tetraneura hir364irsute*aker)	Tomato	+	7
760.	*Tetraneura nigriabdominalis* (Sasaki)	Tomato	+	7
761.	*Tetranychus bioculatus* (Wood-Mason)	Jute	+	4
762.	*Tetranychus oryzae* Hirst	Rice	+	1
763.	*Tetranychus telarius Linneaus*	White mulberry	+	11
764.	*Tetranychus urticae* Koch	Groundnut, Cotton, Sugarbeet, Aroids, Brinjal, Cucurbits, Citrus,	+++	3, 4, 5, 6, 7,

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		Papaya, Chili, Capsicum, Marigold, Rose, Orchid, Chrysanthemum, Zinnia, Dalia, Neem, Hemp, Ashwagandha, Kalomegh, Gulancha, Mint		8, 9, 10, 12, 13
765.	*Thaia oryzivora* Ghauri	Rice	+	1
766.	*Thalassodes quadraria* Guenee	Debdaru	+	11
767.	*Thamnurgides bambusae Beeson*	Bamboo	+	11
768.	*Thamnurgides cinnamomi* Eggers	Cinnamon	++	9
769.	*Thamnurgides dipterocarpi* Beeson	Dholi garjan	+++	11
770.	*Thamnurgides indicus* Eggers	Palmyra palm, Olive, Indian black berry, Jog dumur	++	5, 8, 11
771.	*Thamnurgides litoralis* Beeson	Sundari	+++	11
772.	*Thamnurgides opacifrons* Beeson	Sundari	+	11
773.	*Thamnurgides variabilis* Beeson	Segun	+	11
774.	*Thamnurgides vulgaris* Eggers	Pitraj	+	11
775.	*Thrips flavidus* Bagnall	Cucurbits	+	11
776.	*Thrips flavus* Schrank	Black siris	+	11
777.	*Thrips orientalis* Bagnall	Jasmine	++	10
778.	*Thrips palmi* Karny	Cotton, Mungbean	+	3, 4
779.	*Thrips simplex* (Morison)	Gladiolus	++	10
780.	*Thripis tabaci* (Lindermann)	Sunflower, Cotton, Pineapple, Onion, Garlic, Capsicum, Ulatchandal, Kakmachi	++	3, 4, 8, 9, 13
781.	*Thysanoplusia orichalcea* (Fabricius)	Groundnut, Lemon grass, Isabgol	+	3, 13
782.	*Tirathaba leucotephras* Meyrick	Golpata	+	5
783.	*Toxoptera aurantii* (Boyer de Fonscolombe)	Citrus, Jackfruit, Litchi, Chinese rose, Tea	+	7, 9, 12
784.	*Toxoptera odinae* van der Goot	Mango	+	8
785.	*Trachys bicolor* (Kerremans)	Polash	+	11
786.	*Trachys pacifica* Kerr	Jute	+	4
787.	*Tribolium castaneum* (Herbst)	Wheat, Rice, Lentil, Groundnut, Tamarind	+++	1, 3, 8
788.	*Trichoplusia ni* (Hubner)	Lemon grass, Safed musli	++	13
789.	*Tridactylus* sp.	Eucalyptus, Rubber, Segun	+++	11
790.	*Trioza fletcheri Crawford*	Arjun	+++	11

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791.	*Trioza jambolanae* Crawford	Indian black berry	+	8
792.	*Trogoderma granarium* (Everts)	Rice, Wheat, Maize, Shorghum, Millet, Groundnut	+	1, 3
793.	*Trypanophora semihyalina* Kollar,	Hijal	+	11
794.	*Tuta absoluta* (Meyrick)	Tomato	+	8
795.	*Tyrophagus* sp.	Onion	+	9
796.	*Udaspes folus* Cramer	Ginger, Termeric	++	9
797.	*Urentius hystricellus* (Richter)	Brinjal	+	7
798.	*Urentius sentis* Distant	Brinjal	+	7
799.	*Virachola isocrates* Fabricius	Guava, Pomegranate, Sapota, Kathbel, Tamarind	+++	8
800.	*Xanthochelus supercilosus* (Gyllenhal)	Ber	+	8
801.	*Xyleborus bicolor* Blandford	Indian black berry, Sundari	+++	8, 11
802.	*Xyleborus cognatus* Blandford	Sundari	+	11
803.	*Xyleborus discolor* Blandford	Rubber	+	11
804.	*Xyleborus fallax* Eichhoff	Dholi garjan	+	11
805.	*Xyleborus fornicates* Eichhoff	Guava, Khoksha dumur, Jiga, Iron wood	+	8, 11
806.	*Xyleborus intectus* Beeson	Dholi garjan	+	
807.	*Xyleborus interjectus* Blandford	Silk cotton, Jackfruit, Hog plum, Dewa, Dholi garjan, Mandar, Banyan tree, Aswatha, Gamari, Rubber, Jiga, Sal, Segun Iron wood, Black siris, Kadam, Bohera	+++	4, 8, 11, 13
808.	*Xyleborus laticollis* Blandford	Amloki, Sundari	+	8, 11
809.	*Xyleborus mus* Eggers	Champa	+++	11
810.	*Xyleborus perforans* Wollaston	Mango, Coconut, Hog plum, Sundari, Rubber, Jiga, Mohua, Kumbhi, Badar lathi, Segun, Haritoki	+++	8, 11, 13
811.	*Xyleborus pinicola* Eggers	Pine	+++	11
812.	*Xyleborus semiopacus* Eichhoff	Camphor, Rubber, Jarul, Chapalish, Bok phul	+++	11
813.	*Xyleborus similis* Ferrari	Wood apple, Sundari, Rubber, Polash, Bohera	++	8, 11, 13
814.	*Xyleborus burmanicsus* Beeson	Jog dumur	+	11
815.	*Xyleborus discolor* Blandford	Camphor	+	11
816.	*Xyleborus gravidis* Blandford	Mahagoni	+++	11
817.	*Xyleborus incurvus* Eggers	Golpata	+	5

Sl. No.	Scientific name	Host plants	Rating	Reference Table
818.	*Xyleborus noxius* Sampson	Babla	+++	11
819.	*Xyleborus* sp.	Australian acacia	+	11
820.	*Xyleborus testaceus* Walker	Betel nut	+	12
821.	*Xylocopa aestuans* Linneaus	Banyan tree, Khoksha dumur, Jog dumur, Aswatha, Champa	+	11
822.	*Xylocopa latipes* Drury	Bamboo	+	11
823.	*Xylodectes ornatus* Lesne	Amloki	+	8
824.	*Xylosandrus* (*Xyleborus*) *compactus* Eichhoff	Rubber	+	11
825.	*Xylosandrus* (*Xyleborus*) *discolor* Blandford	Jog dumur, Mahagoni	++	11
826.	*Xylosandrus* (*Xyleborus*) *morigerus* Blandford	Ipil-ipil	+	11
827.	*Xylothrips flavipes* (Illiger)	Olive	+	11
828.	*Xylotrechus quadripes* (Chevrolat)	Coffee	+	12
829.	*Xylotrechus smei* Laporte & Gory	Polash, Gamari, White mulberry, White siris	+	11
830.	*Xystrocera globosa* (Olivier)	Kanchan, Iron wood	+	11
831.	*Zabrotes subfasciatus* (Boheman)	Kenaf, Mesta	+	4
832.	*Zeuzera coffeae* Neitner	Litchi, Amloki, Cinnamon, Australian acacia, Bandar lathi, Australian oak, Camphor, Krishnachura, Jarul, Champa, Mahagoni, Iron wood, Tea, Coffee	+	8, 9, 11, 12

B. Disease causing Pathogens

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
1.	Achlya prolifera	Rice	+++	14
2.	*Acremonium strictum*	Bamboo, Eucalyptus, Sundri,	++	24
3.	*Acremonium terricola*	Bamboo	++	24
4.	*Aecidium crataevae*	Temple plant	++	24
5.	*Aecidium mori*	White mulberry	++	24
6.	*Albugo candida*	Amaranthus spp., Cabbage, Cauliflower, Turnip, Radish	+	20
7.	*Albugo occidentalis*	Red Amaranth	+++	20
8.	*Alternaria alternata*	Wheat, Chickpea, Lentil, Sunflower, Cotton, country bean, Ber, Rose, Gerbera, Marigold, Tuberose, Indian aloe	++	14, 15, 16, 17, 20, 21, 23, 26
9.	*Alternaria brassicae*	Cabbage, cauliflower, rape seed mustard, radish,	+++	15, 20
10.	*Alternaria brassicicola*	Cabbage, cauliflower, country bean, radish, rape seed & mustard, niger, linseed, coriander, fennel, fenugreek, Jain, safflower	++	16, 20, 22, 23,
11.	*Alternaria capsici*	*Chilli*	++	21
12.	*Alternaria citri*	Orshogondha, Gerbera	++	23, 26
13.	*Alternaria dauci*	Carrot	++	20
14.	*Alternaria dianthicola*	Lentil, mango	+	15, 21
15.	*Alternaria helianthi*	Sunflower	+++	16
16.	*Alternaria lini*	Linseed	++	16
17.	*Alternaria longipes*	Tobacco	+++	25
18.	*Alternaria longissima*	Rice	+	14
19.	*Alternaria macrospora*	Cotton	++	17
20.	*Alternaria melongena*	Eggplant	+	20
21.	*Alternaria porri*	Onion, garlic	+++	22
22.	*Alternaria raphani*	Rape seed mustard, radish,	++	16, 20
23.	*Alternaria ricini*	Castor	++	16
24.	*Alternaria saccharicola*	Rose	++	23
25.	*Alternaria sesami*	Sesame	+++	16
26.	*Alternaria solani*	Fennel, lettuce, tomato, eggplant, potato	++	20, 22

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
27.	*Alternaria sonchi*	Lettuce	++	20
28.	*Alternaria tennuissima*	Gerbera	+	23
29.	*Alternaria tenuis*	Rice, Mungbean, Rapeseed & Mustard, Sesame, Radish, Chilli, Fennel, Fenugreek, Celery, Red silk cotton, Tobacco,	++	14, 15, 16, 20, 22, 24, 25,
30.	*Alternaria triticina*	Wheat	+	14
31.	*Aphelenchoides avenae*	Tea	++	25
32.	Aphelenchoides besseyi	Rice	+++	14
33.	*Aphelenchoides fragariae*	Amaranth, Indian spinach, sweet potato, potato, betel leaf	+	20, 25
34.	*Aphelenchus avenae*	Eggplant	++	20
35.	*Apiospora camptospora*	Bamboo	++	24
36.	*Apiospora moantagnei*	Bamboo	++	24
37.	*Arthrinium piospora*	Bamboo	++	24
38.	*Ascochyta bambusina*	Bamboo	++	24
39.	*Ascochyta hibisci*	Kenaf	++	17
40.	Ascochyta oleracea	Cabbage	++	20
41.	Ascochyta pisi	Field pea	++	15
42.	*Ascochyta rabiei*	Chickpea, field pea	++	15
43.	*Ascochyta trifolii*	Grass pea	++	15
44.	*Ascochyta tritici*	Wheat	++	14
45.	*Aspergillus caesillus*	Agarwood	++	24
46.	*Aspergillus candidus*	Rice, Rape seed mustard	++	14, 16
47.	*Aspergillus chevalieri*	Agarwood	++	24
48.	*Aspergillus clavatus*	Mungbean, country bean	+++	15, 20
49.	*Aspergillus flavus*	Wheat, Maize, Chickpea, Grasspea, Lentil, Blackgram, Mungbean, Cowpea, Groundnut, Sesame, Soybean, Tomato, Bitter gourd, Country bean, Eggplant, Onion, Chilli, Rose, White siris, Agarwood, Bamboo, Lemon scented gum tree	++	14, 15, 16, 20, 22, 24,
50.	*Aspergillus flavus-oryzae*	Rice	+++	14
51.	*Aspergillus fmigatus*	blackgram, tomato, marigold	++	15, 20, 23

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
52.	*Aspergillus glaucas*	Country bean, onion, Red silk cotton, white siris, Lemon scented gum tree,	++	20, 22, 24
53.	*Aspergillus nidulans*	Rice	+++	14
54.	*Aspergillus niger*	Rice, chickpea, cowpea, groundnut, lime & lemon, onion, garlic, rose, Red silk cotton, Lemon scented gum tree, teak,	++	14, 15, 16, 21, 22, 24
55.	*Aspergillus ochraceous*	Eggplant, Red silk cotton, white siris, Lemon scented gum tree	++	20, 24
56.	*Aspergillus repens*	Teak	++	24
57.	*Aspergillus restrictus*	Agarwood	++	24
58.	*Aspergillus ruber*	Rice, Agarwood, teak	++	14, 24
59.	*Aspergillus sejunctus*	Agarwood	++	24
60.	*Aspergillus tamari*	Agarwood	++	24
61.	*Asterina delicatula*	Hog plam, Wood apple	+	21
62.	*Asterina lowsoniae*	Sal	++	24
63.	*Aurichularia auricular-judae*	Sal, unidentified logs	++	24
64.	*Auricularia cf. petata*	Indian blackberry	+	24
65.	*Auricularia polytricha*	Unidentified logs	++	24
66.	Banana mosaic virus	Banana	++	20
67.	Bean (Pea) leaf roll virus	Chickpea, lentil	++	15
68.	Bean common mosaic virus	Mungbean, cowpea, Country bean	+++	15, 20
69.	Bean yellow mosaic virus	Lentil, soybean	+	15, 16
70.	*Belonolaimus longicaudatus*	Groundnut, Cotton, potato, sweet gourd, betel leaf	++	16, 17, 20, 25
71.	*Bipolaris maydis*	Maize	++	14
72.	*Bipolaris oryzae*	Rice	+++	14
73.	*Bipolaris sorokiniana*	Wheat, barley	++	14
74.	*Bipolaris turcicum*	Maize	+++	14
75.	*Bitrytis cinerea*	Gerbera	++	23
76.	Blackgram golden mosaic virus	Blackgram	++	15
77.	Blackgram mosaic virus	Blackgram	++	15
78.	Blackgram Yellow mosaic virus	Blackgram	+++	15
79.	*Blumeria graminis* f. sp. *tritici*	Wheat	+	12

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
80.	*Botrydlplodla theobromae*	Mesta, Coconut	+	17, 22
81.	*Botryobasidium salmonicolor*	Cashew-nut, custard apple, Citrus, blackberry, litchi, mango,	++	21
82.	*Botryodiplodia theobromae*	Maize, chickpea, mungbean, blackgram, jute, mesta, sweet potato, coconut, Citrus, jackfruit, pineapple, papaya, blackberry, litchi, chilli, mango, banana, date palm, guava, raintree, Agarwood, sissoo, rubber, slash pine, silk cotton tree, Honduras mahogany, betelnut, tea,	++	14, 15, 17, 20, 21, 24, 25
83.	*Botryosphaera ribis*	Sundri	++	24
84.	*Botryotinia fuckeliana*	Onion	++	22
85.	*Botrytis aclada*	Onion	++	22
86.	*Botrytis allii*	Rose	++	23
87.	*Botrytis cinerea*	Chickpea, lentil, sunflower, onion	++	15, 16, 22
88.	*Botrytis elliptica*	Tuberose	+	23
89.	*Botrytis gladiolorum*	Gladiolus	++	23
90.	*Botrytis squamosa*	Onion	++	22
91.	Bottle gourd mosaic virus (BgMV)	Ash gourd	++	20
92.	*Bremia lactucae*	Lettuce	++	20
93.	Bunchy top virus	Banana	++	21
94.	*Burkholderia cepacia*	Onion	++	22
95.	*Candida krusei*	Citrus	++	21
96.	*Candidatus Phytoplasma solani*	Eggplant	++	20
97.	*Candidatus Liberibacter asiaticus*	Citrus	++	21
98.	*Capnodium citri*	Citrus	+++	21
99.	*Capnodium mangiferum*	Mango	++	21
100.	*Capnodium ramosus*	Mango	++	21
101.	*Capnodium roseum*	Mango	++	21
102.	*Catacauma infectorium*	*Sacred fig*	++	24
103.	*Catacauma repens*	*Sacred fig*	+	24
104.	*Cephalenchus emerginatus*	Eggplant	++	20
105.	*Cephaleuros mycoidea*	Banyan tree, Sal	++	24
106.	*Cephaleuros parasitica*	Sapodilla, mango, guava, litchi, bay leaf, black pepper, tea	++	20, 22, 25

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
107.	*Cephaleuros viens*	Guava	++	21
108.	*Cephaleuros viriscens*	Indian blackberry	++	24
109.	*Cephaleurous virescencs*	Mango	++	21
110.	*Cephalosporium grogatum*	Soybean	+	16
111.	*Cephalosporium sacchari*	Sugarcane	++	18
112.	*Ceratocystis fimbriata*	Rubber	++	24
113.	*Ceratocystis paradoxa*	Sugarcane Jackfruit, coconut, Pineapple betelnut,	++	18, 21, 25
114.	*Cercospora abelmoschi*	Okra	++	20
115.	*Cercospora annonae*	Species of ata fruit	+	20
116.	*Cercospora annulata*	Opposite leaf fig	++	24
117.	*Cercospora arachidicola*	Groundnut	+++	16
118.	*Cercospora batatae*	Sweet potato	+	20
119.	*Cercospora beticola*	Beet	+	18
120.	*Cercospora canescens*	Mungbean, blackgram, cowpea, country bean	+++	15, 20
121.	*Cercospora capsici*	*Chilli*	+++	22
122.	*Cercospora coffeicola*	Coffee	++	25
123.	*Cercospora corchori*	Jute	++	17
124.	*Cercospora crotalareae*	Sunhemp	++	16
125.	*Cercospora cruenta*	Lentil, grasspea, blackbean, mungbean, cowpea, country bean	+++	15, 20
126.	*Cercospora cucurbitae*	Ash gourd	++	20
127.	*Cercospora gossypina*	Cotton	++	17
128.	*Cercospora hibici*	Kenaf	++	17
129.	*Cercospora impatentis*	Balsam	++	23
130.	*Cercospora janseana*	Rice	+++	14
131.	*Cercospora jujubae*	Ber	++	21
132.	*Cercospora kikuchii*	Soybean	++	16
133.	*Cercospora lactucae*	Lettuce	++	20
134.	*Cercospora longipes*	Sugarcane	+	18
135.	*Cercospora mangiferae-indicae*	Mango	+	21

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
136.	*Cercospora melongenae*	Eggplant	++	20
137.	*Cercospora momordicae*	Indian spinach, teasle gourd, bitter gourd	++	20
138.	*Cercospora musae*	Banana	+++	21
139.	*Cercospora necotianae*	Tobacco	+++	25
140.	*Cercospora psidii*	Guava	+	21
141.	*Cercospora ricinella*	Castor, sesame,	++	16
142.	*Cercospora subsessilis*	Neem, Mahagoni	++	24
143.	*Cercospora theae*	Tea	++	25
144.	*Cercospora tricosanthes*	Snake gourd	1	20
145.	*Cercospora woodforda*	Fire flame bush	++	24
146.	*Cercospora zeae-maydis*	Maize	++	14
147.	*Cercospora ziziphi*	Ber, jonglikol, bonboroi	++	21, 24
148.	*Cerotelium alienum*	Jewish plum	++	24
149.	*Cerotelium fici*	Fig	++	24
150.	*Chaetomella raphigera*	Jackfruit, rain tree, sissoo, rubber, keora, Mahogany	++	21, 24
151.	*Chaetomella raphigera*	Jackfruit	++	21
152.	*Chaetomium globosum*	Bamboo	++	24
153.	Chickpea chlorotic dwarf virus	Chickpea	+	15
154.	*Chlamydomyces palmarum*	Betelnut	+++	25
155.	Chlorotic mottle virus	Soybean	+	16
156.	*Choanephora cucurbitarum*	Cauliflower, hyacinth bean, country bean, potato, chilli	++	20, 22
157.	*Choanephora infundibulifera*	China rose	++	23
158.	*Choanephora sesamearum*	Sesame	++	16
159.	Citrus Tristeza Virus	Citrus	+	21
160.	*Cladosporium cladosporioide*	Rice, wheat, rose	++	14, 22
161.	*Cladosporium fulvum*	Tomato	+	20
162.	*Cladosporium herbarum*	Wheat	++	14
163.	*Cladosporium oxysporum*	Rose	++	23
164.	*Clavibacter xyli*	Sugarcane	+++	18

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
165.	*Clitocybe dealbata*	Unidentified logs	++	24
166.	*Coccomyces vilis*	Mango	+	21
167.	*Collectotrichum corchori*	Jute	+++	17
168.	*Colletotrichum acutatum*	Groundnut	+	16
169.	*Colletotrichum agave*	Century plant	++	23
170.	*Colletotrichum atvamentarium*	Eggplant	+++	20
171.	*Colletotrichum cajani*	Pigeonpea	+	15
172.	*Colletotrichum camellia*	Tea	++	25
173.	*Colletotrichum capsici*	Amaranthus spp., Arum, Chilli, Red silk cotton, Betel vine	++	20, 22, 24, 25
174.	*Colletotrichum catechu*	Betelnut	+++	25
175.	*Colletotrichum caulicola*	Blackgram	+	15
176.	*Colletotrichum coffeanum*	Coffee	++	25
177.	*Colletotrichum dematium*	Chickpea, mungbean, cowpea, groundnut, sesame, eggplant, potato, onion, gerbera, betelnut	++	15, 16, 20, 23, 25
178.	*Colletotrichum dematium var truncatum*	Okra, soybean	+++	16, 20
179.	*Colletotrichum falcatum*	Sugarcane	+++	18
180.	*Colletotrichum gloeosporioides*	Kenaf, mesta, okra, teasle gourd, lime & lemon, jackfruit, strawberry, papaya, strawberry, litchi, mango, guava, ber, chilli, black pepper, Indian bay leaf, gerbera, pink cassia, rain tree, sissoo, pongame oiltree, goran, gurjun, red gum tree, *Kandalia rehedii*, *Rhizophora conjugate*, sal, mahogany, West Indies Mahogany, rubber, betelnut, tea, Indian aloe	++	17, 20, 21, 22, 23, 24, 25, 26
181.	*Colletotrichum gossypii*	Cotton	++	17
182.	*Colletotrichum graminicola*	Sorghum, Blackgram, Okra	++	14, 15, 20
183.	*Colletotrichum hibici*	Kenaf, mesta	++	17
184.	*Colletotrichum lagenarium*	Cucumber, bottle gourd	++	20
185.	*Colletotrichum lindemuthianum*	Mungbean, cowpwa, soybean, country bean, snake gourd,	+	15, 16, 20,
186.	*Colletotrichum melongenae*	Eggplant	+++	20
187.	*Colletotrichum musae*	Banana	++	21

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
188.	*Colletotrichum nigrum*	*Chilli*	++	22
189.	*Colletotrichum orbiculare*	Groundnut	+	16
190.	*Colletotrichum piperis*	Betel vine	+	25
191.	*Colletotrichum tabacum*	Tobacco	++	25
192.	*Colletotrichum truncatum*	Lentil	++	15
193.	*Colletotrichum zingiberis*	Ginger	++	22
194.	*Coniella diplodiella*	Slow match tree	++	24
195.	*Coniothyrium arecae*	Betelnut	++	25
196.	*Coniothyrium fuckelii*	Bamboo	++	24
197.	*Coprinus micaceus*	Unidentified logs	++	24
198.	*Coriolopsis telfarii*	Unidentified logs	++	24
199.	*Corn stunt virus (CSV)*	Maize	++	14
200.	*Corticium invisum*	Tea	+++	25
201.	*Corticium salmonicolor*	Jackfruit, Red gum tree, rubber, Tamarind	++	21, 24
202.	*Corticium theae*	Tea	+++	25
203.	*Corynebacterium sepedonicum*	Potato	++	20
204.	*Corynespora cassicola*	Mungbean, blackgram, grasspea, sesame, jute, kenaf, mesta, potato, okra, chilli, rubber, Cane,	++	15, 16, 17, 20, 24
205.	Cowpea aphid-borne mosaic virus	Cowpea	++	15
206.	Cowpea chlorotic mottle virus	Soybean	+	16
207.	Cowpea yellow mosaic Virus	Cowpea	+++	15
208.	*Criconemoides rusticum*	Groundnut	+	16
209.	Cucumber mosaic virus (CMV)	Cucumber, Sweet gourd, Bottle gourd, ribbed gourd, ash gourd, bitter gourd, chilli	++	20, 22,
210.	*Cunninghamella echinulata*	Agarwood	++	24
211.	*Curvularia erarostidis*	African oil palm	++	24
212.	*Curvularia geniculata*	*Chilli*	+	22
213.	*Curvularia lunata*	Rice, wheat, maize, rape seed mustard, niger, safflower, jute, ber, chilli, Red silk cotton, Rose gum tree,	+	14, 16, 17, 21, 22, 24
214.	*Curvularia maculans*	Maize	++	14

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
215.	*Curvularia pallescens*	Rose	++	23
216.	*Curvularia senegalensis*	Rape seed mustard	+	16
217.	*Cylindrocladium crotalariae*	Groundnut	+	16
218.	*Cylindrocladium floridanum*	Sal	++	24
219.	*Cylindrocladium scoparium*	Sal	++	24
220.	*Cytospora sacchari*	Sugarcane	+	18
221.	*Cytospora bambusae*	Bamboo	++	24
222.	*Daedalea cf quercina*	Blinding tree	++	24
223.	*Daedalea ambigua*	Unidentified logs	++	24
224.	*Daedalea* boseii	Mango	++	21
225.	*Daedalea cf hobsoni*	Blinding Tree, Wood oil tree	++	24
226.	*Daedalea confragosa*	Tree under garjan group, woodoil tree	++	24
227.	*Daedalea corrugata*	Unidentified logs, Mallata	++	24
228.	*Daedalea flavida*	Sissoo, Tree under garjan group, Blinding Tree, sal, Indian laurel	++	24
229.	*Daedalea indica*	Unidentified logs	++	24
230.	*Daedalea quercina*	Blinding Tree	++	24
231.	*Daedalea stereoides*	Black siris, Sal	++	24
232.	*Daedalea zonata*	Sundri, Teak	++	24
233.	*Daldinia concentrica*	Chapalis, Tree under garjan group	++	24
234.	*Daldinia eschscholzii*	Fig, date palm	++	24, 18
235.	*Dasheen mosaic virus*	Arum	+	20
236.	*Dendrophthoe falcata*	Pitraj, latkao, miringa, belfoi, silver oak, keora, chundul, passur, blackberry	++	24
237.	*Dendrophthoe pentandra*	Pink cassia, Kapok, sissoo, kakra, Indian rhododendron, Persian lilac, Coval jasmine, black plum, Indian blackberry, Dhakijam, arsol, mango	++	24, 21
238.	*Diaporthe phaseolorum*	Dragon fruit	+	21
239.	*Didymella bryoniae*	Cucumber, bottle gourd, water melon	++	20, 21
240.	*Dimeriella sacchari*	Sugarcane	++	18
241.	*Diplocarpon rosae*	Rose	++	23
242.	*Diplodia agaves*	Century plant	++	24

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
243.	*Diplodia calami*	Cane	++	24
244.	*Diplodia corchori*	Jute	+++	17
245.	*Diplodia gossypina*	Cotton	+++	17
246.	*Diplodia maydis*	Maize	+++	14
247.	*Diplodia natalensis*	Water melon	++	21
248.	*Diplodia natalensis*	Mango	+++	21
249.	*Diplodia rheae*	Rhea	++	17
250.	*Ditylenchus angustus*	Rice	+	14
251.	*Ditylenchus destructor*	Potato	+++	20
252.	*Ditylenchus dipsaci*	Beet,radish, potato, spinach, Citrus, onion, garlic, chilli, betel vine,	++	20, 21, 22, 25
253.	*Ditylenchus melongena*	Eggplant	++	20
254.	*Dothiorella mahagonia*	West Indies mahogony	++	24
255.	*Dothiorella mangiferae*	Mango	++	21
256.	*Drechelera hawaiiensis*	Wheat	++	14
257.	*Drechslera heveae*	Rubber	++	24
258.	*Drechslera oryzae*	Wheat	++	14
259.	*Drechslera rostrata*	Wheat, papaya	++	14, 21
260.	*Drechslera sacchari*	Wheat	++	14
261.	*Drechslera sesami*	Sesame	+	16
262.	*Drechslera stenospilas*	Sugarcane	++	18
263.	*Drechslera tetramera*	Wheat	++	14
264.	*Drechslera tritici repentis*	Wheat	++	14
265.	*Drechslera victoriae*	Wheat	++	14
266.	Eggplant mosaic virus	Eggplant	+	20
267.	*Elsinoe fawcetti*	Citrus	+++	21
268.	*Endodothella albizziae*	Black siris	++	24
269.	*Entyloma oryzae*	Rice	++	14
270.	*Epicoccum nigrum*	Betelnut	++	25
271.	*Epicoccum purpurescens*	Rice, ghritokumari	++	14, 26
272.	*Erisyphe heraclei*	Coriander	++	22

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
273.	*Erwinia carotovora*	Cauliflower	+	20
274.	*Erwinia carotovora* subsp. *carotovora*	Okra, cucumber, tomato, radish, eggplant, mango, banana, pine apple, papaya, onion,	++	20, 21, 22
275.	*Erwinia carotovora var. atroseptica*	Potato	++	20
276.	*Erwinia chrysanthemi*	Potato, onion, ghrotokumari	++	20, 22, 26
277.	*Erwinia chrysanthemi pv chrysanthemi*	Rice	+	14
278.	*Erysiphe cichoracearum*	Cucumber, sweet gourd, bottle gourd, ribbed gourd, gerbera	++	20, 23
279.	*Erysiphe polygoni*	Chickpea, Lentil, Mungbean, Cowpea, Field pea, Rape seed mustard, Country bean, Turnip, Coriander	+	15, 16, 20, 22
280.	*Exosporium palmivorum*	Palm	+	17
281.	*Flammula alnicola*	Sil bhadi	++	24
282.	*Flammula dilepsis*	Palm, Date palm	+	18
283.	*Flammula penetrans*	Bamboo	++	24
284.	*Fomes pachyphloeus*	Kanak champa	++	24
285.	*Fomes albomarginatus*	Sal, Wood oil tree, Dipterocarpus sp.	++	24
286.	*Fomes anebus*	Civit	++	24
287.	*Fomes applanatus*	Wood oil tree, Smyrna fig	++	24
288.	*Fomes badius*	Cutch tree, Babul, Haldu, Sundri, Unidentified logs, Betelnut	++	24, 25
289.	*Fomes caryophylli*	Sal	++	24
290.	*Fomes conchatus*	Sundri	+++	24
291.	*Fomes dochmius*	Alexandrian laurel, Bamboo, Nageswar, Sal	++	24
292.	*Fomes durissimus*	Dhaura, Sal, Honduras mahogany, West Indies mahogany, Jack fruit	++	24, 21
293.	*Fomes fastuosus*	Cutch tree, Batangi, Sal, West Indies mahogany, Tila jarul	++	24
294.	*Fomes fomentarius*	Unidentified logs	++	24
295.	*Fomes geotropus*	Pitraj, Spruce	++	24
296.	*Fomes lamaensis*	Sal	++	24
297.	*Fomes lignosus*	Rubber	++	24
298.	*Fomes lividus*	Cutch tree, Bamboo, Sal	++	24
299.	*Fomes melanoporus*	Sal, Indian laurel	++	24

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
300.	*Fomes ostreiformis*	Hargaza	++	24
301.	*Fomes pachyphloeus*	Mango, Unidentified logs	++	21, 24
302.	*Fomes pactinatus*	Bamboo	++	24
303.	*Fomes pallidus*	Unidentified logs	++	24
304.	*Fomes pseudosenex*	Sal	++	24
305.	*Fomes ribis*	Tila jarul, Pride of India	++	24
306.	*Fomes rimosus*	Cutch tree Passur Sundri Tila jarul Kamala tree Batangi Brown oak Sal Belleric myrabolan Indian laurel Dhundul	++	24
307.	*Fomes roseus*	White teak, Spruce, Sal	+++	24
308.	*Fomes senex*	Apple blossom cassia, Chittagong wood, Smyrna fig, Ghora neem, Pear, White oak, Brown oak, Burma toon, Unidentified logs	++	24
309.	*Fomes sublinteus*	Dipterocarpus sp.	++	24
310.	*Fomes tricolor*	Sal	++	24
311.	*Fomitopsis dochmius*	Dipterocarpus sp.	++	24
312.	*Fommes albomarginatus*	Elaeocarpus sp.	++	24
313.	*Fumago sacchari*	Sugarcane	++	18
314.	*Fusarium caeruleiam*	Potato	+++	20
315.	*Fusarium annum*	*Chilli*	+++	22
316.	*Fusarium avenaceum*	Lentil, Rape seed mustard	++	15, 16
317.	*Fusarium decemcellulare*	Mango	++	21
318.	*Fusarium dimerum*	Sesame	++	16
319.	*Fusarium diversisporum*	Bamboo	++	24
320.	*Fusarium equiseti*	Okra	++	20
321.	*Fusarium equiseti*	Mungbean, Sesame, Rape seed mustard, Soybean, Cauliflower, *Chilli,* Tuberose, Bamboo, False ashoka	++	15, 16. 20, 22, 23, 24
322.	*Fusarium fujikuroi*	Dragon fruit	+	21
323.	*Fusarium graminearum*	Wheat ,Tuberose	++	14, 23
324.	*Fusarium moiliforme*	Rice, Maize, Lentil, Blackgram, Mungbean, Grasspea, Rape seed mustard, Sunflower, Sugarcane, Eggplant, Okra, Snake gourd, Country bean, Litchi, Mango, *Chilli,* Bamboo, Indian sandalwood	++	14, 15, 16, 18, 20, 21, 22, 24

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
325.	*Fusarium orthoceros*	Chickpea	+++	15
326.	*Fusarium oxysporum*	Rice, Wheat, Maize, Lentil, Chickpea, Mungbean, Blackgram, Grasspea, Cowpea, Pigeon pea, Field pea, Rape seed mustard, Soybean, Linseed, Jute, Kenaf, Mesta, Eggplant, Ash gourd, Potato, Tomato, Cauliflower, Strawberry, Water melon, Onion, Garlic, Black cardamom, *Chilli,* Ginger, Agarwood, Red silk cotton, Sissoo, White teak, Rubber, White leadtree, Honduras mahogany, Teak, Betel vine, Tea, Tulsi, Choi-jal	++	14, 15, 16, 17, 20, 21, 22, 24, 25, 26
327.	*Fusarium oxysporum* f. *cubens*	Banana	++	21
328.	*Fusarium oxysporum f.* sp. *conglutinans*	Cabbage	++	20
329.	*Fusarium oxysporum* f. sp. *gladioli*	Gladiolus	++	23
330.	*Fusarium oxysporum f. sp. melongenae*	Eggplant	++	20
331.	*Fusarium oxysporum* f. sp. *niveum*	Water melon	++	21
332.	*Fusarium oxysporum* f. sp. *psidii*	Guava	+++	21
333.	*Fusarium oxysporum f. sp. vasinfectum*	Cotton	++	17
334.	*Fusarium oxysporum f.sp. ciceri*	Chickpea	+++	15
335.	*Fusarium oxysporum* f.sp. *cucumerinum*	Cucumber	++	20
336.	*Fusarium oxysporum f.sp. lentis*	Lentil	++	15
337.	*Fusarium oxysporum f.sp. lini*	Linseed	++	16
338.	*Fusarium oxysporum f.sp. lycopersici*	Tomato	+++	20
339.	*Fusarium oxysporum* f.sp. *phaseoli*	Bush bean, country bean	++	20
340.	*Fusarium oxysporum* f.sp. *vasinfectum*	Sesame	++	16
341.	*Fusarium oxysporum* f.sp. *zingiberi*	Ginger	++	22
342.	*Fusarium oxysporumf.sp. vasinfectum*	Okra	++	20
343.	*Fusarium roseum*	Papaya, Banana	++	21
344.	*Fusarium semitectum*	Rice, Wheat, Blackgram, Rape seed mustard, Groundnut, Soybean, Sesame, Sunflower, Jute, Okra, Ber, *Chilli*	++	14, 15, 16, 17, 20, 21, 22

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
345.	*Fusarium solani*	Lentil, Chickpea, Mungbean, Blackgram, Rape seed mustard, Sesame, Soybean, Kenaf, Mesta, Eggplant, Potato, Okra, Jack fruit, Guava, Papaya, Citrus, Ginger, Fenugreek, Celery seed, Agarwood, Sissoo, red gum tree, White teak, Rubber, White leadtree, Medlar, Nagappu, Khasya pine, Radiata pine, Canary Island pine, Honduras mahogany, Teak, Orshogondha, Choi-jal, Ghritokumari,	++	15, 16, 17, 20, 21, 22, 24, 26
346.	*Fusarium solani f.sp. dalbergiae*	Sissoo	++	24
347.	*Fusarium solani f.sp. phaseoli*	Country bean	++	20
348.	*Fusarium udum*	Pigeon pea, Cowpea	++	15
349.	*Fusarium udum f.sp. crotalareae*	Sunhemp	++	17
350.	*Fusicladium pongamae*	Pongame oil tree	++	24
351.	*Gaeumannomyces leucopheus*	Shil ganjan	++	24
352.	*Gaeumannomyces graminis*	Wheat, maize	+	14
353.	*Ganoderma lucidum*	Indian laurel	++	24
354.	*Ganoderma applanatum*	Mango, Jack fruit, Bamboo, Sissoo, Kat illupei, Wood oil tree, Smyrna fig, Kamala tree, white mulberry,	++	21, 24
355.	*Ganoderma leocopheus*	Kamala tree	++	24
356.	*Ganoderma lucidum*	Coconut, Babul, Pink cedar, Chinquapin, Sissoo, Sundri, Katebel, Nageswar, Royal Poinciana, Honduras mahogany, Pyinkado, Betelnut	++	21, 24, 25
357.	*Ganoderma pseudoferreum*	Rubber	++	24
358.	Garlic mosaic virus (GarMV)	Garlic	+	22
359.	*Gibberella avenacea*	Maize	++	14
360.	*Gibberella moniliforme*	Sugarcane	++	18
361.	*Gloeosporium sydae*	Guava	+++	21
362.	*Gloeosporium musarum*	Banana	++	21
363.	*Glomeralla cingulata*	Jute, Kenaf, Mesta, Coconut, Onion, Garlic, Cinnamon tree, Krishnachura, Red silk cotton African oil palm, Auri, Rubber, Date palm,Tea	++	17, 18, 22, 23, 24, 25
364.	*Glomerella piperata*	Tomato	+	18
365.	*Gongronella butlleri*	Bamboo	++	24

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
366.	*Gramothele effuse-reflexa*	Sal	++	24
367.	*Graphiola applanata*	Date palm	++	24
368.	*Graphiola phoenicis*	Date palm	++	18
369.	*Guepinia spathularia*	Bamboo, Sal	++	24
370.	*Guignardia calami*	Calamus guruba	++	24
371.	*Haplobasidium lelebae*	Bamboo	++	24
372.	*Helicobasidium compactum*	Tea	+	24
373.	*Helicotylenchus dihystera*	Rice, Wheat, Maize, Sesame, Cotton, Potato, Indian spinach, Pine apple, Onion, Garlic, Tea, Betel vine	+	14, 16, 17. 20, 21, 22, 25
374.	*Helicotylenchus* indicus	Sugarcane, Eggplant,	++	18, 20
375.	*Helicotylencus multicinctus*	Banana	++	21
376.	*Helminthosporium avenae*	Oat	++	14
377.	*Helminthosporium gramineum*	Barley	++	14
378.	*Helminthosporium sacchari*	Sugarcane	++	18
379.	*Helminthosporium solani*	Potato	+	20
380.	*Hemileia holarrhenae*	Connessi Bark	++	24
381.	*Hexagonia cf. hirta*	Unidentified logs	++	24
382.	*Hexagonia discopoda*	Sal, Mango	++	21, 24
383.	*Hexagonia kurzii*	Unidentified logs	++	24
384.	*Hexagonia rubiginosum*	Bamboo	++	24
385.	*Hexagonia sulcata*	Sal	++	24
386.	*Hexagonia tenuis*	Chaplais, Blinding Tree	++	24
387.	*Hirschmanniella micronatus*	Rice	++	14
388.	*Hirschmanniella oryzae*	Rice	++	12
389.	*Hoplolaimus indicus*	Maize, Mungbean, Potato, Tomato, Eggplant, Bottle gourd, Cucumber, Indian spinach, Pine apple, Fennel, Tobacco, Betel vine	++	14, 15, 20, 22, 25
390.	*Hydnum udum*	Unidentified logs	++	24
391.	*Hymenochaete cf. tabacina*	Sundri	++	24
392.	*Hymenochaete noxia*	Rubber	++	24
393.	*Hymenochaete rubiginosa*	Quercus spicata, Sal	++	24

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
394.	*Hypochnus solani*	Cowpea	+	15
395.	*Hypocrella discoidea*	Jew plum	++	24
396.	*Hypoxylon hypomiltum*	Excoecaria agallocha	++	24
397.	*Hypoxylon rubiginosum*	Bamboo	++	24
398.	Iris Yellow spot Virus	Onion	++	22
399.	*Irpex flavus*	Coconut, Jackfruit, Bamboo, Sissoo, Ashwattha tree, Silk tree, Lac tree, Indian laurel, Sal, Teak	++	21, 24
400.	*Irpex lacteus*	Bamboo	++	24
401.	*Isariopsis griseola*	Country bean	+	20
402.	*Isariopsis indica var. ziziphi*	Ber	+++	21
403.	*Klebsiella variicola*	Papaya	++	21
404.	*Konradia bambusina*	Bamboo	++	24
405.	*Lasiodiplodia pseudotheobromae*	Citrus	+++	21
406.	*Lasiodiplodia theobromae*	Dragon fruit, Ber, Sissoo, Cacao	++	21, 24, 25
407.	Leaf chlorosis virus	Salvia splendens	++	23
408.	Leaf curl virus	Grasspea, Soybean, Cabbage, Ash gourd, Cauliflower, Sweet gourd, Bottle gourd, Tobacco	+	15, 16, 20, 25
409.	Leaf curling v*irus/ Mycoplasma*	Kenaf	++	17
410.	Leaf mosaic virus/MLO	Jute	+++	17
411.	Leek yellow stripe poty virus (LYSP)	Onion	++	22
412.	Leek yellow stripe virus	Garlic	+	22
413.	*Lentinus cf. badius*	Honduras mahogany	++	24
414.	*Lentinus coadunatus*	Unidentified logs	++	24
415.	*Lentinus cochleatus*	Bamboo, Unidentified logs	++	24
416.	*Lentinus infundibuliformis*	Honduras mahogany	++	24
417.	*Lentinus palisorti*	Mango	++	20
418.	*Lentinus praerigidus*	Dhup, Sal, Honduras mahogany, Syzygium sp.	++	24
419.	*Lentinus subnudus*	Sal, Unidentified logs	++	24
420.	*Lentnus badius*	Honduras mahogany	++	24
421.	*Lenzites adusta*	Bamboo, Indian elm, Sal, Unidentified logs	++	24

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
422.	*Lenzites repanda*	White siris, Acacia sp., Sal	++	24
423.	*Lenzites striata*	Cutch tree, Sal, Betelnut	++	24, 25
424.	*Lenzites subferrugenea*	Spruce	++	24
425.	*Lenzites palisoti*	Blinding tree	++	23
426.	*Lepiota cepaestipes*	Unidentified logs	++	23
427.	*Leptosphaeria sacchari*	Sugarcane	+++	17
428.	*Leptosphaeria taiwanensis*	Sugarcane	+	17
429.	*Leptosphaerulina brassicae*	Rape seed mustard	++	15
430.	*Leptosphaerulina trifolii*	Mungbean, Blackgram, Grasspea, Cowpea, Groundnut, Soybean	++	15, 16
431.	*Lesiodiplodia theobromae*	Mango	+++	20
432.	*Longidorus elogatus*	Maize, Barley, Foxtail millet, Sugar beet, Tomato, Potato	+	14, 18, 20
433.	*Longidorus maximus*	Cucumber, Pine apple, Black cumin	++	20, 21, 22
434.	*Longidorus micoletzky*	Onion	+	21
435.	*Loranthus* sp.	Mango	++	20
436.	*Marasmius ferrugineus*	Unidentified logs	++	23
437.	*Macophomina phaseolina*	Pigeon pea	+	14
438.	*Macrophoma musue*	Banana	+	20
439.	*Macrophoma theicola*	Tea	+++	24
440.	*Macrophomina mangiferae*	Mango	+	20
441.	*Macrophomina phaseolina*	Chickpea, Mungbean, Blackgram, Grasspea, Groundnut, Sesame, soybean, Jute, Cotton, Mesta, Sweet gourd, Radish, Okra, Country bean, Potato, Snake gourd, Amaranthus spp., Sweet potato, Jack fruit, European olive, *Chilli,* Onion, Garlic, Red silk cotton	+++	15, 16, 17, 20, 21, 22, 24
442.	*Macrosolen cochinchinensis*	Campa, Chaplais, Masjot, Sissoo, Gab, Wood oil tree, Olive tree, Belfoi, Bihera, Indian blackberry, Indian plum, Kanak, Kath badam, Ora, Paras, Telsur, Persian lilac, Gandhi gazari, Masjot, Puneala plum, Forest red gum, Kakra species, Bon narenga, Governors plum,	++	23, 24
443.	*Magnaporthe oryzae tritici*	Wheat	++	14
444.	Maize Dwarf Mosaic Virus (MDMV),	Maize	++	14
445.	Maize mosaic Virus (MMV)	Maize	++	14

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
446.	Maize Streak Virus (MSV)	Maize	++	14
447.	Maize Virus (MFV)	Maize	++	14
448.	*Marasmiellus scandens*	Sundri	++	24
449.	*Marasmius equicrinis*	Sundri, Tea	+	24, 25
450.	*Marasmius ferrugineus*	Bamboo	++	24
451.	*Marasmius palmivorus*	Rubber	++	24
452.	*Marasmius pulcher*	Tea	++	25
453.	*Maravalia pterocarpi*	Sissoo	++	24
454.	*Marcosolen cochinchinensis*	Nimpooteli	++	24
455.	*Marsonina rosea*	Rose	++	23
456.	*Melamspora lini*	Linseed	+++	16
457.	*Melanomma citricola*	Citrus	++	21
458.	*Melanops calami*	Cane	++	24
459.	*Meliola butleri*	Citrus	++	21
460.	*Meliola citri*	Citrus	++	21
461.	*Meliola clerodendricola*	Hill glory bower	++	24
462.	*Meliola indica*	Mango pine	++	24
463.	*Meliola palmicola*	Date palm	++	21
464.	*Meliola simillima*	Connessi Bark	++	24
465.	*Meloidogyne arenaria*	Sugarcane, Tomato, Potato	+	18, 20
466.	*Meloidogyne graminicola*	Rice, Onion	++	14, 22
467.	*Meloidogyne incognita*	Rice, Wheat, Maize, Barley, Foxtail millet, Lentil, Chickpea, Mungbean, Blackgram, Grasspea, Cowpea, Jute, Kenaf, Mesta, Sugarcane, Sugar Beet, Tomato, Indian spinach, Potato, Eggplant, Cucumber, Ribbed gourd, Sponge gourd, Bitter gourd, Amaranthus spp., Bottle gourd, Radish, Lettuce, Hyacinth bean, Spinach, Sweet gourd, Water melon, Banana, Garlic, *Chilli,* Coriander, Cardamom, Black cumin, Tobacco, Betel vine	++	14, 15, 17, 18, 20, 21, 22, 25
468.	*Meloidogyne javanica*	Rice, Maize, Foxtail millet, Barley, Chickpea, Lentil, Field pea, Grasspea, Cowpea, Linseed, Jute, Kenaf, Mesta, Sugarbeet,	++	14, 15, 16, 17, 18, 20, 21, 22,

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
		Cucumber, Potato,Carrot, Hyacinth bean, Bottle gourd, Lettuce, Bitter gourd, Ribbed gourd, Amaranthus spp., Tomato, Sweet gourd, Spinach, Radish, Carrot, Sponge gourd, Indian spinach, Banana, Papaya, Garlic, *Chilli,* Coriander, Black cumin, Cardamom, Betel vine, Tobacco		25
469.	*Microdochium oryzae*	Rice	+++	14
470.	*Microporus xanthopus*	Smooth chaste tree	++	24
471.	*Mitteriella ziziphina*	Ber	++	21
472.	Mungbean golden mosaic virus	Mungbean	+++	15
473.	Mungbean yellow mosaic virus	Mungbean, Pigeon pea	+++	15
474.	Mycoplasma	Rice, Lentil, Mungbean, Cowpea, Field pea, Pigeon pea, Groundnut, Sugarcane, Eggplant, Potato, Citrus	+	14, 15, 16, 18, 20, 21
475.	*Mycosphaerella coffeicola*	Coffee	++	24
476.	*Mycosphaerella gibsonii*	Pinus caribaea	++	24
477.	*Mycospharella dalbergiae*	Sissoo	++	24
478.	*Myiocopron orbiculare*	Lodhra	++	24
479.	*Myrothecium roridum*	Mungbean, Blackgram, Soybean, Kenaf, Mesta	++	15, 16, 17
480.	*Nectria haematococca*	Jack fruit	++	21
481.	*Nigrospora oryzae*	Rice, Ber, Indian aloe	++	14, 21, 26
482.	*Nigrospora sphaerica*	Rose	++	23
483.	*Oidium erysiphoidess* f. sp. *ziziphi*	Ber	++	21
484.	*Oidium anacardi*	Cashew nut	++	21
485.	*Oidium caricae*	Papaya	++	21
486.	*Oidium eucalypti*	River red gum	++	24
487.	*Oidium lini*	Linseed	+	16
488.	*Oidium mangifera*	Mango	++	21
489.	*Oidium piperis*	Betel vine	+++	25
490.	*Oidium* sp., *Erysiphe polygoni*	Blackgram	+++	15
491.	*Oidium* sp.; *Leveillula* sp.	Kenaf, Mesta	++	17
492.	Okra leaf curl virus (OLCV)	Okra	+	20

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
493.	Okra yellow vein mosaic virus (OYVMV)	Okra	+	20
494.	*Oospora pustulans*	Potato	+	20
495.	*Orobanche* sp.	Sugarcane, Tobacco	++	18, 25
496.	*Ovulariopsis sissoo*	Sissoo	++	24
497.	*Polyporus grammocephalus*	Quercus sp.	++	24
498.	*Panus rudis*	Unidentified logs	++	24
499.	Papaya mosaic virus	Papaya	++	20
500.	Papaya ringspot virus (PRSV)	Sweet gourd	++	20
501.	Papaya ringspot virus (PRSV-W)	Ash gourd, Cucumber, Ribbed gourd	++	20
502.	*Paratylenchus pratensis*	Eggplant	++	20
503.	Peanut mosaic virus	Groundnut	+	16
504.	Peanut stunt virus	Groundnut	+	16
505.	*Pectobacterium carotovora var. carotovora [Syn. E. carotovra subsp. carotovora*]	Potato	+++	20
506.	*Pectobacterium crysanthemi*	Indian aloe	++	26
507.	*Penicilliopsis clavariaeformis*	Palm	+	18
508.	*Penicillium citrinum*	Agarwood	++	24
509.	*Penicillium digitatum*	Citrus	++	21
510.	*Penicillium notatum*	Chickpea	++	15
511.	*Penicillium spiculisporum*	Bamboo	++	24
512.	*Penicillium cyclopium*	Lentil	+	15
513.	*Periconia byssoides*	Chilli, Betelnut	++	22, 25
514.	*Peronospora brassicae*	Rape seed mustard	++	16
515.	*Peronospora destructor*	Onion	+	22
516.	*Peronospora manshurica*	Soybean	++	16
517.	*Peronospora parasitica*	Cabbage, Cauliflower	++	20
518.	*Peronospora sparsa*	Rose	+++	23
519.	*Peronospora trifoliorum*	Soybean	++	15

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
520.	*Peronospora viciae*	Lentil, Grasspea, Field pea	+++	15
521.	*Peronossclerospora sorghi*	Maize	++	14
522.	*Pestaliopsis palmarum*	Coconut	+	21
523.	*Pestalotia macrochaeta*	Burma toon	++	24
524.	*Pestalotia macrotricha*	Slash pine	++	24
525.	*Pestalotia palmarum*	Palm, Coconut, Betelnut	++	18, 21, 25
526.	*Pestalotia paraguariensis*	Mango pine, Honey tree	++	24
527.	*Pestalotia pauciseta*	Litchi	++	21
528.	*Pestalotia phoenicis*	Date palm	++	21
529.	*Pestalotia psidi*	Guava	++	21
530.	*Pestalotiopsis guepinii*	Rose, Indian aloe	++	23, 26
531.	*Pestalotiopsis mangiferae*	Mango	+	21
532.	*Pestalotiopsis palmarum*	Date palm, Ber	++	18, 21
533.	*Pestalotiopsis psidii*	Guava	+	21
534.	*Pestalotiopsis versicolor*	Molaceana koroi	++	24
535.	*Pestalozzia mangiferae*	Mango	+	21
536.	*Pestalozzia theae*	Tea	+++	25
537.	*Phaeocytostroma sacchari*	Sugarcane	++	18
538.	*Phaeoisariopsis personata/ Cercosporidium personatum*	Groundnut	+++	16
539.	*Phakopsora pachyrhizi*	Soybean	++	16
540.	*Phakopsora phyllanthi*	Indian gooseberry	++	24
541.	*Phakospora gossypii*	Cotton	++	17
542.	*Phialophora bubakii*	Sundri	++	24
543.	*Phialophora parasitica*	Agarwood	++	24
544.	*Phialophora richardsiae*	Bamboo	++	24
545.	*Pholiota adiposa*	Chaplais	++	24
546.	*Pholiota muricata*	Chaplais	++	24
547.	*Phoma beveillei*	Bamboo	++	24
548.	*Phoma exigua f. sp. foveata*	Potato	++	20

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
549.	*Phoma glumerum*	Rice	++	14
550.	*Phoma lingam*	Rape seed mustard	++	16
551.	*Phoma medicaginis*	Blackgram, Mungbean	++	15
552.	*Phoma sabdariffae*	Kenaf, Mesta	++	17
553.	*Phoma sorghina*	Bamboo	++	24
554.	*Phomopsis aquillariae*	Agarwood	++	24
555.	*Phomopsis atrocarpi*	Jack fruit	++	21
556.	*Phomopsis capsici*	*Chilli*	+	22
557.	*Phomopsis citri*	Citrus	+++	21
558.	*Phomopsis heavae*	Rubber	++	24
559.	*Phomopsis heteronema*	Betelnut	++	25
560.	*Phomopsis psidii*	Guava	+	21
561.	*Phomopsis sojae*	Soybean	+	16
562.	*Phomopsis theae*	Tea	+++	25
563.	*Phomopsis vexans*	Eggplant	+++	20
564.	*Phragmidium mucronatum*	Rose	++	23
565.	*Phylachora bambusae*	Bamboo	++	24
566.	*Phyllachora catervaria*	Hairy fig tree	++	24
567.	*Phyllachora dalbergiae*	Sissoo	++	24
568.	*Phyllachora fimbristylicola*	Fig tree	+	24
569.	*Phyllachora graminis*	Sorghum	++	14
570.	*Phyllactinia corylea*	White mulberry, Mulberry	++	24
571.	*Phyllosticta cinnamomi*	Indian bay leaf	+	22
572.	*Phyllosticta caricacola*	Papaya	+	21
573.	*Phyllosticta hibici*	Kenaf, Mesta	++	17
574.	*Phyllosticta hortorum*	Eggplant	+	20
575.	*Phyllosticta pongamae*	Pongame oil tree	++	24
576.	*Phyllosticta sulata*	Papaya	+	21
577.	*Phyllosticta tentone*	Teak	++	24
578.	*Phyllostictina arecae*	Betelnut	+++	25

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
579.	*Phyllostictina artocarpi*	Jack fruit	++	21
580.	*Phyllostictina artocarpina*	Jack fruit	++	21
581.	*Physalospora sydae*	Guava	+	21
582.	*Physoderma zea-maydis*	Maize	+	14
583.	*Phythiacystis citrophthora*	Citrus	++	20
584.	*Phytophthora ansmeadii*	Rubber	++	24
585.	*Phytophthora arecae*	Betelnut	++	25
586.	*Phytophthora citrophthora*	Citrus	++	21
587.	*Phytophthora colacasiae*	Colocasia spp.	+++	20
588.	*Phytophthora infestans*	Tomato, Potato	+++	20
589.	*Phytophthora meadii*	Rubber	++	24
590.	*Phytophthora nicotianae var. nicotianae*	Eggplant	++	20
591.	*Phytophthora nicotiane*	Guava	++	21
592.	*Phytophthora palmivora*	Coconut, Mesta, Rubber, Betelnut, Betel vine	++	21, 24, 25
593.	*Phytophthora parasitica*	Castor, Eggplant, Pineapple	+	16, 17, 20, 21
594.	*Phytophthora parasitica* var. *piperina*	Betel vine	+	24
595.	Phytoplasma	Onion	++	22
596.	*Plasmodiophora brassicae*	Rape seed mustard, Cabbage	++	16, 20
597.	*Pleurotus ostreatus*	Unidentified logs	++	24
598.	*Pleurotus squarrosulsus*	Burflower tree, Sal, Unidentified logs, Slow match tree	++	24
599.	*Pleurotus ulmarius*	Unidentified logs	++	24
600.	*Podosphaera xanthii*	Sesame	++	16
601.	*Polyporu gilvus*	Sal	++	24
602.	*Polyporu ostreiformis*	Sal	++	24
603.	*Polyporus adustus*	Kamala tree	++	24
604.	*Polyporus anebus*	Garjan species, Sal, Indian coral tree	++	24
605.	*Polyporus anthelminticus*	Bamboo	++	24
606.	*Polyporus auricularis*	Dipterocarpus sp.	++	24
607.	*Polyporus boseii*	Unidentified logs	++	24
608.	*Polyporus calcutensis*	Tamarindus indica	++	24

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
609.	*Polyporus calcutensis*	Terminalia catappa, Indian plum	++	24
610.	*Polyporus caparatus*	Alder tree	++	24
611.	*Polyporus conchiodes*	Unidentified logs	++	24
612.	*Polyporus durescens*	Syzygium sp.	++	24
613.	*Polyporus durus*	Bamboo	++	24
614.	*Polyporus fimbriatus*	Pyinkado	++	24
615.	*Polyporus friabilis*	Bamboo	++	24
616.	*Polyporus gilvus*	Dhamani, Indian laurel, Unidentified logs	++	24
617.	*Polyporus grammocephalus*	Hargaza, Dipterocarpus sp., Syzygium sp., Teak	++	24
618.	*Polyporus hirsutus*	Chakua koroi, Chaplais, White teak, Lagerstroemia sp., Unidentified logs	++	24
619.	*Polyporus lignosus*	Unidentified logs	++	24
620.	*Polyporus luteo-umbrinus*	Sundri	++	24
621.	*Polyporus luzonensis*	Banyan tree, Unidentified logs	+	24
622.	*Polyporus ochroleucus*	Ceriops decandra	++	24
623.	*Polyporus ostreiformis*	Coconut, Betelnut	+++	21, 24
624.	*Polyporus sanguineus*	Blinding tree, Dipterocarpus sp.	++	24
625.	*Polyporus thawaitesii*	Blinding tree	++	24
626.	*Polyporus trichomallus*	Unidentified logs	++	24
627.	*Polyporus versatalis*	Shil garjan, Wood oil tree	++	24
628.	*Polyporus versatalis*		++	24
629.	*Polyporus xanthopus*	Chaplais, Barum, Elephant apple, Garjan species, Blinding tree, White teak, Crepe Myrtle	+++	24
630.	*Polyporus zonalis*	Bamboo, Blinding tree, Banyan tree, False ashoka,	++	24
631.	*Polyporus shoreae*	Sal	++	24
632.	*Polysictus hirsutus*	Honduras mahogany	++	24
633.	*Polystictus affinis*	Golden shower, Mauwa, Arjun tree	++	24
634.	*Polystictus cervino-gilvus*	Unidentified logs	++	24
635.	*Polystictus hirsutus*	Chinese Albizia, Blinding tree, Sal	++	24
636.	*Polystictus leoninus*	Blinding tree	++	24

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
637.	*Polystictus licnoides*	Burflower tree	++	24
638.	*Polystictus proteus*	Blistery macaranga	++	24
639.	*Polystictus sanguineus*	Bamboo, Garjan species, Sal, Unidentified logs	++	24
640.	*Polystictus steinheilianus*	Bamboo, Mahua, Kamala tree, Sal	++	24
641.	*Polystictus versicolor*	Holly oak, White oak, Sal, Unidentified logs	++	24
642.	*Polystictus xanthopus*	Elephant apple, Wood oil tree, White teak, Pride of India, Sal, Siamese rough brush, Unidentified logs	++	24
643.	*Polystictus zonalis*	Unidentified logs	++	24
644.	*Poria diversispora*	Bamboo	++	24
645.	*Poria rhizomorpha*	Chalmoogra tree, Bamboo, White teak	++	24
646.	*Poria tenuis*	Unidentified logs	++	24
647.	Potato Acuba Mosaic Virus (PAMV)	Potato	++	20
648.	Potato leaf roll virus (PLRV)	Potato	+++	20
649.	Potato virus A (PVA)	Potato	++	20
650.	Potato virus S	Potato	++	20
651.	Potato virus X (PVX)	Potato	+++	20
652.	Potato virus Y	Potato, *Chilli*	++	20, 22
653.	*Pratylenchus brachyarus*	Sunflower, Sweet potato, Pineapple	++	16, 20, 21
654.	*Pratylenchus coffeae*	Maize, Rape seed mustard, Groundnut, Sugarbeet, Bottle gourd, Amaranthus spp., Sponge gourd, Bitter gourd, Potato	+	14, 16, 18, 20,
655.	*Pratylenchus penetrans*	Hyacinth bean, Potato, Coconut	++	20, 21
656.	*Pratylenchus* pratensis	Sugarcane	++	18
657.	*Pratylenchus zeae*	Maize, Eggplant	++	14, 20
658.	*Protomyces macrosporus*	Coriander	+	22
659.	*Psathyrella disseminata*	Unidentified logs	++	24
660.	Psedoperonospora cubensis	Sweet gourd	++	20
661.	*Pseudocercospora abelmoschi*	Okra	++	20
662.	*Pseudocercospora dalbergiae*	Sissoo	++	24
663.	*Pseudocercosporella herpotrichoides*	Wheat	+	14

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
664.	*Pseudomonas fluorescens*	Potato	+	20
665.	*Pseudomonas glycinea*	Soybean	+	16
666.	*Pseudomonas lachrymans*	Cucumber	++	20
667.	*Pseudomonas rubrilineans*	Sugarcane	++	18
668.	*Pseudomonas solanacearum*	Sweet gourd, Banana, Agarwood, White teak, Rubber, White leadtree, Spanish cherry, Honduras mahogany, Teak, Tobacco	+++	20, 21, 24, 25
669.	*Pseudomonas syringae*	Sundri	++	23
670.	*Pseudomonas syringae pv. syringae*	Rice, Wheat, Guava, Litchi, Mango, Onion	++	14, 21, 0
671.	*Pseudoperenospora cubensis*	Pointed gourd, Cucumber, Ash gourd, Ribbed gourd, Sponge gourd, Water melon	++	20, 21
672.	*Puccinia malvacearum.*	Hollyhock	++	23
673.	*Puccinia allii*	Onion	++	22
674.	*Puccinia arachidis*	Groundnut	++	16
675.	*Puccinia carthami*	Safflower	++	16
676.	*Puccinia graminis* f. sp. *tritici*	Wheat	+	14
677.	*Puccinia hordei*	Barley	++	14
678.	*Puccinia polysora*	Maize	+	14
679.	*Puccinia porri*	Garlic	++	22
680.	*Puccinia recondita* f. sp. *tritici*	Wheat	++	14
681.	*Pyrenochaeta oryzae*	Rice	++	14
682.	*Pyrenochaeta terrestris*	Bamboo	++	24
683.	*Pyrenophora tritici-repentis*	Wheat	+	14
684.	*Pyricularia grisea*	Rice, Foxtail millet, Proso millet	++	14
685.	Pythium *aphanidermatum*	Cabbage, Cauliflower, Arum, Tomato, Radish, Eggplant, Bottle gourd, Papaya, Ginger	++	20, 21, 22
686.	*Pythium vax*	Rubber	++	24
687.	*Radopholus similis*	Cucumber, Citrus, Banana	++	20, 21
688.	*Ralstonia solanacearum*	Tomato, Eggplant, Potato, Ginger	+++	20, 22
689.	*Ramularia areola*	Cotton	++	17

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
690.	*Ravenelia sessilis*	Lebbeck tree	++	24
691.	*Rhizoctonia lamellifera*	Bamboo	++	24
692.	*Rhizoctonia oryzae*	Rice	++	14
693.	Rhizoctonia oryzae-sativa	Rice	+++	14
694.	*Rhizoctonia solani*	Rice, Wheat, Maize, Foxtail millet, Chickpea. Field pea, Mungbean, Blackgram, Groundnut, Soybean, Cotton, Jute, Kenaf, Mesta, Eggplant, Cabbage, Cauliflower, Indian spinach, Bush bean, Tomato, Potato, Country bean, Bamboo, Agarwood, Sissoo, Wood oil tree, River red gum, White teak, White leadtree, Rubber, Spanish cherry, Slash pine, Khasia pine, Ocote pine, Canary island pine, Radiata pine, Honduras mahogany, Red silk cotton, Teak, Betel vine	+++	14, 15, 16, 17, 20, 24, 25
695.	*Rhizopus arrhizus*	Pomegranate	++	21
696.	*Rhizopus artocarpi*	Jackfruit	++	21
697.	*Rhizopus nigiricans*	Sweet potato	+++	20
698.	*Rhizopus stolonifer*	Sunflower, Ber, Citrus, Papaya, Rose	++	16, 21, 23
699.	Rice tungro virus	Rice	++	14
700.	*Robillarda sessilis*	Red silk cotton	++	24
701.	*Rotylenchus renofirmis*	Pigeon pea	+	15
702.	*Scurrula pulverulenta*	Red silk cotton	++	24
703.	*Sarocladium oryzae*	Rice, Bamboo	++	14, 24
704.	*Schizophyllum alneum*	Bamboo	++	24
705.	*Schizophyllum commune*	Mango, Bamboo, Sundri, Sal, Unidentified logs	++	21, 24
706.	*Schroeteriaster cingens*	Bridelia tomentosa	++	24
707.	*Schroeteriaster ehretiae*	Ehretia acuminata	++	24
708.	*Sclerophthora macrospora*	Proso millet	++	14
709.	*Sclerospora graminicola*	Foxtail millet	++	14
710.	*Sclerospora philippeninsis*	Maize	++	14
711.	*Sclerotinia sclerotiorum*	Chickpea, Lentil, Mungbean, Cowpea, Rape seed mustard, Sunflower, Sesame, Groundnut, Tomato, Sweet gourd, Cauliflower, Hyacinth bean, Potato, Eggplant, Carrot, Red Amaranth, Radish, Country bean,		15, 16, 20, 21, 22, 23

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
		Napasak, Bush bean, Amaranthus spp., Okra, Jackfruit, Onion, Garlic, *Chilli, Marigold*		
712.	*Sclerotium cepivorum*	Onion, Garlic	++	22
713.	*Sclerotium oryzae*	Rice	++	14
714.	*Sclerotium rolfsii*	Rice, Whea,t Maize, Barley, Foxtail millet, Proso millet, Chickpea, Lentil, Mungbean, Cowpea, Grasspea, Blackgram, Field pea, Pigeon pea, Groundnut, Sesame, Soybean, Sunflower, Cotton, Jute, Kenaf, Mesta, Eggplant, Okra, Tomato, Country bean, Cabbage, Carrot, Taro, Beet, Potato, Cauliflowe,r Amaranthus spp., Bush bean, Banana, Pineapple, Onion, Ginger, Tuberose, Betel vine, Tobacco	++	14, 15, 16, 17, 20, 21, 22, 23, 25
715.	*Scurrula gracilifolia*	Assar, Molaccana koroi, Lebbeck tree, Chita, Red silk cotton, White teak, Kathbimla, Golden champa, Godajam	++	23
716.	*Scurrula parasitica*	Paowlay, Bagnola, Molaccana koroi, Chaplais. Red silk cotton, Bulkokra, Ban dumar, Rukam, Panyaturi, Kanyari, Kamala tree, Nimpooteli, Mashuma, Rai batna, Horhuta	++	24
717.	*Scurrula pulverulenta*	Mango, Orange Jasmine, Red silk cotton, Banyan tree, Mountain ebony, Elephant apple, Peepul tree, Olat, Rain tree, Lodhbholia, Charcoal tree	+	21, 23, 24
718.	*Septoria chrysanthemella*	Chrysanthemum	++	23
719.	*Septoria glycina*	Soybean	+	16
720.	*Shizophyllum commune*	River red gum	++	24
721.	*Soybean mosaic virus*	Soybean	+++	16
722.	*Sphaceloma fawcettii*	Citrus	++	21
723.	*Sphacelotheca sorghi*	Sorghum vulgaris	++	14
724.	*Sphaerella bhauria*	Lodhra	++	24
725.	*Sphaerostilbe repens*	Tea	+	25
726.	*Spongospora subterranea f.sp. subterranea*	Potato	++	20
727.	*Stachybotrys bisbi*	Bamboo	++	24
728.	*Stagnospora arecae*	Betelnut	+	25

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
729.	*Stagonospora sacchari*	Sugarcane	++	18
730.	*Starbaeckiella mangifera*	Mango	++	21
731.	*Stemphylium botryosum*	Onion	+++	22
732.	*Stemphylium sarciniformis*	Chickpea, Lentil	+++	15
733.	*Stemphylium solani*	Tomato	+	20
734.	*Stemphylium vesicari*	Onion	+++	22
735.	*Stemphylium vesicarium*	Onion, Garlic	+++	22
736.	*Stereum cf. papyrinum*	Chaplais	++	24
737.	*Stereum fuscum*	Sal	++	24
738.	*Stereum hirsutum*	Sundri		24
739.	*Stereum percome*	Sal	++	24
740.	*Stereum petaloides*	Bamboo, Silver oak, Teak	++	24
741.	*Streptomyces scabies*	Potato	+++	20
742.	*Striga densiflora*	Sugarcane	++	18
743.	Sugarcane mosaic virus (SCMV)	Sugarcane	+++	18
744.	Sweet potato chlorotic fleck virus (SPCFV)	Sweet potato	++	20
745.	Sweet potato feathery mottle virus (SPFMV)	Sweet potato	++	20
746.	Sweet potato latent virus (SPLV)	Sweet potato	++	20
747.	Sweet potato leaf curl virus (SPLCV)	Sweet potato	++	20
748.	Sweet potato mild mottle virus (SPMMV)	Sweet potato	++	20
749.	*Synchytrium collapsum*	Hill glory bower	++	24
750.	*Tametes cingulata*	Bamboo	++	24
751.	*Tametes devexa*	Bamboo	++	24
752.	*Taphrina maculans*	Turmeric	+++	22
753.	*Thanatephorus cucumeris*	Red silk cotton	++	24
754.	*Thanatephorus sasakii*	Sugarcane	+	18

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
755.	*Thelephora palmata*	Bamboo	++	24
756.	*Thielaviopsis paradoxa*	Coconut, Banana, Betelnut	+++	21, 25
757.	*Tilletia barclayana*	Rice	++	14
758.	Tobacco leaf curl virus	Papaya, *Chilli*	+++	21, 22
759.	Tobacco mosaic virus	Tomato, Tobacco	+	20, 25
760.	Tomato leaf curl New Delhi virus	Tomato	+++	20
761.	Tomato mosaic virus	Tomato	+++	20
762.	Tomato purple vein virus	Tomato	++	20
763.	Tomato spotted wilt virus	Groundnut, Tomato	+	16, 20
764.	Tomato yellow leaf curl virus	Tomato	++	20
765.	*Trametes badia*	Sal	++	24
766.	*Trametes badius*	Morus alba	++	24
767.	*Trametes betulina*	Acrocarpus fraxinifolius	++	24
768.	*Trametes cingulata*	Silver oak, Nageswar, Sal, Civit	++	24
769.	*Trametes corrugata*	White teak, Unidentified logs	++	24
770.	*Trametes cubensis*	Sal, Unidentified logs	++	24
771.	*Trametes devexa*	Unidentified logs	++	24
772.	*Trametes lacinea*	Unidentified logs	++	24
773.	*Trametes lactinea*	Blinding tree, White teak, Sal	++	24
774.	*Trametes meyani*	Ficus sp.	++	24
775.	*Trametes persoonii*	Red silk cotton, Banyan, Silver oak, Kamala tree, Buddha's coconut, Sal, Keora, Malabar plum	++	24
776.	*Trametes suaveolens*	Chaplais, Connessi Bark	++	24
777.	*Trametes versatilis*	Nageswar, Tinis, Sal, Indian laurel	++	24
778.	*Trametes versiformis*	Dhup	++	24
779.	*Tremella fuciformis*	Mango	++	21
780.	*Trichoconis padwickii*	Rice	+++	14
781.	*Trichoderma viride*	Rose, Agarwood	++	23, 24
782.	*Trichodorus christei*	Maize, Soybean, Groundnut, Sugarbeet, Tomato, Potato	+	14, 16, 18, 20

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
783.	*Tylenchorhynchus clatony*	Eggplant, Potato, Sweet potato, Banana	++	20, 21
784.	*Tylenchus semipenetrans*	Citrus	++	21
785.	*Uredo tectonae*	Teak	++	24
786.	*Urocystis cepulae*	Onion	++	22
787.	*Uromyces appendiculatus*	Chickpea, Cowpea, Country bean	++	15, 20
788.	*Uromyces caryophyllium*	Carnation	++	23
789.	*Uromyces ciceris-arietini*	Chickpea	++	15
790.	*Uromyces decoratus*	Sunhemp	++	17
791.	*Uromyces echinulatus*	Honey tree	++	24
792.	*Uromyces eragrostidis*	Cheena	++	14
793.	*Uromyces fabae*	Lentil, Field pea	+++	15
794.	*Uromyces phaseoli*	Country bean	++	20
795.	*Ustilaginoidea virens*	Rice	+++	14
796.	*Ustilago avenae*	Wheat	+	14
797.	*Ustilago nuda*	Barley	+	14
798.	*Ustilago scitaminea*	Sugarcane	++	18
799.	*Ustilago tritici*	Wheat	+	14
800.	*Ustilago zeae*	Maize	+	14
801.	*Ustulina deusta*	Tea	+++	25
802.	*Ustulina zonata*	Tea	+++	25
803.	*Vermicularia capsici*	Cowpea, Eggplant	+	15,20
804.	*Verticillium albo-atrum*	Sunflower, Potato	+	16, 20
805.	*Verticillium psalliotae*	Bamboo	++	24
806.	Viroid	Coconut	+	21
807.	Virus/ Mycoplasma	Wheat ,Barley ,Mungbean, Blackgram, Pigeon pea, Grasspea, Sesame, Soybean, Groundnut, Rape seed mustard, Sunflower, Cotton, Mesta, Kenaf, Papaya, Water melon, Marigold, Zinnia, China aster, Buttonbush, Dahlia	+	14, 15, 16, 17, 21, 23,
808.	*Viscum monoicum*	Burflower tree, Mango pine, Malayan Spindle Tree, Red silk cotton, Miringa, Gab, Elaeocarpus, varunna, Chamfata, Kathbimla, Kanyari	++	24

Sl. No	*Scientific name*	Host plants	Rating	Reference Table
809.	*Viscum orientale*	Axlewood	++	24
810.	*Vizella conferta*	Lodhra	++	24
811.	Water Melon Mosaic virus-2 (WMV-2)	Ash gourd	++	20
812.	*Xanthomonas albilineans*	Sugarcane	+++	18
813.	*Xanthomonas axonopoides* pv. *citri*	Citrus	+++	21
814.	*Xanthomonas campestries*	Rape seed mustard, Tuberose	++	16, 23
815.	*Xanthomonas campestris pv. campestris*	Cauliflower, Cabbage	++	20
816.	*Xanthomonas campestris pv. citrumelo*	Citrus	+	21
817.	*Xanthomonas campestris* pv. *malvacearum*	Cotton	++	17
818.	*Xanthomonas campestris pv.phaseoli*	Country bean	++	20
819.	*Xanthomonas campestris translucens*	Wheat	++	14
820.	*Xanthomonas cucurbitae*	Cucumber, Sweet gourd, Snake gourd	++	20
821.	*Xanthomonas oryzae* pv *oryzae*	Rice	+++	14
822.	*Xanthomonas phaseoli*	Mungbean	++	15
823.	*Xanthomonas phaseolina var. sojense*	Soybean	++	16
824.	*Xanthomonas vignicola*	Cowpea	++	15
825.	*Xiphinema americanum*	Eggplant	++	20
826.	*Xiphinema diversicaudatum*	Groundnut	+	16
827.	*Xiphinema index*	Maize, papaya, tobacco	+	14,21, 25
828.	*Xiphinema indicum*	Sugarcane	++	18
829.	*Xphinema index*	Lettuce, potato	++	20
830.	Yellow mosaic virus	Chickpea, Field pea, Okra, country bean	+++	15, 20
831.	Yellow Vein clearing moaic virus (OkYVCMV)	Okra	+	20
832.	Zucchini yellow mosaic virus	Sweet gourd	++	20
833.	*Zygotylenchus gueverai*	Eggplant	++	20

C. Weeds Species

Sl. No.	Scientific name	Host	Rating	Reference Table
1.	*Abutilion indica*	Tea	+++	38
2.	*Adinostemma lavenia* (Linn.) O. Kunze.	Rice	+++	27
3.	*Aeschynomene aspera*	Rice	++	27
4.	*Agaratum conyzoldes*	Forest crops, Tea	+++	37, 38
5.	*Agrenone maxicana*	Wheat, maize, sugarcane	++	27, 31
6.	*Alternanthera philoxeroides*	Rice	+++	27
7.	*Alternanthera sessilis*	Rice, wheat, cotton	+++	27, 30
8.	*Amaranthus acanthochiton* Sauer.	Sesame, Soybean, potato, flower,	+++	29, 32, 33, 36
9.	*Amaranthus blitoides*	Cotton	++	30
10.	*Amaranthus spinosus.* L.	Wheat, maize, Lentil, Mungbean,Sunflower, brinjal, danta, onion, garlic, chilli, ginger, turmeric, flower, ixora, aloevera	+++	30, 32, 33, 35, 36, 39
11.	*Amaranthus viridis* L.	Cotton, brinjal, tomato, ridge gourd, bitter gourd, onion , garlic, chili, ginger, turmeric, flower	++	27, 28, 29, 33, 35, 36
12.	*Anagalis arvensis*	Wheat, cotton	++	27, 30
13.	*Azolla pinnata* R.	Rice	++	27
14.	*Borreria hispida*	Tea	+++	38
15.	*Borreria laevis*(Lam) Griseb.	Sugarcane	+	31
16.	*Blumea lacera*. (Burn.f.) DC	Wheat, cotton, Tea	++	27, 30, 38
17.	*Blumea mollis* (D. Don) E.D. Merr.	Sugarcane	++	31
18.	*Brassica kaber*	Lentil	++	28
19.	*Cardaria draba*	Cotton	+++	30
20.	*Cassia tora*	Sugarcane, sugar beet	+++	31
21.	*Celosia argentea* L.	Sesame	+++	29
22.	*Cephalandraa indica*	Forest crop	++	37
23.	*Ceratophyllum dumersum* L.	Rice	+++	27
24.	*Ceratopteris thalictroides*	Rice	++	27
25.	*Commelina bengalensis* L.	Rice	+++	27
26.	*Commelina difusa*	Wheat	+++	27
27.	*Chamomilla recutita* (L.) Rauschert	Onion,	+	35

Sl. No.	Scientific name	Host	Rating	Reference Table
28.	*Chenopodium album*. L.	Wheat, mustard, flower, cabbage, Lentil, Soybean, banana	+++	27, 28, 29, 33, 34, 36
29.	*Chrysopogoa aciculetus*	Rice, Sugarcane, Sugar beet	++	27, 31
30.	*Cirsium arvense*	Jute	++	30, 32
31.	*Convolvulus arvensis*	Chickpea	+++	28
32.	*Crassocephalum crepidioides*	Forest crop	+	37
33.	*Crotolaria striata*	Sugarcane, sugarbeet,	+	31
34.	*Croton sparsriflora*	Potato	++	33
35.	*Cyrtococcum patens*	Tea	+++	38
36.	*Curcumis melo*	Sugarcane, Sugarbeet	+	31, 32
37.	*Cuscuta reflexa*	Tea, forest crop, tulsi,	+	37, 38, 39
38.	*Cyanotis axillaris* R & S	Rice, Tea	+++	27, 38
39.	*Cynodon dactylon* Pers.	Rice,Wheat, mustard,G. nut, Sunflower, safflower, sesame, Soybean,	+++	27, 29, 30, 35, 36, 39
40.	*Cyperus deformis* L.	Rice	++	27
41.	*Cyperus esculentus* L.	Rice, flower. Red ginger, thuza,	++	27, 36
42.	*Cyperus iria* L.	Rice	+++	27, 32
43.	*Cyperus kyllinga*	Tea	+++	38
44.	*Cyperus nemoralis*Cherm.	Rice, Tea	+++	27, 32, 38
45.	*Cyperus rotandus*L.	Rice, Wheat, Banana, strawberry, thuza, tea, Tobacco	+++	27, 34, 36, 38
46.	*Cypers anguinolentus* L.	Rice	+++	27
47.	*Cyperus strigosus*	Sugarcane	++	31
48.	*Cyperus tenuspica*	Tea	+++	38
49.	*Dactyloctenium aegyptium*	Sugarcane, sugarbeet, guava, tea,	++	31, 34, 38
50.	*Dendrophthae falcate*	Mango, forest crop,	+	34, 37
51.	*Desmodium trifolium*	Forest crop	+++	37
52.	*Digitaria ciliaris* (Retz.) Koeler	Sesame	++	29
53.	*Digiteria carinatus*	Tea	+++	38
54.	*Digiteria ischaemum* Schreb.	Rice, Wheat, cotton	++	27, 30
55.	*Digiteria sanguinalis*(L.) Scop.	Rice, cotton, chili, ginger, turmeric, calendula,	+++	27, 30, 35, 36

Sl. No.	Scientific name	Host	Rating	Reference Table
56.	*Digiteria. scalarum*	Tea	+++	38
57.	*Dryopteris filix-mas*	Forest crop	++	37
58.	*Dutura stramonium*	Forest crop	++	37
59.	*Echinochloa colonum*(L) Link.	Rice, Wheat, jute, kenaf, potao	+++	27, 30, 33
60.	*Echinochloa crus-galli* (L.) P. Beauv.	Rice, cotton, potato, Banana	+++	27, 30, 33, 34
61.	*Eclipta alba* (L)	Wheat, cotton	+++	27, 30
62.	*Eclipta prostrata*	wheat	++	27, 32
63.	*Eichhornia crassipes*	Rice	++	27
64.	*Eleocharis atropurpurea*Kunth.	Rice	+++	27
65.	*Elusine indica*L.	Rice, Wheat, m,aize, groundnut, bottle gourd, ginger, Tobacco mussanda, senna, aparajita, haritaki,	+++	27, 29, 33, 35, 38, 39
66.	*Emilia sonchifolia*	Onion, forest crop,	+++	35, 37
67.	*Enhydra fluctuans*.Lour.	Wheat	+	27
68.	*Euphorbia hirta*	Jute, kenaf, onion	++	30, 35
69.	*Euphorbia parviflora*	Maize, potato	+++	27, 33
70.	*Fimbristylis miliaceae* (L.) Vahl.	Rice, Wheat, cotton, guava	+++	27, 30, 32, 34
71.	*Fimbristylis diphylla* (Retz.) Vahl.	Rice	+++	27
72.	*Euphorbia microphilla*	Jute, kenaf	++	30
73.	*Euphorbia parviflora*	Maize		27
74.	*Gnaphalium affine* D. Don	wheat	+++	27
75.	*Hedyotis brachipoda*	Wheat	+++	27
76.	*Hedyotis corymbose* (L..) Lam.	Wheat	+++	27
77.	*Heliotropium indicum* L.	Maize, sesame	+++	27, 29
78.	*Hydrocotyl asiatica*	sugarcane	+	31
79.	*Hydrolia zeylanica*	sugarcane	==	31
80.	*Hygrophila deformis*	Jute, Sugarcane	++	30, 31
81.	*Hypochaeris radicata*	sugarcane	++	31
82.	*Imperata cylindrica*	Sugarcane, forest crop, tea, Aparajita,	++	31, 37, 38, 39
83.	*Ipomoa aquaticae*	Rice, wheat, sugarcane	+++	27, 31
84.	*Ipomea plebeia* .R. Br.	sugarcane	+++	31

Sl. No.	Scientific name	Host	Rating	Reference Table
85.	*Jussiaea decurrens*	Cotton	++	30
86.	*Jussiaea repens*	Jute kenaf, onion	++	31, 35
87.	*Lantana camara*	Groundnut	++	29
88.	*Leersia hexandra* Swartz.	Rice, calendula	+++	27, 36
89.	*Leptochloa chinensis* (L.) Nees	Rice	+++	27
90.	*Leptochloa panicea* (Retz.) Ohwi	Rice	+++	27
91.	*Leucas aspera* Spreng.	Wheat, cotton	+++	27, 30
92.	*Leonurus sibiricus* (MH)	Wheat	+++	27
93.	*Lindernia anagallis (*Burm.f.) Pennell	Tea	+++	38
94.	*Ludwigia adscendense* L.) Hara.	Rice, onion	+++	27, 35
95.	*Ludwigia decorrens*	Calendula	+++	36
96.	*Ludwigia hyssopifolia* (G. Don) Exell	Rice	+++	27
97.	*Ludwigia octavalvis* (Jacq.) P.H.Raven	Rice	+++	27
98.	*Marcilia quardrifolia*L.	Rice, sugarcane	+++	27, 31
99.	*Mazusr ugosus*	Maize	++	27
100.	*Mikania cordata*	Forest crop	+++	37
101.	*Mikania scandens*	Tea	+++	38
102.	*Mimosa invisum*	Forest crop, Tea, Chirayata,	+++	37, 38, 39
103.	*Mimosa pudica*	Sugarcane, forest crop	+	31, 37
104.	*Mollugo verticillata*	Sugar beet	++	31
105.	*Monochoria hastata*	Sugar beet	++	31
106.	*Monochoria vaginalis* L.	Rice	+++	27
107.	*Nicotiana plumbaginfolia* Viv.	Wheat, cotton, guava	+++	27, 30, 34
108.	*Orovanche* r*amosa*	Mustard	++	29
109.	*Oryzae rufipogon*	Rice	+	27
110.	*Oxalis europea*	Rice, wheat, cotton, Banana, garlic	+	27, 30, 34, 35
111.	*Panicum dichotomoflorum*	Rice	++	27
112.	*Panicum repens*	Rice, maize, blackgram,	+++	27, 28
113.	*Parapholis incurve* C.E.Hubb.	Rice	++	27
114.	Parapholis strigosa	wheat	+++	27

Sl. No.	Scientific name	Host	Rating	Reference Table
115.	*Parthenium hysterophorus*L	Lentil, sesame, cotton, potato, Mango	+++	28, 29, 30, 33,34
116.	*Paspalum commersoni* Link.	Rice	+++	27
117.	*Paspalum dialatum*	Sugarcane	++	31, 32
118.	*Paspalum distichum*	Rice, jute,	+++	27, 27
119.	*Pistia stratiotes*L.	Rice	++	27
120.	*Phylla nodiflora*	Tea	++	38
121.	*Phyllunthus niruri*	Kalomegh, Tea,	++	38, 39
122.	*Physalis angulata*	Forest crop, Kalomegh	++	37, 39
123.	*Physalis heterophylla* L.	Khesari, jute, cotton	++	28, 30
124.	*Physalis minima* L.	wheat	+	27
125.	*Pistia stratiotes* L.	Rice	++	27
126.	*Poa annua*	Aparajita, kalomegh	++	39
127.	*Polygonium coccineum*	wheat	+++	27
128.	*Polygonum aviculare*	Onion	++	35
129.	*Polygonum hydropiper* L.	Rice, wheat, cotton, guava, onion,Tea	++	27, 30, 34, 35,38
130.	*Parthenium hysterophorus*.	Mango, Garlic, onion		34, 35
131.	*Polygonum persocaria* L.	Rice	+++	27
132.	*Polygonum plebeium* R. Br.	wheat, cotton, guava	+	27, 30, 34
133.	*Ponieun javanicum*	Jute, kenaf	++	30
134.	*Portulaca oleracea* L	wheat, maize, peanut, bean, ginger, Straw berry, Tea	+++	27, 29, 33, 34, 35, 38
135.	*Portulaca quadrifida*	Jute, kenaf	+	30
136.	*Raphanus rephanistruma*	Maize	+	27
137.	*Rumex maritimus*	Rice, wheat, khesari, flower	++	27, 28, 36
138.	*Saccharum spontaneum*L.	Mungbean, Sugarcane, Sugarbeet	++	28, 31
139.	*Salvinia natans*	Rice	+++	27
140.	*Saussurea affinis*	Lentil	+++	28
141.	*Scirpus articulatus*	Maize	++	27
142.	*Scirpus japonica*	Tea	+++	38
143.	*Scirpus juncoides*	Rice	+++	27

Sl. No.	Scientific name	Host	Rating	Reference Table
144.	*Scirpus maritimus* (Kenna ghas)	Rice	++	27
145.	*Scoparia dulcis*	Cotton	++	30
146.	*Setaria glauca* (L.) P.Beauv	Rice, wheat,maize	+++	27
147.	*Setaria viridis*	Rice, blackgram, guava	+++	27, 28, 34
148.	*Sidia acuta*	Tea	+++	38
149.	*Solanum carolinense.*	Eggplant, Flower	++	33, 36
150.	*Solanum mauritianum*	Sugarcane, sugarbeet	+++	31
151.	*Solanum nigrum* L.	Wheat, sesame, flower, Sugarcane	++	27, 29, 31, 32,36
152.	*Solanum rostratum*	Forest crop	++	37
153.	*Solanum torvum Swartz.*	Wheat, cotton, guava, sugarcane,	+	27, 30, 31, 34
154.	*Sonchus oleraceus*	Wheat, lentil	+	27, 28
155.	*Splenoclea zeylanica*	Rice	++	27
156.	*Spilanthes paniculata*	Sunflower	+	29
157.	*Sporobolus indicus*	Sugarcane	++	31
158.	*Stellaria media.*	Wheat	+++	27
159.	*Striga densiflora*	Sugarcane, Tobacco	+++	31, 38
160.	*Thlaspi arvense*	Cotton, guava	++	30, 34
161.	*Verbasculum thapsus* L	Banana	++	34
162.	*Vermonia cinerea*	Tea	+++	38
163.	*Vicia hirsute* L.	Wheat, sugarcane	++	27, 31
164.	*Vicia sativa.*L.	Wheat, chickpea	+++	27, 28
165.	*Xanthium indicum* Koen. ex Roxb	sugarcane	++	31
166.	*Xanthium italicum*	sugarcane	+++	31
167.	*Xanthium strumerium* Koenig.	Wheat, cotton	++	27, 30

6.0 DISTRIBUTION OF PESTS OF PLANTS AND PLANT PRODUCTS IN 14 AGRICULTURAL REGIONS OF BANGLADESH

Table 41. Distribution of Insect and Mite Pests, Disease causing pathogens and Weed spices in 14 agricultural regions

A. Insect and Mite Pests

Sl. No.	Scientific name of the pests	Dhaka	Mymensingh	Rajshahi	Bogura	Rangpur	Dinajpur	Jesshore	Khulna	Barishal	Faridpur	Comilla	Sylhet	Chattogram	Rangamati	Reference Table
01	*Abryna regispetri* Paiva	+	+	+	+	+	+	+	+	+	+	+	+	+	+	40
02	*Acanthiophillus helianthi* Rossi	+	+	+	+	-	-	+	-	+	+	-	-	+	-	
03	*Acaphylla theae* (Watt)	-	-	-	-	-	+	-	-	-	-	-	+	-	+	
04	*Acaudaleyrodes rachipora* Singh	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
05	*Aceria doctersi* (Nalepa)	+	-	-	-	-	-	-	-	-	-	-	+	+	+	
06	*Aceria litchi* (Keiger)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
07	*Aceria mangiferae* Sayed	+	+	+	-	+	+	-	+	-	-	-	-	+	+	
08	*Achaea janata* (Linneaus)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
09	*Acherontia styx* (Westwood)	++	++	++	++	++	+++	+++	++	++	+++	++	++	+++	+++	
10	*Acleris epidesma* Lower	+	+	-	-	-	-	-	-	-	-	-	+	+	+	
11	*Acmaeodera aurifera* Laporte & Gory	-	-	+	+	-	-	+	-	-	-	-	+	+	+	
12	*Acmaeodera stictipennis* Laporte & Gory	+	+	-	-	-	-	-	+	-	-	-	+	+	+	
13	*Acrida exaltata* (Walker)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
14	*Acrocercops calycophthalma* Meyrick	+	+	-	-	-	-	-	+	-	-	-	+	+	+	
15	*Acrocercops cathedraea* Meyrick	+	+	-	-	-	-	-	+	-	-	-	+	+	+	
16	*Acrocercops euthycolona* Meyrick	+	+	-	-	-	-	-	+	-	-	-	+	+	+	
17	*Acrocercops niphocremna* Meyrick	+	+	-	-	-	-	-	+	-	-	-	+	+	+	
18	*Acrocercops ordinatella* Meyrick	+	+	-	-	-	-	-	+	-	-	-	+	+	+	
19	*Acrocercops ustula* Stainton	+	+	-	-	-	-	-	+	-	-	-	+	+	+	
20	*Acrocerocops aestiopa* Meyrick	+	+	-	-	-	-	-	+	-	-	-	+	+	+	

Sl. No.	Scientific name of the pests	Dhaka	Mymensingh	Rajshahi	Bogura	Rangpur	Dinajpur	Jesshore	Khulna	Barishal	Faridpur	Comilla	Sylhet	Chattogram	Rangamati	Reference Table
21	*Acrocerocops auricilla* Stainton	+	+	-	-	-	-	-	+	-	-	+	+	+	+	
22	*Acrocerocops desiccata* Meyrick	+	+	-	-	-	-	-	+	-	-	-	+	+	+	
23	*Acrocerocops gemoniella* Stainton	+	+	-	-	-	-	-	+	-	-	-	+	+	+	
24	*Acrocerocops hierocosma* Meyrick	+	+	-	-	-	-	-	+	-	-	-	+	+	+	
25	*Acrocerocops ordinatella* Meyrick	+	+	-	-	-	-	-	+	-	-	+	+	+	+	
26	*Acrocerocops resplendens* Stainton	+	+	-	-	-	-	-	-	-	-	-	-	-	-	
27	*Acrocerocops telestis* Meyrick	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
28	*Acrocerocops terminaliae* Stainton	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
29	*Actias selene* (Hübner)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
30	*Adisura atkinsoni* Moore	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
31	*Adoretus bimarginatus* Ohaus	++	++	+	+	++	++	++	++	+	+	++	++	++	++	
32	*Adoretus caliginosus* Burmeister	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
33	*Adoretus serratipes* Arrow	++	+++	++	+++	+++	+++	+++	+++	+++	++	++	+++	+++	+++	
34	*Aeolesthes holocericea* Fabricius	+	+	+	+	+	+	+	+	+	+	+	+	+	+	40
35	*Aeolothrips collaris* Priesner	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
36	*Agonoscelis nubila* (Fabricius)	-	+	+	+	+	+	+	+	-	+	-	+	+	+	
37	*Agrilus acutus* Thumb	+++	+++	++	++	+++	+++	++	+++	+++	+++	++	+	+	+	
38	*Agrilus elaeocarpi* Thery	+	+	+	+	+	+	+	+	-	-	-	-	-	+	
39	*Agriotes* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
40	*Agromyza* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
41	*Agrotera basinotata* Hampson	+++	+++	+++	+++	+++	+++	+++	+++	++	++	++	+++	+++	+++	
42	*Agrotis ipsilon* (Hufnagel)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
43	*Agrotis segetum* (Denis & Schiffermüller)	-	-	-	-	+	+	+	+	-	+	-	-	+	+	
44	*Agrotis* spp.	++	++	++	++	++	++	++	++	+++	++	++	++	++	++	
45	*Ahasverus advena* Linneaus	+	-	+	+	+	+	+	+	+	+	+	-	+	+	
46	*Alcides collaris* Pascoe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
47	*Alcidodes affaber* Aurivillius	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

Sl. No.	Scientific name of the pests	Dhaka	Mymensingh	Rajshahi	Bogura	Rangpur	Dinajpur	Jesshore	Khulna	Barishal	Faridpur	Comilla	Sylhet	Chattogram	Rangamati	Reference Table
48	*Alcidodes crassus* Pascoe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
49	*Alcidodes frenatus* Faust	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
50	*Alcidodes ludificator* Faust	+	+	-	-	-	-	-	-	-	-	-	+	+	+	
51	*Aleurocanthus bambusae* (Peal)	+	+	-	-	-	-	-	-	-	-	-	+	+	+	
52	*Aleurocanthus inceratus* Silvestri	+	+		-	-	-	+	-	-	-	+	+	+	+	
53	*Aleurocanthus nubilans* (Buckton)	-	-	++	-	-	-	++	-	-	-	-	++	++	++	
54	*Aleurocanthus woglumi* Ashby	+	+		-	-	-	-	-	-	-	+	+	+	+	
55	*Aleurodicus disperses* Russell	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
56	*Aleurolobus barodensis* (Maskell)	-	+	+	-	+	+	+	-	-	-	-	-	+	+	
57	*Allisonotum impressicolle* Arrow	-	+	+	-	+	+	+	-	-	-	-	-	+	+	
58	*Alphitobius piceus* (Olivier)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
59	*Altha nivea* Walker	+	+	-	-	-	-	-	-	-	-	+	+	+	+	
60	*Amata pasalis* Fabricius	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
61	*Amathusia phidippus* Johann	+	-	-	-	-	-	-	-	-	-	-	-	+	+	40
62	*Amblyrhinus poricollis* Schoenherr	-	-	-	-	-	-	-	-	-	-	-	+	+	+	
63	*Ambulyx substrigillis* Westwood	+	+	+	+	+	+	+	+	+	+	-	-	+	+	
64	*Amradiplosis amraemyia* Rao	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
65	*Amradiplosis echinogalliperda* Mani	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
66	*Amrasca* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
67	*Amrasca biguttula* (Ishida)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
68	*Amrasca biguttula biguttula* (Ishida)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
69	*Anarsia ephippias* Meyrick	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
70	*Anatrachyntis philocarpa* Meyrick	-	-	+	+	+	+	+	+	-	-	-	-	-	-	
71	*Anomala* sp.	-	-	+	+	+	+	+	+	-	+	-	-	-	+	
72	*Anomala bengalensis* Blanchard	+	+	-	-	-	-	-	-	-	-	-	+	+	+	
73	*Anomala antique* (Gyllenhal)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
74	*Anomala polita* Blanchard	++	-	-	-	-	-	-	-	-	-	-	++	+++	+++	

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75	*Anomalococcus indicus* Ramakrishna Ayyar	-	-	+++	-	-	-	-	-	-	-	-	+++	+++	+++	
76	*Anomis flava* (Fabricius)	-	-	+	+	+	+	+	+	-	-	-		+	+	
77	*Anomis sabulifera* Guenee	+	+	+	+	+	+	-	-	+	+	+	-	-	-	
78	*Anoplocnemis phasiana* (Fabricius)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
79	*Anthaxia phyllanthi* Obenberger	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
80	*Antheraea paphia* Linneaus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
81	*Anthophila aegyptiaca* Zeller	+++	+++	-	-	-	-	-	-	-	-	-	-	-	-	
82	*Antigastra catalaunalis* (Duponchel)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
83	*Antitrygodes cuneilinea* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
84	*Antoba olevacea* (Walker)	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
85	*Aonidiella aurantii* (Maskell)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
86	*Aonidiella citrina* Coquillett	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
87	*Aonidiella orientalis* Newstead	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
88	*Aphannus sordidus* Fabricius	+	+	-	-	-	-	-	+	+	+	+	-	-	-	40
89	*Aphis craccivora* (Koch)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
90	*Aphis fabae* Scopoli	++	++	++	++	++	++	++	++	+	+	+	+	++	+	
91	*Aphis gossypii* Glover	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
92	*Aphis medicaginis* Koch	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
93	*Aphis nerii* Boyer de Fonscolombe,	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	
94	*Aphrophora* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
95	*Aphrophora saratogensis* (Fitch)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
96	*Apion corchori* Marshall	+++	+++	++	+++	+++	+++	+++	++	++	+++	+++	++	++	-	
97	*Apoderus* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
98	*Apoderus tranquebaricus* Fabricius	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
99	*Apomecyna neglecta* Pascoe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
100	*Apomecyna saltator* Fabricius	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
101	*Aporina germari* Linneaus	-	-	++	-	-	++	-	-	-	-	-	++	++	++	

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102	*Aproaerema nerteria* Meyrick	+++	+++	+++	+++	+++	++	++	+++	+++	+++	+++	++	+++	+++	
103	*Aproarema modicella* Deventer	+++	+++	+++	+++	+++	++	++	+++	+++	+++	+++	++	+++	+++	
104	*Apsylla cistellata* Buckton	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
105	*Araecerus suturalis* Boheman	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
106	*Araecerus fasciculatus* De Geer	+++	+++	-	-	-	-	-	-	-	-	-	+++	+++	+++	
107	*Araecerus intangens Walker*	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
108	*Archips micaceanus* (Walker)	+++	+++	+++	+++	+++	++	++	+++	+++	+++	+++	++	+++	+++	
109	*Archips oporana* (Linnaeus)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
110	*Argyroploce illepedia* (Butler)	+	+	+	+	+	+	+	+	-	-	+	+	+	+	
111	*Argyroploce tonica* Meyrick	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
112	*Aristobia approximator* Thompson	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	
113	*Arthroschista hilaralis* Walker	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
114	*Ascotis infixaria* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
115	*Ascotis selenaria* (Denis & Schiffermüller)	+	+	-	-	-	-	-	-	-	-	-	+	+	+	40
116	*Asphondylia phyllanthi* Felt	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
117	*Aspidiella* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
118	*Aspidiotus destructor* Signoret	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
119	*Aspidiotus hartii* Cockrell	-	+	+	+	+	+	-	-	-	-	-	+	+	+	
120	*Aspidomorpha dorsata* Fabricius	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
121	*Aspongopus brunneus* Thunberg	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
122	*Aspongopus janus* (Fabricius)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
123	*Aspongopus* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
124	*Athalia proxima* (Klug)	+	+	+	+	+	+	+	+	-	+	+	-	+	-	
125	*Atherigona excise* Thomas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
126	*Atherigona oryzae* Malloch	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
127	*Atherigona soccata* Rondani	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
128	*Atmetonychus peregrinus* Olivier	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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129	*Atractomorpha crenulata* Fabricius	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
130	*Attractomorpha parasitica* (de Haan)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
131	*Atractomorpha psittacine* DeHaan	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
132	*Attacus atlas* Linneaus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
133	*Attatha regalis* Moore	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
134	*Aulacophora abdominalis* (Fabricius)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
135	*Aulacophora foveicollis* (Lucas)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
136	*Aulacophora frontalis* Baly	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
137	*Aularachis miliaris* (Linneaus)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
138	*Autoba angulifera* Moore	++	++	++	++	++	++	++	++	++	+	++	++	++	++	
139	*Bactrocera caudata* (Fabricius)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
140	*Bactrocera cucurbitae* (Coquillett)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
141	*Bactrocera dorsalis* (Hendel)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
142	*Bactrocera hochii* (Zia).	+	+	+	+	+	+	+	+	+	+	+	+	+	+	40
143	*Bactrocera latifrons* (Hendel)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
144	*Bactrocera tau* (Walker)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
145	*Bactrocera zonata* (Saunders)	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
146	*Balaninus c-album* Fabricius	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
147	*Baliothrips serrate* (Kabus)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
148	*Barasa alopha* Hampson	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
149	*Basitropis nitidicutis* Jekel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
150	*Batocera rubus* (Linnaeus)	++	+++	++	++	+++	++	+++	+++	++	++	++	+++	+++	+++	
151	*Batocera rufomaculata* (De Geer)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
152	*Belionota prasina* Thumberg	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
153	*Bemisia tabaci* (Gennadius)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
154	*Biprorulus bibax* Breddin	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
155	*Biston suppressaria* Guenee	-	-	-	-	-	++	-	-	-	-	-	++	++	++	

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156	*Blastobasis sparmologa* Meyrick	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	
157	*Blosyrus asellus* (Olivier)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
158	*Blosyrus oniscus* Olivier	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
159	*Bombyx mori* Linneaus	-	-	+++	-	-	-	-	-	-	-	-	+++	+++	+++	
160	*Brachytes bicolar* Westwood	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
161	*Brachytrypes orientalis* Burmeister	-	-	-	-	-	-	-	-	-	-	-	-	+++	+++	
162	*Brachytrupes portentosus* (Lichtenstein)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
163	*Brahmina* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
164	*Brevennia rehi* (Lindinger)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
165	*Brevicoryne brassicae* (Linnaeus)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
166	*Brevipalpus phoenicis* (Geijskes)	-	-	-	-	-	+	-	-	-	-	-	+	+	+	
167	*Bruchidius* sp.	-	-	+++	+	+	+	-	-	-	-	-	+++	+++	+++	
168	*Bruchidius uberatus* Fabricius	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
169	*Bruchus bilineatopygus* Pic	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	40
172	*Bruchus pisorum* Linneaus	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
173	*Cadera cautella* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
174	*Calandra linearis* Herbst	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
175	*Callosobruchus chinensis* Linnaeus	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
176	*Callosobruchus maculatus* Fabricius	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
177	*Calopepla leayana* Laterille	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	
178	*Camponotus* spp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
179	*Camponotus compressus* Fabricius	++	++	++	+	++	++	+	+	+	+	+	++	++	++	
180	*Carea angulata* Fabricius	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
181	*Carphurus* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
182	*Carpomya vesuviana* Costa	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
183	*Carpophilus cylindricus* Murzini	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
184	*Carpophilus hemipterus* (Linneaus)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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185	*Caryedon gonagra* Fabricius	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
186	*Catochrysops pandava* Horsfield	-	-	-	-	-	-	-	-	-	-	-	+	+	+	
187	*Catopsilia crocale* Cramer	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
188	*Cavariella aegopodii* (Scopoli)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
189	*Celyphus obtectus* Dalman	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
190	*Centrococcus insolitus* (Green)	++	++	++	++	++	++	++	++	+	++	++	++	++	++	
191	*Cerataphis lataniae* Lichtenstein	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
192	*Ceratovacuna lanigera* (Zehntner)	-	++	++	++	++	++	++	++	-	++	-	++	++	++	
193	*Ceroplastes ceriferus* Anderson	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
194	*Ceroplastes floridensis* Comstock	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
195	*Chaetocnema basalis* Baby	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
196	*Chaetocnema* sp.	+	+	-	-	-	-	-	+	+	+	+	+	+	+	
197	*Chalcidomyia atricornis* Malloch	++	++	++	++	++	++	++	++	-	-	++	++	++	++	
198	*Chelidonium cinctum* Guerin-Meneville	+	+	+	+	+	+	+	+	+	+	+	+	+	+	40
199	*Cheromettia apicata* Moore	+	+	-	-	-	-	-	+	-	-	+	+	+	+	
200	*Chilasa clytia* Linneaus	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	
201	*Chilo auricilius* Dudgeon	-	+	+	+	+	+	+	+	-	+	-	-	+	+	
202	*Chilo infuscatellus* Snellen	-	+++	+++	+++	+++	+++	+++	+++	-	+++	-	-	+++	+++	
203	*Chilo partellus* (Swinhoe)	++	++	++	++	++	++	++	-	-	++	++	++	++	++	
204	*Chilo polychrysus* (Meyrick)	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
205	*Chilo tumidicostalis* Hampson	-	++	++	++	++	++	++	++	-	++	-	-	++	++	
206	*Chloridolum alcmene* Thomson	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
207	*Chloropulvinaria psidii* Maskell	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
208	*Chrysocoris stolli* (Wolff)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
209	*Chrysomphalus aonidum* (Linneaus)	-	-	-	-	-	+	-	-	-	-	-	+	+	+	
210	*Chrysomphalus ficus* Ashmead	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
211	*Clania cramerii* (Westwood)	-	-	-	-	-	+	-	-	-	-	-	+	+	+	

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212	*Clania sikkima* (Moore)	-	-	-	-	-	+	-	-	-	-	-	+	+	+	
213	*Cleora cornaria* Guenee	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
214	*Cletus pugnator* (Fabricius)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
215	*Clitea picta* Baly	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
216	*Clovia* sp.	-	+	+	+	+	+	+	+	-	-	-	-	+	+	
217	*Cnaphalocrocis medinalis* (Guen.)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
218	*Coccotrypes dactyliperda* Fabricius	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
219	*Coccotrypes ealeocarpi* Beeson	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
220	*Coccus elongatus* Signoret	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
221	*Coccus indicus* Green	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
222	*Coccus viridis* (Green)	+	+	-	-	-	-	-	-	-	-	-	+	+	+	
223	*Cofana spectra* (Distant)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
224	*Colemania sphenarioides* Bolivar	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
225	*Colposcelis kanarensis* Jacoby	+	+	+	+	+	+	+	+	+	+	+	+	+	+	40
226	*Componotus compressus* Fabricius	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
227	*Conocephalus longipennis* (de Hann)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
228	*Conopomorpha sinensis* Bradley	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
229	*Coptosoma cribarium* (Fabricius)	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
230	*Coptotemes heimi* (Wasmann)	-	-	-	-	-	+++	-	-	-	-	-	+++	+++	+++	
231	*Coptotermes ceyloincus* Holmgren	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	
232	*Corcyra cephalonica* (Stainton)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
233	*Cosmopolites sordidus* (Germar)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
234	*Cosmopteryx* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
235	*Cosmoscaria relata* (Distant)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
236	*Creatonotos transiens* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
237	*Cricula trifenestrata* Helfer	++	++		-	-	-	-	-	-	-	++	++	++	++	
238	*Crioceris* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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239	*Crocidolomia binotalis* Zeller	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
240	*Crossotarsus bonvouiloiri* Chapuis	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	
241	*Crossotarsus latelunatus Beeson*	-	-	-	-	-	-	-	-	-	-	-	+	+	+	
242	*Crossotarsus minax* Walker	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	
243	*Crossotarsus saundersi* Chapuis	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	
244	*Crossotarsus squamulatus* Chapuis	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	
245	*Crotogonus* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
246	*Crotogonus trachypterous* (Blanchard)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
247	*Cryptolechia nyctiphronas* Meyrick	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
248	*Cryptolestes pusillus* (Schoenherr)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
249	*Cryptophlebia illepida* (Butler)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
250	*Cryptotermes bengalensis* Snyder	-	-	-	-	-	-	-	+++	+++	-	-	-	-	-	
251	*Cryptothelea cramari* Westwood	+	+	+	+	+	+	+	+	+	+	+	+++	+++	+++	
252	*Cryptothelea variegata* Snelen	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	40
253	*Cryptothrips aculta* Linnaeus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
254	*Crytozemia dispar* Pasc	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
255	*Curetis thetis* (Drury)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
256	*Cyclas formicarius* (Fabricius)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
257	*Cyclosia papilionaris* Drury	+	+	-	-	+	+	+	+	-	-	+	+	+	+	
258	*Cyrtozemia cognata* Marshall	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
259	*Cyrtozemia dispar* Pascoe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
260	*Dactynotus earthami* (Das)	-	+	+	+	+	+	+	+	+	+	-	-	-	-	
261	*Dacus ciliatus* (Loew)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
262	*Dacus cucurbitae* (Coquillett)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
263	*Dacus divresa* (Coquillett)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
264	*Dacus longicornis* (Wiedemann)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
265	*Danaus chrysippus* Linnaeus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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266	*Dasychira grotei* Moore	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
267	*Dasychira mendosa* Hubner	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
268	*Dasychira obliqua* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
269	*Dasyneura lini* Barnes	-	+	+	+	+	+	+	+	+	+	-	-	-	-	
270	*Decadarchis scorpiura* Meyrick	-	-	-	-	-	-	-	-	-	-	-	+	+	+	
271	*Delia antiqua* Meigen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
272	*Delias eucharis* (Drury)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
273	*Demonax limoniae* Gardner	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
274	*Deporaus marginatus* Pascoe	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
275	*Derolus discicollis* Gahan	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
276	*Diacrisia obliqua* (Walker)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
277	*Diacrotricha fasciola* (Zeller)	-	-	-	-	-	-	-	+	+	-	-	-	-	-	
278	*Dialeurodes citri* Ashmead	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
279	*Diaphania indica* (Saunders)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	40
280	*Diaphorina caesalis* (Walker)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
281	*Diaphorina citri* Kuwayana	-	-	-	-	-	-	-	-	-	-	+	+	+	+	
282	*Diaphornia dakariensis* Boselli	-	-	-	-	-	-	-	-	-	-	-	+	+	+	
283	*Dichocrocis evaxalis* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
284	*Dichocrocis punctiferalis* Guenee	++	++	++	++	++	++	++	++	++	++	++	+++	+++	+++	
285	*Dicladispa armigera* (Olivier)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
286	*Diconocoris hewetti* (Distant)	-	-	-	-	-	-	-	-	-	-	-	++	++	++	
287	*Dihammus cervinus* Hope	-	-	-	-	-	-	-	-	-	-	-		+++	+++	
288	*Dinoderus brevis* Horn	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
289	*Dinoderus minutus* Fabricius	+++	+++	-	-	-	-	-	-	-	-	-	+++	+++	+++	
290	*Disphinctus humeralis* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
291	*Disphinctus politus* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
292	*Dolycoris indicus* Stal	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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293	*Donda ornata* Moore	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
294	*Dorcathispa cuspidata* Maulik	+	+	+	+	+	+	+	+	-	-	-	+	+	+	
295	*Dorylus orientalis* Westwood	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
296	*Downesia tarsata* Baly	+	+	+	+	+	+	+	+	-	-	-	+	+	+	
297	*Drosicha dalbergiae* Green	++	++	-	-	-	-	++	++	-	-	-	++	++	++	
298	*Dysaphis tulipae* (Boyer de Fonscolombe)	++	++	++	-	-	-	-	-	-	-	++	++	++	-	
299	*Dysdercus cingulatus* (Fabricius)	++	++	+	+	+	+	+	+	+	+	+++	+++	+++	+++	
300	*Dysmicoccus brevipes* (Cockerell)	-	+++	-	-	-	-	-	-	-	-	-	+++	+++	+++	
301	*Earias cupreoviridis* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
302	*Earias insulana (*Boisduval)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
303	*Earias vittella* **(**Fabricius)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
304	*Elasmolemus sordidus* (Fabricius)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
305	*Elygea materna* Linneaus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	40
306	*Emmalocera depressella* Swinhoe	+++	+++	+++	+++	+++	+++	+++	+++	-	-	-	+++	+++	+++	
307	*Empoasca flavescens* Fabricius	-	-	-	-	-	+	-	-	-	-	-	+	+	+	
308	*Empoasca kerri* Pruthi	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
309	*Empoasca* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
310	*Empoasca terminalis* Distant	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
311	*Endoclita undulifer* Walker	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	
312	*Eoeurysa flavocapitata* Muir	-	++	++	++	++	++	++	++	-	-	-	-	++	++	
313	*Ephestia cautella* (Walker)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
314	*Ephestia* sp.	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
314	*Epilachna dodecastigma* (Wiedemann)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
315	*Epilachna septima* Dieke	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
316	*Epilachna sparsa* (Herbst)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
317	*Epilachna varivestis* Mulsant	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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318	*Epilachna vigintioctopunctata* (Fabricius)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
319	*Ergolis ariadne* Johnson	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
320	*Eriophyes tulipae* Keifer	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
321	*Eriyophyes guerreronis* Keifer	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
322	*Erosomyia mangiferae* Felt	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
323	*Estigmene chinensis* Hope	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
324	*Euborellia stali* (Dohrn)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
325	*Euchromia polymena* Linnaeus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
326	*Euchrysops cnejus* (Fabricius)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
327	*Euploea core* (Cramer)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
328	*Euproctis fraterna* Moore	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
329	*Euproctis lunata* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
330	*Euproctis scintillans* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
331	*Euproctis* sp	+	+	+	+	+	+	+	+	+	+	+	+	+	+	40
332	*Euproctis virguncula* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
333	*Eupterote geminata* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
334	*Eupterote undata* Blachard	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
335	*Eurema blanda silhetana* Wallace	+	+	+	+	+	+	+	+	+	+	+	+	+++	+++	
336	*Eurema hecabe* Linneaus	-	-	-	-	-	-	-	-	-	-	-	++	++	++	
337	*Eurydema pulchrum* Westwood	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
338	*Eusarcocoris* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
339	*Eusarcocoris ventralis* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
340	*Euscyrtus concinnus* (de Haan)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
341	*Eutectona machaeralis* (Walker)	-	-	-	-	-	-	-	-	-	-	-	-	+++	+++	
342	*Euzophera perticella* Ragonot	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
343	*Euzophera plumbeifascialla* Haworth	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
344	*Exitianus indicus* (Distant)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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345	*Exitianus* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
346	*Eysarcoris* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
347	*Eysarcoris ventralis* Distant	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
348	*Ferrisia pseudococcus* (Signoret)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
349	*Ferrisia virgata* (Cockerell)	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
350	*Forficula* sp.	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
351	*Formiconus antiguus* Kerr	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
352	*Formosina flavipes* Malloch	++	++	++	++	++	++	++	++	-	-	-	++	++	++	
353	*Frankliniella intonsa* (Trybom)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
354	*Frankliniella occidentalis* (Pergande)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
355	*Frankliniella schultzei* (Trybom)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
356	*Gallobelicus crassicornis* Distant	-	-	-	-	++	++	++	-	-	-	-	-	++	++	
357	*Gangara thyrsis* Fabricius	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	
358	*Gegines gullatus* Wulp	+	+	+	+	+	+	+	+	+	+	+	+	+	+	40
359	*Geocoris ochopterus* (Fieber)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
360	*Geoica lucifuga* (Zehntner)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
361	*Glyphodes caesalis* Walker	-	+++	-	-	-	-	-	-	-	-	-	+++	+++	+++	
362	*Glyptotermes dilatatus* (Bugnion & Popoff)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
363	*Gnorimoschema heliopa* Low	+	-	-	+	+	+	+	-	-	-	-	-	+	+	
364	*Gonocephalum bilineatum* (Walker)	+	-	-	+	+	+	+	-	-	-	-	-	+	+	
365	*Gonocephalum planatum* (Walker)	-	-	-	-	-	-	-	-	-	-	-	-	+++	+++	
366	*Gonocephalum tuberculatum* Hope	+	-	-	+	+	+	+	-	-	-	-	-	+	+	
367	*Gracilaria theivora* Walsom	-	-	-	-	-	+	-	-	-	-	-	+	+	+	
368	*Graphium sarpedon* Linneaus	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	
369	*Graptostethus servus* Fabricius	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
370	*Graptostethus servus* Fabricius															

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371	*Greenidea artocarpi* (Westwood)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
372	*Gryllatalpa africana* Palisot de Beauvois	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
373	*Gynaikothrips ficorum (*Marchal)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
374	*Haltica cyanea* Weber	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
375	*Hedylepta indicata* (Fabricius)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
378	*Helicoverp armigera* (Hubner)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
379	*Helicoverpa assulta* Green	+	-	-	+	+	+	+	-	-	-	-	-	+	+	
380	*Helicoverpa obsoleta* Fabricius	-	-	+	+	+	+	-	-	-	-	-	-	-	+	
381	*Helicoverpa zea* (Boddie)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
382	*Heliothrips haemorrhoidalis* (Bouche)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
383	*Heliothrips indicus* Bagnall	-	-	+	+	+	+	+	+	-	+	-	+	+	+	
384	*Hellula undalis* (Fabricius)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
385	*Helopeltis antonii* Signoret	++	++	++	++	++	+++	++	++	++	++	++	+++	+++	+++	
386	*Helopeltis theivora* Waterhouse	-	-	-	-	-	+++	-	-	-	-	-	+++	+++	+++	40
387	*Hemiberlesia lantaniae* Signoret	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
388	*Heminodes indicus* Jacoby	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
388	*Hemitarsonemus latus* Banks	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
389	*Hendecasis duplifascialis* Hampson	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
390	*Heortia vitessoides* Moore	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	
391	*Hermolaus typicus* Distant	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
.392	*Herse convolvuli* (Linnaeus)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
393	*Heterobostrychus aecualis* Waterhouse	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
394	*Heterobostrychus hamatipennis* Lesne	+++	+++	-	-	-	-	-	-	-	-	-	+++	+++	+++	
395	*Heteroderes lenis* Candeze	++	++	++	++	++	++	++	++	-	-	-	-	++	++	
396	*Heteroghaphis bengalella* Rag	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
397	*Heteronychus* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
398	*Heteropsylla cubana* Crawford	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	

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399	*Hippotion celerio* (Linnaeus)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
400	*Holothrichia* spp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
401	*Holotrichia problematica* Brenske	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
402	*Holotrichia serrata* (Fabricius)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
403	*Homona coffearia* Nietner	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
404	*Hoplocerambyx spinicornis* Newman	+++	+++	-	-	-	-	-	-	-	-	-	-	-	-	
405	*Horaga viola* Moore	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
406	*Hydrellia philippina* Ferino	++	++	-	-	-	-	-	-	++	++	++	++	-	-	
407	*Hydronomidus molitor* Faust	+	+	-	-	-	-	-	-	+	+	+	+	-	-	
408	*Hymenia fascialis* Cramer	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
409	*Hymenia recurvalis* Fabricius	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
410	*Hymenoptychis sordida* Zeller	-	-	-	-	-	-	-	+++	+++	-	-	-	-	-	
411	*Hypatima spathota* Meyrick	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
412	*Hypolixus truncatulus* (Fabricius)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	40
413	*Hyposidra successaria* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
414	*Hyposidra talaca* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
415	*Hypsipyla robusta Moore*	+++	+++	++	++	++	++	++	++	++	++	++	+++	+++	+++	
416	*Hysteroneura setariae* (Thomas)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
417	*Icerya aegyptiaca* (Douglas)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
418	*Icerya formicarum* Newstead	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
419	*Icerya purchasi* Maskell	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
420	*Icerya* sp.															
421	*Idiocerus atkinsoni* Lethierry	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
422	*Idioscospus clypealis* Lethierry	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
423	*Indarbela quadrinotata* (Walker)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
424	*Indarbela teraonis* Moore	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
425	*Inderbela theivora* (Hampson)	-	-	-	-	-	+	-	-	-	-	-	+	+	+	

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426	*Junonia hierta* (Fabricius)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
427	*Junonia orithya* (Linneaus)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
428	*Kerria lacca* Kerr	+	+	+++	+	+	+	+	+	+	+	+	+	+++	+++	
429	*Labeda nobilis* Walker	-	-	-	-	-	-	-	+	+	-	-	-	-	-	
430	*Laemophloeus minutus* (Olivier)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
431	*Lamida moncusalis* Walker	+	+	-	-	-	-	-	-	-	-	-	+	+	+	
432	*Lamprosema indicata* Fabricius	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
433	*Lasioderma serricorne* (Fabricius)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
434	*Lasioptera falcata* Felt	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
435	*Lasioselus* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
436	*Laspeyresia heteropa* Meyrick	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
437	*Laspeyresia koenigiana* Fabricius	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
438	*Laspeyresia pulverula* Meyrick	+++	+++	-	-	-	-	-	-	-	-	-	+++	+++	+++	
439	*Latheticus oryzae* (Waterhouse)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	40
440	*Lecanium discrepans* Green	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
441	*Leewenia karnyiana* Priesner	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
442	*Lema coromendaliana* Fabricius	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
443	*Lema downsei* Baly	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
444	*Leperisinus indicus* Beeson	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
445	*Lepropus chrysochlorus* Wiedemann	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	
446	*Leptocentrus taurus* (Fabricius)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
447	*Leptocorisa* spp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
448	*Leptocrisa acuta* (Thunberg)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
449	*Leptocrisa oratorius* (Fabricius)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
450	*Leptoglossus australis* (Fabricius)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
451	*Lespeyresia leucotoma*	-	-	-	-	-	+	-	-	-	-	-	+	+	+	
452	*Leucinodes orbonalis* Guenee	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	

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453	*Leucinodes* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
454	*Lilioceris impressa* (Fabricius)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
455	*Lilioceris lilii* (Scopoli)	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
456	*Lindingaspis rossi* (Maskell)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
457	*Lipaphis erysimi* (Kaltenbach)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
458	*Lipaphis pseudobrassicae* (Davis)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
459	*Liriomyza sativae* Blanchard	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
460	*Lixus brachyrhinus* Boheman	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
461	*Lixus brachyrrhinus* Bohemann	+	+	+	+	+	+	+	+	+	+	-	-	-	-	
462	*Longiunguis sacchari* (Zehnt.)	-	+	+	+	+	+	+	-	-	-	-	-	+	+	
463	*Loxostege sticticalis*	-	-	+	+	+	+	+	+	-	-	-	-	-	-	
464	*Luperomorpha birmanica* (Jacoby)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
465	*Luperomorpha vittata* Duvivier	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
466	*Lyctus africanus* Lesne	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	40
467	*Lyctus brunneus* Stephens	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
468	*Lygus ragulipennis* Poppius	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
469	*Lymantria mathura* Moore	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
470	*Lymantria nigra* Moore	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
471	*Macalla carbonifera* Meyrick	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
472	*Macrosiphum euphorbiae* (Thomas)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
473	*Macrosiphum miscanthi* (Takahashi)	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
474	*Macrosiphum rosaeformis* Das	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
475	*Macrotermes* spp.	-	-	-	-	-	-	-	-	-	-	-	+	+	+	
476	*Madurasia obscurella* Jacoby	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
477	*Manophyas* sp.	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
478	*Marasmia exigua* (Butler)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
479	*Marasmia patnalis* Bradley	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	

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480	*Marasmia suspicalis* Walker	-	+	+	+	+	+	+	+	-	-	-	-	+	+	
481	*Maruca testulalis* Geyer	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
482	*Maruca vitrata* (Geyer)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
483	*Megalurothrips distalis* (Karny)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
484	*Megalurothrips usitatus* (Bagnall)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
485	*Melanagromyza obtusa* (Malloch)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
486	*Melanaspis glomerata* (Green)	++	++	++	++	++	++	++	++	-	-	-	-	-	++	
487	*Melanephthalma distinguenda* (Kaltenbach)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
488	*Melanitis leda ismene* Cramer	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
489	*Melanoplus* spp.	-	-	+	+	+	+	+	+	-	-	-	-	-	-	
490	*Melanotus* sp.	-	+	+	+	+	+	+	+	-	-	-	-	-	-	
491	*Melittia indica* Butler	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
492	*Melolontha melolontha*	-	-	-	-	-	+	-	-	-	-	-	+	+	+	40
493	*Metanastria hyrtaca* Cramer	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
494	*Metriona circumdata* Herbst	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
495	*Microcerotermes championi* (Snyder)	-	-	-	-	-	+++	-	-	-	-	-	+++	+++	+++	
496	*Microcolona leucosticta* Meyrick	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
497	*Microtermes mycophagus* (Desneux)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
498	*Microtemes obesi* (Holmgren)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
499	*Microtermes obesi* Holmergen`	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
500	*Microtermes* sp.	-	-	-	-	-	-	-	-	-	-	-	+	+	+	
501	*Mimegralla coerubifrons* Malloch	++	++	++	++	++	++	++	++	-	-	-	++	++	++	
502	*Minthea rugicollis* (Walker)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
503	*Monanthia globulifera* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
504	*Monolepta orientalis* (Jacoby)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
505	*Monolepta* spp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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506	*Monolepta signata* (Olivier)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
507	*Murgantia histrionica* (Hahn)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
508	*Mylabris* spp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
509	*Mylabris pustulata* Thunberg	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
510	*Mylleocerus catechu* Marshall	-	-	+	+	-	-	-	-	-	-	-	+	+	+	
511	*Myllocerus discolor* Boheman	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
512	*Myllocerus dorsatus* (Fabricius)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
513	*Myllocerus 11-pustulatus* Faust	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
514	*Myllocerus richardi*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
515	*Myllocerus setulifer* Desbrochers	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
516	*Myllocerus severini* Marshall	+	+	-	-	-	-	-	-	-	-	-	-	-	-	
517	*Myllocerus undecimpustulatus* Marshall	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
518	*Myocalandra exarta* Boheman	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
519	*Mythimna separata* (Walker)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	40
520	*Myzus persicae* (Sulzer)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
521	*Naranga aenessens* Moore	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
522	*Narosa confersa* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
523	*Neoheegeria indica* Hood	+	-	-	-	+	+	+	+	-	-	-	-	+	+	
524	*Neotermes* (*Kalotermes*) *greeni* Desneux	-	-	-	-	-	-	-	-	-	-	-	-	+	+	
525	*Nephantis serinopa* Meyrick	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
526	*Nephopteryx eugraphella* Ragonot	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
527	*Nephotettix bipunctatus* Fabricius	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
528	*Nephotettix cincticeps* (Uhler)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
529	*Nephotettix nigropictus* (Stal)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
530	*Nephotettix virescens* (Distant)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
531	*Neptis jumbah* Moore	-	-	-	-	-	-	-	-	-	-	-	-	+	+	
532	*Nesidiocoris* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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533	*Nezara viridula* (Linnaeus)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
534	*Nilaparvata lugens* (Stal)	+++	+++	+++	+++	+++	+++	-	+++	-	-	-	+++	+++	+++	
535	*Nirvana* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
536	*Nisotra orbiculata* (Motsch)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
537	*Nodostoma viridipennis* Motschulsky	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
538	*Nupsera bicolor* (Dutta)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
539	*Nymphula depunctalis* (Guenee)	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
540	*Nymphula responsalis* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
541	*Nysius inconspicuous* Distant	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
542	*Oberia brevis* Swed	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
543	*Ochyromera artocarpi* (Marshall)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
544	*Odites atmopa* Meyrick	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
545	*Odoiporus longicollis* Olivier	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
546	*Odontotermes bellahunisensis*Holmgren	+	+	+	+	+	+	+	+	+	+	+	+	+	+	40
547	*Odontotermes brunneus* Hagen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
548	*Odontotermes feae* (Wasmann)	-	-	-	-	-	+	-	-	-	-	-	+	+	+	
549	*Odontotermes homi* (Wasmann)	-	-	-	-	-	+	-	-	-	-	-	+	+	+	
550	*Odontotermes obesus* (Rambur)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
551	*Odontotermes parvidens* Holmgren	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
552	*Odontotermes* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
553	*Oecophylla smaragdina* Fabricius	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
554	*Olene mendosa* Hübner	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
555	*Olenecamptus bilobus* Fabricius	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
556	*Oliarus lodgarti* Distant	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
557	*Oligonichus oryzae* (Hirst)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
558	*Oligonychus coffeae* Nietner	-	-	-	-	-	-	-	-	-	-	-	-	+++	+++	
559	*Oligonychus indicus* Hirst	+	+	+	+	+	+	+	+	-	-	-	-	+	+	

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560	*Ommatolapus haemorrhoidalis* (Wiedemann)	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	
561	*Omphisa anastomosalis* (Guenee)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
562	*Ophiomyia phaseoli* (Tryon)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
563	*Ophiusa janata* Linneaus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
564	*Ophiusa melicerta* (Drury)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
565	*Orgyia postica* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
566	*Orgyia turbata* Butler	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
567	*Orseolia oryzae* (Wood-Mason)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
568	*Orthacris sp.*	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
569	*Oryctes rhinoceros* Linneaus	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
570	*Oryzaephilus surinamensis* (Linnaeus)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
571	*Ostrinia furnacalis* (Gunee)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
572	*Othreis spp.*	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	
573	*Otinotus elongates* Distant	+	+	+	+	+	+	+	+	+	+	+	+	+	+	40
574	*Otinotus oneratus* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
575	*Otiorrhynchus sulcatus* (Fabricius)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
576	*Oulema sp.*	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
577	*Oxya chinensis* (Thunberg)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
578	*Oxya hyla intricata* (Stal)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
579	*Oxya japonica* (Thunberg)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
580	*Oxya japonica japonica* (Thunberg)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
581	*Oxycarenus laetus* Kirby	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
582	*Oxyrachis mangiferana* Distant	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
583	*Oxyrhachis taranda* (Fabricius)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
584	*Oxyrhachis tarandus* Fabricius	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
585	*Ozotomerus maculosus* Perroud	-	-	-	-	-	-	-	+	+	-	-	-	-	-	
586	*Pachneophorus bretinghami* Baly	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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587	*Pagiophloeus longiclavis* Dalla Torre & Schenkling	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	40
588	*Pagyda salvalis* Walker	-	-	-	-	-	-	-	-	-	-	-	-	+++	+++	
589	*Palpita marginata* (Hampson)	-	-	-	-	-	-	-	-	-	-	-	++	++	++	
590	*Pammene theristis* Moore	+++	+++	-	-	-	-	-	-	-	-	-	-	-	-	
591	*Panchaetothrips indicus* Bagnall	+	+	+	+	+	+	+	+	-	-	-	+	+	+	
592	*Papilio demoleus* Linnaeus	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
593	*Papilio polytes* Lnneaus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
594	*Paracoccus marginatus* Williams & Granara de Willink	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
595	*Parallelia crameri* Moore	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
596	*Parasa lepida* Cramer	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
597	*Parlatoria blanchardi* Targioni	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
598	*Parnara guttata* Bremer & Grey	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
599	*Paromius exiguous* (Distant)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
600	*Pauropsylla depressa* Crawford	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
601	*Pauropsylla tuberculata* Crawford	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	
602	*Pectinophora gossypiella* (Saunders)	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
603	*Pelopidas mathias* (Fabiricius)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
604	*Pentodon bengalens* Arrow	+	+	+	+	+	+	+	+	-	-	-	+	+	+	
605	*Pericallia recini* Fabricius	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
606	*Perina nuda* (Fabricius)	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
607	*Phaneroptera gracilli* Burmeister	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
608	*Phedologeton diversus* (Jerdon)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
609	*Phenacaspis dilatata* Cockerell & Cooley	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
610	*Phenacoccus hirsutus* Green	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
611	*Phlogophora meticulosa* (Linnaeus)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
612	*Phthorimaea operculella* (Zeller)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	

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613	*Phycodes minor* Moore	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
614	*Phyllocnistis chrysophthalma* Meyrick	-	-	-	-	-	-	-	-	-	-	-	+	+	+	
615	*Phyllocnistis citrella* Stainton	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
616	*Phyllocnistis helicodes* Meyrick	+	+	+	-	-	-	-	-	-	-	-	+	+	+	
617	*Phyllocnistis tectonivora* Meyrick	-	-	-	-	-	-	-	-	-	-	-	-	+	+	
618	*Phyllophaga spp.*	-	+	+	+	+	+	+	+	+	+	-	-	-	-	
619	*Phyllotreta brassicae* Alam	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
620	*Phyllotreta chotanica* Duvivier	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
621	*Phyllotreta cruciferae* (Goeze)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
622	*Phyllotreta sp.*	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
623	*Phyllotreta striolata* Fabricius	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
624	*Phytomyza horticola* Goureau	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
625	*Pieris brassicae* (Linnaeus)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
626	*Pieris canidia* (Sparman)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	40
627	*Pieris hecabe* Linnaeus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
628	*Pinnaspis scrobicularum* Green	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
629	*Plannococcus citri* Risso	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
630	*Planococcus lilacinus* (Cockerell)	-	-	-	-	-	-	-	-	-	-	-	-	+	+	
631	*Planococcus* sp.	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
632	*Platypeplus aprobola* Meyrick	-	-	-	-	-	-	-	-	-	-	-	+	+	+	
633	*Platypus cupulatus* Chapuis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
634	*Platypus cupulifer* Wichmann	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
635	*Platypus furcatus* Blandford	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
636	*Platypus hybridus* Schedler	-	-	-	-	-	-	-	-	-	-	-	+	+	+	
637	*Platypus indicus* Strohmeyer	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
638	*Platypus piniperda* Beeson	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	
639	*Platypus solidus* Walker	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	

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640	*Platypus suffodiens* Sampson	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
641	*Platypus uncinatus* Blandford	-	-	-	-	-	-	-	+++	+++	-	-	+++	+++	+++	
642	*Plautia fimbriata* Fabricius	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
643	*Plodia interpunctella* (Hubner)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
644	*Plusia orichalcea* (Fabricius)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
645	*Plusia signata* (Fabricius)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
646	*Plutella xylostella* (Linnaeus)	+++	+	+	+	+	+	+	+	+	+	+	+++	+++	+++	
647	*Podontia 14-punctata* Linneaus	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
648	*Poecilocoris latus* Dallas	-	-	-	-	-	+	-	-	-	-	-	+	+	+	
649	*Pollyphagotarsonemus latus* Banks	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
650	*Polychrisia moneta* (Fabricius)	+++	+++	-	-	-	-	+++	+++	-	-	-	-	-	-	
651	*Polytela gloriosae*	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
652	*Prioneris sita* Linnaeus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
653	*Progonia partonalis* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	40
654	*Prospalta capensis* (Guenee)	+	+	+	+	+	+	+	+	+	+	-	-	-	-	
655	*Proutista moesta (*Westwood)	-	+	+	+	+	+	+	+	-	-	-	-	+	+	
656	*Psalis pennatula* Fabricius	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
657	*Pseudaletia unipuncta* (Haworth)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
658	*Pseudococcus adonidum* Linneaus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
659	*Pseudococcus comstocki* Kuwana	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
660	*Pseudococcus corymbatlus* Green	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
661	*Pseudococcus filamentosus* (Cockerell)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
662	*Pseudococcus nipae* Maskell	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
663	*Pseudococcus sp.*	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
664	*Pseudococcus virgatus* (Cockerell)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
665	*Pseudonapomyza asiatica* Spencer	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
666	*Psorosticha zizyphi* Stainton	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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667	*Psylla isitis* Buckton	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
668	*Pterolophia bambusae* Breuning	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
669	*Ptilinus binodulus* (Motschulsky)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
670	*Ptyelus nebulosus* Fabricius	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
671	*Pulvinaria azadirachatae* Green	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
672	*Pulvinaria maxima* Green	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
673	*Pyrilla perpusilla pusana* Distant	+	+	+	+	+	+	+	+	-	-	-	-	+	+	
674	*Pyrilla purpusilla* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
675	*Pyroderces dilatata* Meyrick	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
676	*Pyroderces certropecta* Meyrick	+	-	-	-	-	-	-	-	-	-	-	-	+	+	
677	*Rastrococcus iceryodes* Greeni	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
678	*Recilia dorsalis* (Motschulsky)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
679	*Rhacochlaena cassiae* Munro	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	
680	*Rhesala imparata* Walker	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	40
681	*Rhipiphorothrips cruentatus* Hood	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
682	*Rhizoglyphus* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
683	*Rhopalosiphum maidis* (Fitch)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
684	*Rhopalosiphum padi* (Linnaeus)	+++	+++	+++	+++	+++	+++	+++	+++	-	+++	-	-	-	-	
685	*Rhopalosiphum rufiabdominalis* (Sasaki)	+	+	+	+	+	+	+	+	-	+	-	-	-	-	
686	*Rhopalus macropictus* Distant	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
687	*Rhynchocoris humeralis* Thunberg	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
688	*Rhynchophorus ferrugineus* Olivier	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
689	*Rhyzopertha dominaca* (Fabricius)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
690	*Ricania zebra* (Distant)	-	+	+	+	+	+	+	+	-	-	-	-	+	+	
691	*Riptortus pedestris* Fabricius	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
692	*Riptorus fuscus* (Fabricius)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
693	*Sacharicoccus sachari* (Cockerell)	-	+	+	+	+	+	+	+	-	-	-	-	+	+	

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694	*Sagra carbunculus* Hope	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
695	*Sagrafe morata* (Drury)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
696	*Sahyadrassus malabaricus* (Moore)	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	
697	*Saissetia nigra* Neitner	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
698	*Saissetia oleae* Bernard	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
699	*Salurnis marginella* (Guérin-Méneville)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
700	*Sambus gmelinae* Thery	-	-	-	-	-	-	-	-	-	-	-	+	+	+	
701	*Schistoceros anobioides* Waterhouse	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
702	*Schizaphis minuta* (Fitch)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
703	*Schizotetranychus andropogoni* (Hirst)	-	+	+	+	+	+	+	+	-	+	-	-	+	+	
704	*Sciara rufithorax* Wulp	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
705	*Scirpophaga excerptalis* Walker	-	+++	+++	+++	+++	+++	+++	+++	-	+++	-	-	+++	+++	
706	*Scirpophaga incertulas* (Walker)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
707	*Scirtothrips dorsalis* Hood	+	+	+	+	+	+	+	+	+	+	+	+	+	+	40
708	*Scopula emissaria* (Walker)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
709	*Scutelleria nobilis* Linneaus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
710	*Selenothrips rubrocinctus* Giard	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
711	*Selepa celtis* Moore	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
712	*Sesamia inferens* (Walker)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
713	*Sinoxylon anale* Lesne	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
714	*Sinoxylon atratum* Lesne	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
715	*Sinoxylon crassum* Lesne	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
716	*Sinoxylon pygmaeum* Lesne	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
717	*Sinoxylon* sp.	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
718	*Siphocoryne indobrassicae* Das	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+	+	
719	*Sitophilus oryzae* (Linnaeus)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
720	*Sitophilus rugicollis* Casey	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	

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721	*Sitotroga cerealella* (Olivier)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
722	*Sogatella furcifera* (Horvath)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
723	*Solenopsis geminata* (Fabricius)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
724	*Somena scintnillans* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
725	*Sphenoptera perotetti* Guenee	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
726	*Spilarctia obliqua* (Walker)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
727	*Spilostethus pandurus* (Scopoli)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
728	*Spodoptera exigua* (Hübner)	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
729	*Spodoptera frugiperda* J.E. Smith	-	-	++	++	++	++	++	++	-	-	-	-	-	-	
730	*Spodoptera litura* (Fabricius)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
731	*Spodoptera mauritia acronyctoides* Guenee	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
732	*Spodoptera mauritia* Boisduval	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
733	*Stegobium paniceum* (Linnaeus)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
734	*Stenchaetothrips biformis* (Bagnal)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	40
735	*Sternocera sternocornis* Linneaus	-	-	+	+	+	-	-	-	-	-	-	+	+	+	
736	*Sternochaetus frigidus* (Fabricius)	+++	+++	-	-	-	-	-	-	-	-	+++	+++	+++	+++	
737	*Sternochaetus mangiferae* (Fabricius)	+	+	-	-	-	-	-	-	-	-	+	+	+	+	
738	*Stibaraopus tabulatus*	-	-	-	+	+	+	+	+	-	-	+	+	+	+	
739	*Stomopteryx nerteria* Meyrick	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
740	*Stomopteryx* spp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
741	*Streblote siva* Lefevre	+	+	-	-	-	-	-	-	-	-	+	+	+	+	
742	*Strepsicrates rhothia* Meyrick	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
743	*Striglina scitaria* Walker	-	-	-	-	-	-	-	-	-	-	-	-	+	+	
744	*Stromatium barbatum* Fabricius	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
745	*Suastus gremius* Fabricius	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
746	*Sylepta balteata* Fabricius	+	+	-	-	-	-	-	-	-	-	-	-	-	-	
747	*Sylepta crotonalis* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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748	*Sylepta derogata* (Fabricius)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
749	*Syllepta* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
750	*Taeniothrips longistylus Karny*	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
751	*Tanymecus hispidus* Marshall	-	+	+	+	+	+	+	+	-	+	-	-	+	+	
752	*Tanymecus indicus* Faust	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
753	*Tanymecus sciurus* Oliver	-	+	+	+	+	+	+	+	-	+	-	-	+	+	
754	*Tarache notabilis* (Walker)	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
755	*Teleclita strigata* Moore	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
756	*Tenymecus indicus* Faust	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
757	*Tessaratoma javanica* (Thunberg)	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
758	*Tetramorium guineense* (Fabricius)	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
759	*Tetraneura hirsuta* (Baker)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
760	*Tetraneura nigriabdominalis* (Sasaki)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
761	*Tetranychus bioculatus* (Wood-Mason)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	40
762	*Tetranychus oryzae* Hirst	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
763	*Tetranychus telarius Linneaus*	-	+	+	+	+	-	-	-	-	-	+	+	+	+	
764	*Tetranychus urticae* Koch	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
765	*Thaia oryzivora* Ghauri	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
766	*Thalassodes quadraria* Guenee	+	+	-	-	-	-	-	-	-	-	+	+	+	+	
767	*Thamnurgides bambusae Beeson*	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
768	*Thamnurgides cinnamomi* Eggers	-	-	-	-	-	-	-	-	-	-	-	+	+	+	
769	*Thamnurgides dipterocarpi* Beeson	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	
770	*Thamnurgides indicus* Eggers	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
771	*Thamnurgides litoralis* Beeson	-	-	-	-	-	-	-	+++	+++	-	-	-	-	-	
772	*Thamnurgides opacifrons* Beeson	-	-	-	-	-	-	-	+	+	-	-	-	-	-	
773	*Thamnurgides variabilis* Beeson	-	-	-	-	-	-	-	-	-	-	-	+	+	+	
774	*Thamnurgides vulgaris* Eggers	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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775	*Thrips flavidus* Bagnall	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
776	*Thrips flavus* Schrank	-	-	-	-	-	-	-	-	-	-	-	+	+	+	
777	*Thrips orientalis* Bagnall	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
778	*Thrips palmi* Karny	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
779	*Thrips simplex* (Morison)	++	++	++	++	++	++	++	++	-	-	-	-	-	-	
780	*Thripis tabaci* (Lindermann)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
781	*Thysanoplusia orichalcea* (Fabricius)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
782	*Tirathaba leucotephras* Meyrick	-	-	-	-	-	-	-	+	+	-	-	-	+	+	
783	*Toxoptera aurantii* (Boyer de Fonscolombe)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
784	*Toxoptera odinae* van der Goot	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
785	*Trachys bicolor* (Kerremans)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
786	*Trachys pacifica* Kerr	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
787	*Tribolium castaneum* (Herbst)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
788	*Trichoplusia ni* (Hubner)	++	++	++	++	++	++	++	++	++	++	++	++	++	++	40
789	*Tridactylus* sp.	-	-	-	-	-	-	-	-	-	-	-	-	+++	+++	
790	*Trioza fletcheri Crawford*	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
791	*Trioza jambolanae* Crawford	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
792	*Trogoderma granarium* (Everts)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
793	*Trypanophora semihyalina* Kollar,	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
794	*Tuta absoluta* (Meyrick)	-	-	-	+	+	+	-	-	-	-	-	-	-	-	
795	*Tyrophagus* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
796	*Udaspes folus* Cramer	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
797	*Urentius hystricellus* (Richter)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
798	*Urentius sentis* Distant	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
799	*Virachola isocrates* Fabricius	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
800	*Xanthochelus supercilosus* (Gyllenhal)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
801	*Xyleborus bicolor* Blandford	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	

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802	*Xyleborus cognatus* Blandford	-	-	-	-	-	-	-	+	+	-	-	-	-	-	
803	*Xyleborus discolor* Blandford	-	-	-	-	-	-	-	-	-	-	-	-	+	+	
804	*Xyleborus fallax* Eichhoff	-	-	-	-	-	-	-	-	-	-	-	+	+	+	
805	*Xyleborus fornicates* Eichhoff	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
806	*Xyleborus intectus* Beeson	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
807	*Xyleborus interjectus* Blandford	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
808	*Xyleborus laticollis* Blandford	-	-	-	-	-	-	-	+	+	-	-	-	-	-	
809	*Xyleborus mus* Eggers	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
810	*Xyleborus perforans* Wollaston	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
811	*Xyleborus pinicola* Eggers	-	-	-	-	-	-	-	-	-	-	-	+++	+++	+++	
812	*Xyleborus semiopacus* Eichhoff	-	-	-	-	-	-	-	+++	+++	-	-	+++	+++	+++	
813	*Xyleborus similis* Ferrari	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
814	*Xyleborus burmanicsus* Beeson	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
815	*Xyleborus discolor* Blandford	-	-	-	-	-	-	-	-	-	-	-	+	+	+	40
816	*Xyleborus gravidis* Blandford	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
817	*Xyleborus incurvus* Eggers	-	-	-	-	-	-	+	+	-	-	-	-	+	+	
818	*Xyleborus noxius* Sampson	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
819	*Xyleborus* sp.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
820	*Xyleborus testaceus* Walker	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
821	*Xylocopa aestuans* Linneaus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
822	*Xylocopa latipes* Drury	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
823	*Xylodectes ornatus* Lesne	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
824	*Xylosandrus compactus* Eichhoff	-	-	-	-	-	-	-	-	-	-	-	-	+	+	
825	*Xylosandrus discolor* Blandford	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
826	*Xylosandrus morigerus* Blandford	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
827	*Xylothrips flavipes* (Illiger)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
828	*Xylotrechus quadripes* (Chevrolat)	-	-	-	-	-	-	-	-	-	-	-	-	+	+	

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829	*Xylotrechus smei* Laporte & Gory	+	+	+	+	+	+	+	+	+	+	+	+	+	+	40
830	*Xystrocera globosa* (Olivier)	-	-	-	-	-	-	-	-	-	-	-	+	+	+	
831	*Zabrotes subfasciatus* (Boheman)		+	+	+	+	+	+	+	+	+					
832	*Zeuzera coffeae* Neitner	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

B. Disease Causing Pathogens

Sl. No.	Name of Pathogen	Dhaka	Mymensingh	Rajshahi	Bogra	Rangpur	Dinajpur	Jesshore	Khulna	Barisal	Faridpur	Comilla	Sylhet	Chittagong	Rangamati	Reference Table
1.	*Achlya prolifera*	+++	+++	+++	+++	+++	+++	+++	+++	++	++	++	++	++	++	40
2.	*Acremonium strictum*	+	++	+	+	+	+	+	+++	++	++	++	++	++	++	
3.	*Acremonium terricola*	++	+	+	+	+	-	+	+	-	+	+	++	++	+	
4.	*Albugo candida*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
5.	*Albugo occidentalis*	++	++	++	++	++	+	+++	++	++	++	+	+	+	++	
6.	*Alternaria alternata*	+++	+	++	++	++	+	++	++	++	++	++	+	++	++	
7.	*Alternaria brassicae*	++	++	++	++	++	+	++	+	+	+	++	++	++	++	
8.	*Alternaria brassicicola*	++	++	++	++	++	+	+++	++	++	++	++	++	++	+	
9.	*Alternaria capsici*	+	++	++	++	++	++	++	++	++	++	++	++	+	+	
10.	*Alternaria citri*	+++	+++	++	++	+	+	++	++	+	++	++	+++	++	++	
11.	*Alternaria dauci*	++	+	+	++	++	++	+++	++	+	++	++	+	++	+	
12.	*Alternaria dianthicola*	+	+	++	+	+	+	++	++	+	+	++	+	+	+	
13.	*Alternaria helianthi*	+++	++	++	++	++	++	+++	++	++	++	++	++	+	+	
14.	*Alternaria lini*	++	++	++	++	++	++	++	+	+	+	+	+	+	+	
15.	*Alternaria longissima*	++	+	++	++	++	+	++	++	++	++	++	+	+	-	

Sl. No.	Name of Pathogen	Dhaka	Mymensingh	Rajshahi	Bogra	Rangpur	Dinajpur	Jesshore	Khulna	Barisal	Faridpur	Comilla	Sylhet	Chittagong	Rangamati	Reference Table
16.	*Alternaria porri*	++	++	+++	+	++	++	++	++	++	+++	++	++	++	++	
17.	*Alternaria raphani*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
18.	*Alternaria saccharicola*	++	++	++	++	++	++	+++	++	++	++	++	++	++	-	
19.	*Alternaria sesami*	+++	++	++	++	++	++	++	++	++	+++	+	+	-	-	
20.	*Alternaria solani*	+++	++	++	++	++	++	+++	++	++	++	+++	++	++	++	
21.	*Alternaria tenuis*	++	++	++	++	++	+	+	++	++	++	++	+	+	+	
22.	*Alternaria triticina*	++	++	++	++	++	++	++	++	++	++	++	++	++	+	
23.	*Aphelenchoides avenae*	-	-	-	-	-	++	-	-	-	-	+++	++	-	-	
24.	*Aphelenchoides besseyi*	++	++	++	++	+	+	++	++	+	++	++	+	++	+	
25.	*Aphelenchoides fragariae*	++	++	++	++	++	++	++	++	++	+	++	+	++	-	
26.	*Aphelenchus avenae*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
27.	*Ascochyta bambusina*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
28.	Ascochyta oleracea	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
29.	Ascochyta pisi	++	++	+	++	+	+	+	+	++	++	++	++	-	-	40
30.	*Ascochyta rabiei*	++	++	++	++	++	++	++	++	++	++	++	++	++	-	
31.	*Ascochyta trifolii*	+++	++	++	+++	++	++	+++	++	+	+	++	+	+	+	
32.	*Ascochyta tritici*	+	+	+	++	++	++	++	++	++	++	++	++	++	-	
33.	*Aspergillus flavus*	+	+	+	+	+	+	+++	+	+	+	+	+	+	+	
34.	*Aspergillus fumigatus*	++	++	++	++	++	++	+++	+	+	+	+	+	+	+	
35.	Bean (Pea) leaf roll virus	++	++	++	++	++	++	++	+	++	++	++	+	++	-	
36.	Bean common mosaic virus	+++	++	++	++	++	++	++	++	++	++	++	++	++	++	
37.	Bean yellow mosaic virus	++	++	++	++	++	++	+	+	+	+	+	+	+	+	
38.	*Bipolaris maydis*	++	++	++	+	++	+	+	++	+	-	++	-	+	-	
39.	*Bipolaris oryzae*	++	++	+++	++	++	++	++	++	++	++	+++	++	++	++	
40.	*Bipolaris sorokiniana*	++	++	++	+	++	++	++	++	++	+	++	+	+	+	
41.	*Bipolaris turcicum*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
42.	*Botrytis cinerea*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	

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43.	Blackgram Yellow mosaic virus	++	++	+++	++	++	++	+++	++	++	+++	++	++	+++	++	
44.	*Blumeria graminis* f. sp. *tritici*	+	+	+	-	+	+	+	+	+	+	+	+	+	+	
45.	*Botrydlplodla theobromae*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
46.	*Botryobasidium salmonicolor*	++	-	++	-	++	-	-	-	-	++	-	-	+	-	
47.	*Botryodiplodia theobromae*	++	++	++	++	++	++	+++	++	++	++	++	++	++	+	
48.	*Botryosphaera ribis*	+	+	+	-	+	++	++	++	++	++	+	+	+	+	
49.	*Botryotinia fuckeliana*	++	++	++	++	++	++	++	++	++	++	+++	+	++	++	
50.	*Botrytis aclada*	+	+	+	+	+	++	++	++	++	++	++	++	++	++	
51.	*Botrytis allii*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
52.	*Botrytis cinerea*	++	++	++	++	++	++	++	+	+	+	++	++	++	++	
53.	*Botrytis elliptica*	++	++	++	++	++	++	++	++	+	++	++	+	++	++	
54.	Bottle gourd mosaic virus (BgMV)	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
55.	*Bunchy top virus*	++	+	++	+	++	++	++	+	+	+	+	+	++	+	
56.	*Burkholderia cepacia*	++	++	++	+	++	++	++	+++	++	+	+	+	++	+	40
57.	*Candidatus Liberibacter asiaticus*	-	+	+	+	+	-	-	-	-	-	-	++	++	-	
58.	*Capnodium citri*	+++	++	++	++	++	++	++	++	++	++	++	+++	++	+	
59.	*Capnodium mangiferum*	++	++	++	++	++	+	++	+	+	++	+	-	+	-	
60.	*Cephaleuros parasitica*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
61.	*Cephalosporium sacchari*	++	++	++	++	++	++	++	++	++	++	++	+	+	+	
62.	*Ceratocystis fimbriata*	-	-	-	-	-	-	-	-	-	-	-	++	++	++	
63.	*Ceratocystis paradoxa*	++	++	++	++	++	+	+	+	++	++	++	++	+	+	
64.	*Cercospora abelmoschi*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
65.	*Cercospora arachidicola*	+	++	++	++	++	++	++	++	++	++	+	+	+	-	
66.	*Cercospora batatae*	++	+++	++	++	++	++	++	++	++	++	+++	++	++	++	
67.	*Cercospora canescens*	++	++	++	++	++	++	++	++	++	+++	++	++	++	++	
68.	*Cercospora capsici*	++	++	++	++	++	++	++	+	+	++	++	+	+	+	
69.	*Cercospora corchori*	++	++	++	++	++	++	++	++	++	++	++	++	-	-	

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70.	*Cercospora cruenta*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
71.	*Cercospora mangiferae-indicae*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
72.	*Cercospora melongenae*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
73.	*Cercospora momordicae*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
74.	*Cercospora musae*	++	++	++	++	++	++	+	+	++	++	++	++	+	+	
75.	*Cercospora necotianae*	-	-	-	-	++	-	-	-	-	+	-	-	+	+	
76.	*Cercospora psidii*	++	++	++	++	++	++	+	++	++	++	++	+	++	+	
77.	*Cercospora subsessilis*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
78.	*Cercospora theae*	-	-	-	-	-	++	-	-	-	-	-	++	++	-	
79.	*Cercospora ziziphi*	++	++	+	++	++	++	++	++	++	++	++	+	++	+	
80.	*Chaetomella raphigera*	++	++	++	++	++	++	++	+++	++	++	++	++	++	++	
81.	*Chlamydomyces palmarum*	+++	+++	++	++	++	++	++	++	+++	++	+++	++	++	++	
82.	*Choanephora cucurbitarum*	++	++	++	++	+	+	++	++	++	++	++	+	+	+	
83.	Citrus Tristeza Virus	++	+	+	+	-	-	-	-	++	+	++	+++	++	+	40
84.	*Collectotrichum corchori*	++	++	++	++	++	++	+	+	++	++	++	++	-	-	
85.	*Colletotrichum camellia*	-	-	-	-	++	-	-	-	-	-	-	++	+	++	
86.	*Colletotrichum capsici*	++	++	+	++	++	++	++	++	++	++	++	++	++	++	
87.	*Colletotrichum catechu*	++	++	++	++	++	++	++	++	+++	++	+++	++	++	++	
88.	*Colletotrichum dematium*	++	++	++	++	++	++	++	++	++	++	++	++	++	+	
89.	*Colletotrichum gloeosporioides*	++	++	++	++	++	++	++	++	++	+	++	++	++	++	
90.	*Colletotrichum gossypii*	++	++	++	-	++	-	++	++	++	-	-	-	-	+	
91.	*Colletotrichum graminicola*	++	+	++	++	++	++	++	++	++	++	++	++	+	+	
92.	*Colletotrichum lindemuthianum*	+	+	+	+	++	++	-	-	-	-	-	+	+	+	
93.	*Colletotrichum tabacum*	-	-	-	-	++	-	-	-	-	+	-	-	-	-	
94.	*Coprinus micaceus*	-	-	-	-	-	-	-	-	-	-	-	-	++	-	
95.	*Coriolopsis telfarii*	-	-	-	-	-	-	-	-	-	-	-	-	++	-	
96.	Corn stunt virus (CSV)	+	-	+	++	++	++	++	-	-	-	++	-	-	+	

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97.	*Corticium invisum*	-	-	-	-	-	+	-	-	-	-	-	++	++	++	
98.	*Corticium salmonicolor*	++	++	++	++	++	+	++	++	++	++	++	++	++	++	
99.	*Corticium theae*	-	-	-	-	-	+	-	-	-	-	-	++	++	++	
100.	*Corynespora cassicola*	++	++	++	++	++	++	++	+	+	+	+	++	++	++	
101.	Cucumber mosaic virus (CMV)	++	++	++	++	++	++	+++	++	+	++	++	++	++	++	
102.	*Cunninghamella echinulata*	-	-	-	-	-	-	-	++	-	-	-	++	++	+	
103.	*Curvularia lunata*	++	++	++	++	++	++	++	++	++	++	++	++	++	+	
104.	*Cylindrocladium floridanum*	++	++	++	++	++	++	-	-	-	-	++	-	-	-	
105.	*Cylindrocladium scoparium*	++	++	++	++	++	++	-	-	-	-	++	-	-	-	
106.	*Daedalea ambigua*	-	-	-	-	-	-	-	-	-	-	-	-	++	-	
107.	*Daedalea flavida*	++	++	++	++	++	++	++	++	++	++	+	+	++	+	
108.	*Daedalea indica*	-	-	-	-	-	-	-	-	-	-	-	-	++	-	
109.	*Dendrophthoe pentandra*	++	++	++	++	+	++	++	++	+	++	++	++	+	+	
110.	*Diaporthe phaseolorum*	+	-	-	-	-	-	-	-	-	-	-	-	-	++	40
111.	*Diplodia calami*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
112.	*Dimeriella sacchari*	++	++	++	++	++	++	++	+	+	++	++	++	+	+	
113.	*Ditylenchus angustus*	-	-	-	-	-	-	-	-	++	-	-	-	-	-	
114.	*Ditylenchus destructor*	++	++	++	++	++	+	++	++	++	++	++	+	++	+	
115.	Ditylenchus dipsaci	+++	+++	++	++	++	++	+++	++	++	+	+++	+	++	+	
116.	*Ditylenchus melongena*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
117.	*Drechslera victoriae*	++	++	++	++	++	++	++	++	++	++	++	++	++	-	
118.	*Entyloma oryzae*	++	++	++	++	++	++	+	++	++	++	++	+	++	+	
119.	*Erwinia carotovora* subsp. *carotovora*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
120.	*Erwinia chrysanthemi*	++	++	++	++	++	++	++	++	++	++	++	++	++	-	
121.	*Erysiphe cichoracearum*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
122.	*Erysiphe polygoni*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
123.	*Exosporium palmivorum*	++	+	+	+	+	+	+	+	+	+	+	+	+	+	

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124.	*Flammula penetrans*	++	++	+	++	+	+	+	++	+	+	+++	+	+	+	
125.	*Fomes badius*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
126.	*Fomes conchatus*	-	-	-	-	-	-	-	++	-	-	-	-	-	-	
127.	*Fomes fastuosus*	+	+	++	+	+	+	+	+++	+	+	++	++	++	++	
128.	*Fomes senex*	+	+	+	++	++	++	++	+	++	++	++	++	+	+	
129.	*Fusarium moiliforme*	++	++	++	++	++	+++	++	++	+	+	++	+	+	+	
130.	*Fusarium oxysporum*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
131.	*Fusarium oxysporum* f. *cubens*	++	+	++	++	++	+	++	++	++	++	++	++	+	+	
132.	*Fusarium oxysporum f. sp. melongenae*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
133.	*Fusarium oxysporum* f. sp. *psidii*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
134.	*Fusarium oxysporum f.sp. ciceri*	+	+	++	++	++	++	+	++	++	++	-	-	++	-	
135.	*Fusarium oxysporum f.sp. lentis*	++	++	++	++	++	++	+	+	++	++	++	+	+	+	
136.	*Fusarium oxysporum f.sp. lycopersici*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
137.	*Fusarium oxysporum* f.sp. *phaseoli*	++	+	+	++	++	++	++	++	++	++	++	+	++	+	40
138.	*Fusarium roseum*	+	++	++	++	++	++	++	++	++	++	++	+	+	+	
139.	*Fusarium solani*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
140.	*Fusarium solani f.sp. dalbergiae*	-	++	-	+	+	+	+	+	+	-	-	++	++	++	
141.	*Ganoderma lucidum*	+	+	+	+	+	+	+	+	+	+	+	++	++	++	
142.	*Gloeosporium sydae*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
143.	*Glomerella piperata*	+	+	++	+	++	++	++	+	+	+	++	++	++	++	
144.	*Graphiola applanata*	+++	++	++	++	++	++	++	++	++	++	++	+	++	+	
145.	*Guepinia spathularia*	++	++	++	+++	++	+	++	+	++	++	+++	+	++	+	
146.	*Haplobasidium lelebae*	++	+	++	++	++	++	++	++	+	+	++	++	+	-	
147.	*Helicobasidium compactum*	-	-	-	-	-	++	-	-	-	-	-	+	+	+	
148.	*Helicotylenchus dihystera*	++	++	++	++	+	+	+	++	++	+	++	+	+	+	
149.	*Helminthosporium sacchari*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
150.	*Hoplolaimus indicus*	++	+	+	++	++	+	++	++	+	+	+	+	++	++	

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151.	*Hymenochaete noxia*	-	-	-	-	-	-	-	-	-	-	-	++	++	++	
152.	*Hymenochaete noxia*	-	-	-	-	-	-	-	-	-	-	-	++	++	++	
153.	*Irpex flavus*	++	++	+	+	+	+	++	++	++	++	++	++	++	++	
154.	*Lasiodiplodia theobromae*	++	++	+	+	+	+	+	++	++	++	++	++	++	++	
155.	Leek yellow stripe poty virus (LYSP)	+	++	++	+	++	++	++	+	+	+	+	+	+	+	
156.	*Leptosphaeria sacchari*	+	++	++	++	++	++	+	+	+	+	++	++	++	+	
157.	*Leptosphaeria taiwanensis*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
158.	*Longidorus maximus*	+	++	+	+	+	+	+	++	+	+	+	++	++	++	
159.	*Macrophoma musue*	++	++	++	++	+	+	++	++	++	++	++	++	++	+	
160.	*Macrophomina mangiferae*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
161.	*Macrophomina phaseolina*	+	++	++	++	++	++	++	++	++	+	++	+	+	+	
162.	*Magnaporthe oryzae tritici*	-	-	-	-	-	-	++	++	++	+	-	-	-	-	
163.	*Melanomma citricola*	++	++	+	+	+	+	+	++	++	+	++	+	+++	++	
164.	*Meliola citri*	++	-	-	-	++	-	+	-	++	++	++	++	++	++	40
165.	*Meloidogyne graminicola*	++	++	++	++	++	++	+++	++	+	+	+	+	+	+	
166.	*Meloidogyne incognita*	++	++	++	-	++	++	++	++	++	++	++	++	++	+	
167.	*Meloidogyne javanica*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
168.	*Oidium caricae*	++	+	++	+	++	++	+	+	++	+	+	+	+	+	
169.	*Oidium piperis*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
170.	Okra yellow vein mosaic virus (OYVMV)	+	+	++	++	++	+	++	+	+	+++	++	++	++	+	
171.	*Orobanche* sp.	+	++	++	++	++	++	++	++	++	++	++	++	+	+	
172.	Papaya ringspot virus (PRSV)	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
173.	Papaya ringspot virus (PRSV-W)	++	++	++	++	++	+	++	++	+	+	++	+	++	+	
174.	*Peronospora brassicae*	++	++	++	+	++	++	++	++	++	+	+	+	+	+	
175.	*Peronospora destructor*	++	++	++	+	+	++	++	++	++	++	++	+	+	+	
176.	*Peronospora manshurica*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
177.	*Peronospora viciae*	-	+	++	++	-	-	++	++	++	++	-	-	-	-	

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178.	*Peronossclerospora sorghi*	+	++	++	++	++	++	++	++	++	++	++	+	+	+	
179.	*Pestaliopsis palmarum*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
180.	*Pestalotia palmarum*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
181.	*Pestalotia pauciseta*	++	++	++	++	++	++	+	+	+	+	++	+	++	++	
182.	*Pestalotia psidi*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
183.	*Pestalotiopsis mangiferae*	+	+	++	++	++	++	+	+	++	++	++	++	+	+	
184.	*Pestalotiopsis palmarum*	++	++	++	++	++	++	++	+++	+++	++	++	++	++	+	
185.	*Pestalotiopsis psidii*	+	+	+	++	++	++	++	+	+	+	++	+	+	+	
186.	*Pestalozzia mangiferae*	++	++	++	++	++	++	++	++	+	+	++	++	++	+	
187.	*Pestalozzia theae*	-	-	-	-	-	++	-	-	-	-	-	++	++	+	
188.	*Phaeocytostroma sacchari*	++	++	+	++	+	+	+++	++	+	+	+++	+	++	+	
189.	*Phakopsora pachyrhizi*	+	+	+	-	+	+	++	++	++	++	++	+	+	+	
190.	*Phakospora gossypii*	++	++	++	-	++	++	++	-	-	-	-	-	+	+	
191.	*Phialophora bubakii*	-	-	-	-	-	-	-	+	-	-	-	-	-	-	40
192.	*Phialophora parasitica*	-	-	-	-	-	-	-	+	-	-	-	-	-	-	
193.	*Phialophora richardsiae*	++	+	++	++	++	++	++	++	++	++	++	++	++	++	
194.	*Phoma beveillei*	+	++	++	+	++	++	++	++	++	++	++	++	++	++	
195.	*Phoma lingam*	+	+	+	+	++	++	+	+	++	++	++	+	+	-	
196.	*Phoma medicaginis*	++	-	++	++	++	++	++	++	+	++	++	+	+	+	
197.	*Phoma sorghina*	++	++	++	++	++	++	++	+	+	++	++	++	+	+	
198.	*Phomopsis aquillariae*	-	-	-	-	-	-	-	++	-	-	-	++	++	++	
199.	*Phomopsis atrocarpi*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
200.	*Phomopsis capsici*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
201.	*Phomopsis citri*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
202.	*Phomopsis heavae*	-	-	-	-	-	-	-	-	-	-	-	++	++	++	
203.	*Phomopsis heteronema*	+++	++	+++	++	++	++	+++	++	++	++	++	++	++	++	
204.	*Phomopsis psidii*	++	++	++	++	++	++	++	++	++	++	++	++	+	+	

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205.	*Phomopsis sojae*	-	-	++	-	++	++	-	-	-	-	++	-	++	-	40
206.	*Phomopsis theae*	-	-	-	-	-	++	-	-	-	-	-	++	++	++	
207.	*Phomopsis vexans*	++	++	++	++	++	++	+	++	+	++	++	++	+	+	
208.	*Phragmidium mucronatum*	++	-	-	++	+	++	++	-	++	++	++	-	+	+	
209.	*Phylachora bambusae*	++	++	++	++	++	++	++	++	++	++	++	++	+++	+++	
210.	*Phyllachora dalbergiae*	++	++	-	-	++	-	-	-	-	-	-	++	++	++	
211.	*Phyllosticta caricacola*	++	++	+	+	+	+	+	++	++	+	++	+	+++	++	
212.	*Phyllosticta hortorum*	++	++	++	++	++	++	++	+	++	++	++	++	++	++	
213.	*Phyllostictina arecae*	++	++	++	++	++	++	++	++	++	++	++	++	+++	+++	
214.	*Phyllostictina artocarpi*	+++	++	++	++	++	++	++	++	++	++	++	++	+++	+++	
215.	*Physalospora sydae*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
216.	*Physoderma zea-maydis*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
217.	*Phythiacystis citrophthora*	++	++	+	+	+	+	++	++	++	+	++	++	++	++	
218.	*Phytophthora ansmeadii*	-	-	-	-	-	-	-	-	-	-	-	++	++	++	
219.	*Phytophthora arecae*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
220.	*Phytophthora citrophthora*	++	++	+	+	++	++	+	++	++	+	++	+	+++	++	
221.	*Phytophthora infestans*	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	++	++	+	+	
222.	*Phytophthora nicotianae var. nicotianae*	++	++	++	++	++	++	++	++	++	++	++	+	+	+	
223.	*Phytophthora nicotiane*	++	++	++	++	++	++	++	++	++	++	++	+	++	+	
224.	*Phytophthora palmivora*	++	++	++	++	++	++	++	++	++	++	+	+	+	+	
225.	*Phytophthora parasitica*	+	++	++	++	++	++	++	++	++	+	+	+	+	+	
226.	*Phytophthora parasitica* var. *piperina*	++	++	++	++	++	++	++	++	++	+	++	++	++	+	
227.	*Pleurotus ostreatus*	-	-	-	-	-	-	-	-	-	-	-	-	+	+	
228.	*Podosphaera xanthii*	++	+++	+	+	+	+	++	++	+	+	+	++	+++	++	
229.	*Polyporus gilvus*	++	++	+	-	++	++	-	-	-	-	++	-	-	-	
230.	*Polyporu ostreiformis*	++	++	++	++	++	++	++	++	++	++	++	-	-	+	
231.	*Polyporus shoreae*	++	++	++	-	++	++	-	-	-	-	++	-	-	-	

Sl. No.	Name of Pathogen	Dhaka	Mymensingh	Rajshahi	Bogra	Rangpur	Dinajpur	Jesshore	Khulna	Barisal	Faridpur	Comilla	Sylhet	Chittagong	Rangamati	Reference Table
232.	*Polyporus zonalis*	++	++	++	++	++	++	+	+	++	++	++	+	+	+	
233.	*Polystictus affinis*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
234.	*Polystictus sanguineus*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
235.	*Poria rhizomorpha*	+++	+++	++	++	++	+	+	+	++	+	+++	-	+++	+	
236.	Potato Acuba Mosaic Virus (PAMV)	++	+	++	++	++	++	++	++	++	++	++	-	++	-	
237.	Potato leaf roll virus (PLRV)	++	++	++	++	++	+	++	++	++	++	++	-	++	-	
238.	Potato virus A (PVA)	++	++	++	++	++	++	++	++	++	++	+	-	+	-	
239.	Potato virus S	++	++	++	++	++	++	++	++	++	++	++	-	++	-	
240.	Potato virus X (PVX)	+	+	+	+	++	++	++	++	++	++	+	-	+	-	
241.	Potato virus Y	+++	++	++	++	++	+	+	+	+	+	+++	+	++	++	
242.	*Pratylenchus coffeae*	+++	++	+++	+++	+++	+++	++	++	++	++	+++	++	+++	++	
243.	*Pratylenchus pratensis*	++	++	++	+	++	++	++	++	++	++	+	+	+	-	
244.	*Protomyces macrosporus*	++	++	++	+	++	++	++	++	++	++	+	+	+	+	
245.	*Psedoperonospora cubensis*	+	+	++	+	+	+	+	+	+	+	-	-	++	-	40
246.	*Pseudocercospora abelmoschi*	+	+	++	++	++	++	++	++	-	+	-	-	-	+	
247.	*Pseudocercosporella herpotrichoides*	++	++	++	++	+	+	++	++	+	++	++	++	+	+	
248.	*Pseudomonas fluorescens*	++	++	++	++	++	++	++	+	++	++	++	+	+	+	
249.	*Pseudomonas glycinea*	-	-	++	-	++	-	-	-	-	-	++	-	-	-	
250.	*Pseudomonas lachrymans*	++	++	+	++	+	++	++	++	++	+	++	+	++	++	
251.	*Pseudomonas rubrilineans*	++	++	++	++	++	++	++	+	+	+	++	+	++	++	
252.	*Pseudomonas syringae*	-	-	-	-	-	-	-	+++	-	-	-	-	-	-	
253.	*Puccinia allii*	-	-	-	-	-	-	-	-	-	-	-	++	++	++	
254.	*Puccinia arachidis*	++	++	++	++	++	++	++	-	++	++	++	++	++	++	
255.	*Puccinia graminis* f. sp. *tritici*	++	++	++	++	++	+	++	++	++	++	++	+	+	+	
256.	*Puccinia polysora*	++	++	++	++	++	+	+	++	++	++	++	+	+	+	
257.	*Puccinia porri*	++	++	++	++	++	+	+++	++	++	++	++	++	++	+	
258.	*Puccinia recondita* f. sp. *tritici*	+	+	++	-	++	+	+	-	-	-	++	+	-	-	

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259.	*Pyrenochaeta oryzae*	++	++	++	+	++	+	++	+	+	++	++	+	++	++	
260.	*Pyrenochaeta terrestris*	+++	++	+++	+++	++	++	+++	++	++	++	+++	++	++	+	
261.	*Pyrenophora tritici-repentis*	++	++	++	++	++	++	++	++	++	++	++	+	++	++	
262.	*Pyricularia grisea*	++	++	++	++	++	++	+	+	+	++	++	+	+	+	
263.	*Pythium aphanidermatum*	++	++	++	+	+	+	++	++	++	+	+	-	+	-	
264.	*Radopholus similis*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
265.	*Ralstonia solanacearum*	++	+++	++	++	+	+++	++	++	++	+	++	+	+	+	
266.	*Ramularia areola*	+	++	++	+	+	+	++	++	+	+	-	-	+	-	
267.	*Rhizoctonia oryzae*	++	++	++	++	++	++	++	-	-	++	+	-	-	+	
268.	*Rhizoctonia oryzae-sativa*	++	++	++	++	++	++	+	++	++	++	++	++	++	+	
269.	*Rhizoctonia solani*	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
270.	*Rhizopus artocarpi*	+	+	+	-	+	+	+	++	++	++	+	+	+	+	
271.	*Rhizopus nigiricans*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
272.	*Rhizopus stolonifer*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	40
273.	Rice tungro virus	-	-	++	-	++		++	-	-	-	-	++	-	-	
274.	*Sarocladium oryzae*	+	+	++	++	++	++	++	++	++	++	+	+	+	+	
275.	*Schizophyllum alneum*	++	++	++	++	++	+	+	++	++	++	++	+	++	+	
276.	*Schizophyllum commune*	++	++	++	++	++	+	+	++	++	+	++	++	+	+	
277.	*Sclerophthora macrospora*	-	-	-	-	-	-	-	-	-	-	-	-	-	++	
278.	*Sclerospora graminicola*	-	-	-	-	-	-	-	-	-	-	-	-	-	++	
279.	*Sclerospora philippeninsis*	++	++	++	++	++	++	+	++	++	+	++	+	++	+	
280.	*Sclerotinia sclerotiorum*	++	++	++	+	++	++	++	++	++	++	++	+	+	+	
281.	*Sclerotium cepivorum*	++	++	++	+	++	++	+	++	+	++	++	+	++	+	
282.	*Sclerotium rolfsii*	++	++	++	++	++	++	+	++	+	++	++	+	++	++	
283.	*Scurrula gracilifolia*	-	+	-	-	-	-	-	+++	-	-	-	++	+++	++	
284.	*Scurrula parasitica*	-	+	-	-	-	-	-	+++	-	-	-	++	+++	++	
285.	*Scurrula pulverulenta*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	

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286.	*Septoria glycina*	-	-	++	-	++	++	-	-	-	-	++	-	++	-	40
287.	Soybean mosaic virus	-	-	++	-	++	++	-	-	-	-	++	-	++	-	
288.	*Sphaceloma fawcettii*	+	++	++	++	++	+	+	+	++	++	++	+	+	+	
289.	*Sphaerostilbe repens*	-	-	-	-	-	++	-	-	-	-	-	++	++	++	
290.	*Spongospora subterranea f.sp. subterranea*	++	++	++	++	++	++	++	++	++	++	++	++	++	-	
291.	*Stachybotrys bisbi*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
292.	*Stagnospora arecae*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
293.	*Stagonospora sacchari*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
294.	*Starbaeckiella mangifera*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
295.	*Stemphylium botryosum*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
296.	*Stemphylium solani*	++	++	++	++	++	+	++	+	++	++	++	++	+	+	
297.	Stemphylium vesicari	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
298.	*Stemphylium vesicarium*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
299.	*Striga densiflora*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
300.	Sugarcane mosaic virus (SCMV)	++	++	++	++	++	++	+	++	++	++	+	+	++	++	
301.	Sweet potato chlorotic fleck virus (SPCFV)	++	++	++	++	-	++	+	++	++	++	+	+	++	++	
302.	Sweet potato feathery mottle virus (SPFMV)	++	++	++	++	++	-	+	++	++	++	+	+	++	+	
303.	Sweet potato latent virus (SPLV)	++	++	++	++	++	++	-	++	++	++	+	+	++	+	
304.	Sweet potato leaf curl virus (SPLCV)	++	++	++	++	++	++	-	++	++	++	+	+	++	+	
305.	*Tametes cingulata*	++	+	+	+	+	+	++	+++	+++	++	++	+++	+++	+++	
306.	*Tametes devexa*	++	++	++	++	++	++	++	++	++	++	++	++	+++	++	
307.	*Thanatephorus cucumeris*	++	++	++	++	++	+++	++	++	++	++	++	+++	+++	++	
308.	*Thanatephorus sasakii*	+++	++	+++	++	+++	++	++	++	++	++	++	++	++	+	
309.	*Thelephora palmata*	++	++	++	++	++	+++	++	++	++	++	++	+++	+++	++	
310.	*Thielaviopsis paradoxa*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	

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311.	*Tilletia barclayana*	++	++	++	++	++	++	++	++	+	+	+	+	+	+	
312.	Tobacco leaf curl virus	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
313.	Tobacco mosaic virus	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
314.	Tomato leaf curl New Delhi virus	++	++	+++	++	++	++	++	++	++	++	++	++	++	++	
315.	Tomato mosaic virus	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
316.	Tomato purple vein virus	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
317.	Tomato spotted wilt virus	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
318.	Tomato yellow leaf curl virus	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
319.	*Trametes corrugata*	-	++	-	-	-	-	-	-	-	-	++	++	++	++	
320.	*Trametes cubensis*	++	++	++	-	++	++	-	-	-	-	++	-	++	-	
321.	*Trametes devexa*	-	-	-	-	-	-	-	-	-	-	-	-	++	-	
322.	*Trametes lacinea*	-	-	-	-	-	-	-	-	-	-	-	-	++	-	
323.	*Trametes meyani*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
324.	*Trametes persoonii*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	40
325.	*Tremella fuciformis*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
326.	*Trichoconis padwickii*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
327.	*Trichoderma viride*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
328.	*Trichodorus christei*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
329.	*Tylenchorhynchus clatony*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
330.	*Tylenchus semipenetrans*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
331.	*Uredo tectonae*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
332.	*Urocystis cepulae*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
333.	*Uromyces appendiculatus*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
334.	*Uromyces caryophyllium*	++	++	++	++	++	++	+	+	+	++	++	++	++	++	
335.	*Uromyces ciceris-arietini*	++	++	++	++	++	++	++	++	++	+	+	+	+	+	
336.	*Uromyces echinulatus*	+	+	+	+	++	++	++	++	++	++	+	+	+	+	
337.	*Uromyces fabae*	++	-	-	-	-	-	-	-	-	-	-	++	++	++	

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338.	*Ustilaginoidea virens*	++	+	++	++	-	-	-	++	++	++	++	++	++	++	
339.	*Ustilago tritici*	++	++	++	++	++	++	++	++	++	++	+	+	+	+	
340.	*Ustulina zonata*	++	+	++	+	+++	+	++	+	-	+	-	-	+	+	
341.	*Virus/Mycoplasma*	++	++	++	++	++	++	++	++	++	++	++	+	+	+	
342.	*Xanthomonas albilineans*	++	++	+	++	++	++	++	++	++	+	++	+	+++	++	
343.	*Xanthomonas axonopoides* pv. *citri*	++	++	++	++	++	++	++	-	-	-	++	-	-	++	
344.	*Xanthomonas oryzae pv oryzae*	++	++	++	++	+	+	+	+++	++	+	+++	+	++	+	40
345.	*Xanthomonas oryzae pv oryzicola*	+	+	++	+	+	+	+	++	+	+	+	+	+	-	
346.	Yellow mosain virus	-	-	-	-	-	++	-	-	-	-	-	+++	++	++	
347.	Yellow Vein clearing moaic virus (OkYVCMV)	++	++	++	++	++	++	++	++	++	++	++	+	+	+	
348.	*Zucchini yellow mosaic virus*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
349.	*Zygotylenchus gueverai*	+	+	++	++	++	++	++	++	++	++	++	++	++	++	

C. Weeds Species

Sl. No.	Scientific name of Pest	Dhaka	Mymensingh	Rajshahi	Bogra	Rangpur	Dinaspur	Jessore	Khulna	Barisal	Faridpur	Comilla	Sylhet	Chittagong	Rangamati	Reference Table
1.	*Abutilion indica*	-	+++	-	-	+++	+++	-	+++	+++	+++	+++	+++	-	+++	
2.	*Adinostemma lavenia* (Linn.) O. Kunze.	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
3.	*Aeschynomene aspera*	+++	+	+++	+++	+++	+++	+++	+-	+++	+++	+++	+++	+++	+++	40
4.	*Agaratum conyzoldes*	+++	+++	+++	+++	+++	+++	+++	+++	-	+++	+++	+++	+++		
5.	*Agrenone maxicana*	++	+	++	++	++	+	+	++	++	++	+	++	++	++	
6.	*Alternanthera philoxeroides*	+++	++	-	++	++	++	++	-	++	++	++	-	++	++	

Sl. No.	Scientific name of Pest	Dhaka	Mymensingh	Rajshahi	Bogra	Rangpur	Dinaspur	Jessore	Khulna	Barisal	Faridpur	Comilla	Sylhet	Chittagong	Rangamati	Reference Table
7.	*Alternanthera sessilis*	+++	+++	++	++	++	+	++	+++	+++	++	+	+++	++	+	40
8.	*Amaranthus acanthochiton* Sauer.	+++	-	+++	+++	+++	+++	+++	-	+++	+++	+++	+++	+++	+++	
9.	*Amaranthus blitoides*	++	++	++	++	++	++	++	++	-	++	++	++	++	+	
10.	*Amaranthusspinosus.* L.	+++	++	+	+++	+++	+++	+++	++	+++	+++	+++	++	+++	+++	
11.	*Amaranthusviridis*L	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
12.	*Anagalisarvensis*	++	+	++	++	++	++	++	+	++	++	++	++	++	+	
13.	*Azollapinnata* R.	++	++	+	+	++	+	+	++	++	++	++	++	+	+	
14.	*Borreria hispida*	+++	-	+++	+++	+++	+++	+++	-	+++	+++	+++	+++	+++	+++	
15.	*Borreria laevis* (Lam) Griseb.	+	+	+	+	+	+	+	+	-	+	+	+	+		
16.	*Blumea lacera* (Burn.f.) DC	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
17.	Blumea mollis (D. Don) E.D. Merr.	++	++	-	-	++	-	-	++	++	++	++	++	-	++	
18.	Brassica kaber	++	++	++	++	-	++	++	++	++	++	-	++	++	++	
19.	*Cardaria draba*	+++	-	-	+++	+++	+++	+++	-	+++	+++	+++	-	+++	+++	
20.	*Cassia tora*	-	+++		+++	+++	+++		+++	+++	+++	+++	+++	-	-	
21.	*Celosia argentea* L.	++	++	++	++	-	++	++	++	++	++	-	++	++	++	
22.	*Cephalandra indica*		++	++	++	++		++	++		++	++	++			
23.	*Ceratophyllum dumersum* L.	+++	+++	-	-	++	-	-	+++	+++	+++	+++	+++	-	++	
24.	*Ceratopteris thalictroides*	++	++	++		-	++	++	++	++	++	-	++	++	++	
25.	*Commelina bengalensis* L.	+++	+++	-	-	+++	-	-	+++	+++	+++	+++	+++	-	++	
26.	*Commelina diffusa*	+++	++	+++	+++	+++	+++	+++	+-	+++	+++	++	+++	+++	++	
27.	*Convolvulus arvensis*	+++	+++	+++	+++	+++	+	+++	+++	+++	+++	+++	+++	+++	+	
28.	*Chamomilla recutita* (L.) Rauschert	+	-	+	+	+	+	+	-	+	+	+	+	+	+	
29.	*Chenopodium album* L.	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
30.	*Chrysopogoa aciculetus*	++	++	++	++	++	++	++	++	++	++	++	++	++		
31.	*Chrysopogoa aciculetus*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
32.	*Cirsium arvense*	++	++	-	-	++	-	-	++	++	++	++	++	-	++	

Sl. No.	Scientific name of Pest	Dhaka	Mymensingh	Rajshahi	Bogra	Rangpur	Dinaspur	Jessore	Khulna	Barisal	Faridpur	Comilla	Sylhet	Chittagong	Rangamati	Reference Table
33.	*Convolvulus arvensis*	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	40
34.	*Crassocephalum crepidioides*	++	-	-	++	++	++	++	-	++	++	++	-	-	++	
35.	*Crotolaria striata*	+	+	+	+	+	+	+	+	-	+	+	+	+	-	
36.	*Croton sparsriflora*	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
37.	Crysopogonacciculatus	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
38.	*Cyrtococcum patens*	-	+++	-	+++	+++	+++	+++	+++	+++	-	+++	+++	+++	-	
39.	*Curcumis melo*	+	+	+	-	+	+	+	+	+	+	+	+	+	+	
40.	*Cuscuta reflexa*	+	-	-	+	+	+	+	-	+	+	+	-	+	+	
41.	*Cyanotis axillaris* R & S	-	+++		+++	+++	+++		+++	+++	+++	+++	+++	-	-	
42.	*Cynodon dactylon* Pers.	+++	+++	-	-	+++	-	-	+++	+++	+++	+++	+++	-	++	
43.	*Cyperus deformis* L.	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
44.	*Cyperus esculentus* L.	++	-	-	++	++	++	++	-	++	++	++	-	++	++	
45.	*Cyperus iria* L.	+++	+++	+++	+++	+++	+++	+++	+++	-	+++	+++	+++	+++	-	
46.	*Cyperus kyllinga*	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
47.	*Cyperus nemoralis C*herm.	+++	+++	+++	+++	-	+++	+++	+++	+++	+++	-	+++	+++	+++	
48.	*Cyperus rotandus* L.	++	+++	-	+++	+++	-	+++	+++	+++	++	+++	+++	+++	+	
49.	*Cyper sanguinolentus* L.	+++	++	-	+++	+++	+++	+++	++	+++	+++	+++	-	+++	+++	
50.	*Cyperus strigosus*	-	++		++	++	++		++	++	++	++	++	-	-	
51.	*Cyperus tenuspica*	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
52.	*Dactyloctenium aegyptium*	++	-	-	++	++	++	++	-	++	++	++	-	++	++	
53.	*Dendrophthae falcate*	+	+	+	+	+	+	+	+	-	+	+	+	+	-	
54.	*Desmodium trifolium*	+++	+++	-	-	-	-	+++	+++	+++	+++	+++	+++	--	-	
55.	*Digitaria ciliaris* (Retz.) Koeler	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
56.	*Digiteria carinatus*	+++	-	-	+++	+++	+++	+++	-	+++	+++	+++	-	+++	+++	
57.	*Digiteria ischaemum* Schreb.	++	++	++	++	+	++	++	++	++	++	++	++	++	++	
58.	*Digiteria sanguinalis* (L.) Scop.	+++	++	+	+++	+++	+++	+++	++	+++	+++	+++	+	+++	+++	

Sl. No.	Scientific name of Pest	Dhaka	Mymensingh	Rajshahi	Bogra	Rangpur	Dinaspur	Jessore	Khulna	Barisal	Faridpur	Comilla	Sylhet	Chittagong	Rangamati	Reference Table
59.	*Digiteria. scalarum*	+++	+++	+++	-	-	-	+++	+++	+++	+++	+++	+++	--	-	40
60.	*Dryopteris filix-mas*	+++	+++	+++	-	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
61.	*Dutura stramonium*	++	-	-	++	++	++	++	-	++	++	++	-	++	++	
62.	*Echinochloa colonum* (L) Link.	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
63.	*Echinochloa crus-galli* (L.) P. Beauv.	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
64.	*Eclipta alba* (L.)	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
65.	*Eclipta prostrata*	+++	-	-	+++	+++	+++	+++	-	+++	+++	+++	-	+++	+++	
66.	*Eichhornia crassipes*	++	++	-	++	++	-	++	++	++	++	++	++	++	+	
67.	*Eleocharis atropurpurea* Kunth.	+++	+++	-	++	++	-	+++	+++	+++	+++	+++	+++	++	++	
68.	*Elusine indica* L.	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
69.	*Emilia sonchifolia*	+++	-	+++	+++	+++	+++	+++	-	+++	+++	+++	-	+++	+++	
70.	*Enhydra fluctuans* Lour.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
71.	*Euphorbia hirta*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
72.	*Euphorbia microphilla*	+	-	-	+	+	+	+	-	+	+	+	-	+	+	
73.	*Euphorbia parviflora*	+++	+++	+++	+++	+++	+++	+++	+++	+	+++	+++	+++	+++	+	
74.	*Fimbristylis miliaceae* (L.) Vahl.	+++	+	+	+++	+++	+++	+++	+	+++	+++	+++	+	+++	+++	
75.	*Fimbristylis diphylla* (Retz.) Vahl.	+++	+++	++	+++	+++	++	++	+++	+++	+++	+	+++	+++	+	
76.	*Gnaphalium affine* D. Don	+++	++	+	+++	+++	+++	+++	++	+++	+++	+++	+	+++	+++	
77.	*Hedyotis brachipoda*	+++	+++	++	+++	+++	+	++	+++	+++	+++	+	+++	+++	++	
78.	*Hedyotis corymbose* (L.) Lam.	++-	+++	+	+++	+++	+++	+	+++	+++	+++	+++	+++	+++	+	
79.	*Heliotropium indicum* L.	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
80.	*Hydrocotyl asiatica*	+	-	-	+	+	+	+	-	+	+	+	-	+	+	
81.	*Hydrolia zeylanica*	++	++	++	++	++	++	++	++	-	++	++	++	++	-	
82.	*Hygrophila deformis*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
83.	*Hypochaeris radicata*	++	++		++	++	++	++	++	++	++	_	++	++		
84.	*Imperata cylindrica*	++	++	-	++	++	-	++	++	++	++	++	++	--	++	

Sl. No.	Scientific name of Pest	Dhaka	Mymensingh	Rajshahi	Bogra	Rangpur	Dinaspur	Jessore	Khulna	Barisal	Faridpur	Comilla	Sylhet	Chittagong	Rangamati	Reference Table
85.	*Ipomoa aquaticae*	+++	+++	++	+++	+++	+++	+++	+++	+++	+++	+	+++	+++	+++	40
86.	*Ipomea plebeia* **R.** B**r.**	+++	+++		+++	+++	-		+++	+++	+++	+++	+++	-	+++	
87.	*Jussiaea decurrens*	++	++	-	++	++	++	-	++	++	++		++	++	-	
88.	*Jussiaea repens*	+++	+++	-	+++	+++	+++	-	+++	+++	+++	+++	+++	+++	-	
89.	*Lantana camara*	++	++	-	++	++		++	++	++	++	++	++	++	++	
90.	*Leersia hexandra* Swartz.	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
91.	*Leptochloa chinensis* (L.) Nees	+++	+++	+	+++	+++	+++	+++	+++	+++	+++	++	+++	+	+	
92.	*Leptochloa panicea* (Retz.) Ohwi	+++	+++	+	+++	+++	+	+++	+++	+++	+++	+++	+++	--	+++	
93.	*Leucas aspera* Spreng.	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
94.	*Leonurus sibiricus* (MH)	++	++	+	++	++	++	++	++	++	++	+	+	++	+	
95.	*Lindernia anagallis* (Burm.f.) Pennell	+++	+++	-	+++	+++	-	+++	+++	+++	+++	+++	+++	--	++	
96.	*Ludwigia adscendense* (L.) Hara.	++	+++	++	++	++	++	++	++	+++	++	++	++	++	++	
97.	*Ludwigia decorrens*	+++	+++	-	+++	+++		+++	+++	+++	+++	+++	+++	+++	+++	
98.	*Ludwigia hyssopifolia* (G. Don) Exell	+++	+++	++	+++	+++	+	+++	+++	+++	+++	++	+++	+++	+++	
99.	*Ludwigia octavalvis* (Jacq.) P.H.Raven	+++	+++	++	+++	+++	+++	++	+++	+++	+++	++	+++	+++	+	
100.	*Marcilia quardrifolia* L.	+++	+++	+++	+++	+++	+++	++	+++	+++	+++	+++	+++	+++	++	
101.	Mazusrugosus	++	++	+	++	++	+	++	++	++	++	++	++	++	++	
102.	*Mikania cordata*	+++	+++	-	+++	+++		+++	+++	+++	+++	+++	+++	+++	-	
103.	*Mikania scandens*	+++		+++	+++	+++	+++	-	+++	+++	+++	+++	-	+++	-	
104.	*Mimosa invisum*	+++	+++	-	+++	+++		+++	+++	+++	+++	+++	+++	+++	+++	
105.	*Mimosa pudica*	+		+	+	+	+	-	+	--	+	+	-	+	-	
106.	*Mollugo verticillata*	++	++	-	++	++		++	++	++	++	++	++	++	++	
107.	*Monochoria hastata*	++		++	++		++	++	++	--	++	++	-	++	++	
108.	*Monochoria vaginalis* L.	+++	+++	+	+++	+++	++	+++	+++	+++	+++	+++	+++	+++	+	
109.	*Nicotiana plumbaginfolia* Viv.	+	+	+++	+++	+++	+++	+++	+	+	+++	+	+	+	-	
110.	*Orovanche ramosa*	-	-		++	++	++	++	-	--	-	-	-	-	++	

Sl. No.	Scientific name of Pest	Dhaka	Mymensingh	Rajshahi	Bogra	Rangpur	Dinaspur	Jessore	Khulna	Barisal	Faridpur	Comilla	Sylhet	Chittagong	Rangamati	Reference Table
111.	*Oryzae rufipogon*	+	+	+	+	+	+	+	+	+	+	+	+	+	+	40
112.	*Oxalis europea*	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
113.	*Panicum dichotomoflorum*	++	++	+	++	++	+	++	++	++	+	++	++	++	+	
114.	*Panicum repens*	+++	++	+++	+++	+++	+++	+	+++	++	+++	+++	+	+++	++	
115.	*Parapholis incurve* C.E.Hubb.	++	++	+	++	++	+	++	++	++	++	++	++	++	++	
116.	*Parapholis strigosa*	+++	++	+++	+++	+++	+++	++	+++	+++	+++	+++	++	+++	+++	
117.	*Parthenium hysterophorus* L	+++	+++	++	+++	+++	+	+++	+++	+++	+++	+++	+++	+++	+++	
118.	*Paspalum commersoni* Link.	+++	++	+++	+++	+++	+++	+	+++	+	+++	+++	++	+++	+++	
119.	*Paspalum dialatum*	+++	+++	+	+++	+++	+	+++	+++	+++	+++	+++	+++	+++	+++	
120.	*Paspalum distichum*	++		++	++	++	++	++	++	++	++	++	++	++	++	
121.	*Phylla nodiflora*	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
122.	*Phyllunthusniruri*	++	++	-	++	++	-	++	++	++	-	++	++	-	-	
123.	*Physalis angulata*	-	+++	+++	+++	+++	-	+++	+++	+++	+++	+++	+++	-	-	
124.	*Physalis heterophylla* L.	+	+	-	+	+	+	+	+	+	-	+	+	-	+	
125.	*Physalisminima* L.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
126.	*Pistia stratiotes*L.	++	++	+	++	++	+	++	+	++	+	++	++	++	+	
127.	*Poaannua*	++	++	-	++	++		++	++	++	-	++	++	++	-	
128.	*Polygonium coccineum*	+++	++	+++	+++	+++	+++	+++	+++	+	+++	+++	+	+++	+++	
129.	*Polygonum aviculare*	++	++	-	++	++		++	++	++	++	++	++	++	-	
130.	*Polygonum hydropiper* L.	++	+	++	++	++	++	+	++	+	++	++	+	++	++	
131.	*Polygonum persocaria* L.	+++	+++	++	+++	+++	+	+++	+++	+++	+++	+++	+++	+++	+	
132.	*Polygonum plebeium* R. Br.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
133.	*Ponieun javanicum*	++	++	-	++	++		++	++	++	++	++	++	++	-	
134.	*Portulaca oleracea* L	++	+	++	++	+	++	++	++	+	++	++	+	++		
135.	*Portulaca quadrifida*	+		+	+	+	+	-	+	--	+	+	-	+	+	
136.	*Raphanus rephanistruma*	+	+	-	+	+	-	+	+	+	-	+	+	-	-	

Sl. No.	Scientific name of Pest	Dhaka	Mymensingh	Rajshahi	Bogra	Rangpur	Dinaspur	Jessore	Khulna	Barisal	Faridpur	Comilla	Sylhet	Chittagong	Rangamati	Reference Table
137.	*Rumex maritimus*	++	+	++	++	++	++	+	++	++	++	++	+	++	++	40
138.	*Saccharum spontaneum*L.	++	++	++	++	++	-	++	++	++	++	++	++	++	-	
139.	*Salvinia natans*	+	+++	++	+	++	+++	+++	+++	+++	+	+++	+++	+	+	
140.	*Saussurea affinis*	+++	+++	+	+++	+++	++	+++	+++	+++	+	+++	+++	+++	+++	
141.	*Scirpus articulatus*	++	++	-	++	++	-	++	++	++	-	++	++	++	-	
142.	*Scirpus japonica*	++	++	-	++	++		++	++	++	++	++	++	++	-	
143.	*Scirpus juncoides*	+++	++	+++	+++	+++	+++	+	+++	+++	+++	+++	+	+++	++	
144.	*Scirpus maritimus* (Kenna ghas)	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
145.	*Scoparia dulcis*	++	++	-	++	++	-	++	++	++	-	++	++	-	-	
146.	*Setaria glauca* (L.) P.Beauv	+	+++	+++	+++	+++	++	+++	+++	+++	+++	+++	+++	+	++	
147.	*Setaria viridis*	+++	+++	++	+++	+++	+	+++	+++	+++	+	+++	+++	++	+++	
148.	*Sidia acuta*	+++	+++	-	+++	+++		+++	+++	+++	-	+++	+++	+++	-	
149.	*Solanum carolinense.*	+	+	-	+	+	-	+	+	+	-	+	+	-	+	
150.	*Solanum mauritianum*	++	++	-	++	++	-	++	++	++	-	++	++	-	-	
151.	*Solanum nigrum* L.	++	++	+	++	++	+	++	++	++	+	++	++	++	++	
152.	*Solanum rostratum*	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
153.	*Solanum torvum* Swartz.	-	++	++	++	++	-	++	++	++	++	++	++	-	-	
154.	*Sonchus oleraceus*	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	+++	
155.	*Splenoclea zeylanica*	++	++	++	++	++	++	++	++	++	++	++	++	++	++	
156.	*Spilanthes paniculata*	+	+	-	+	+	-	+	+	+	-	+	+	-	-	
157.	*Sporobolus indicus*	-	++	++	++	++	-	++	++	++	++	++	++	++	-	
158.	*Stellaria media.*	+++	+++	++	+++	+++	+	+++	+++	+++	+	+++	+++	+++	+++	
159.	*Striga densiflora*	-	-	+++	+++	+++	+++	-	-	-	-	-	-	-	-	
160.	*Thlaspi arvense*	++	++	-	++	++	-	++	++	++	-	++	++	++	++	
161.	*Verbasculum thapsus* L	++	++	-	++	++	-	++	++	++	-	++	++	-	-	
162.	*Vermoniacinerea*	+++	+++	-	+++	+++	-	+++	+++	+++	-	+++	+++	+++	+++	

Sl. No.	Scientific name of Pest	Dhaka	Mymensingh	Rajshahi	Bogra	Rangpur	Dinaspur	Jessore	Khulna	Barisal	Faridpur	Comilla	Sylhet	Chittagong	Rangamati	Reference Table
163.	*Vicia hirsute* L.	++	++	+	++	++	+	++	++	++	+	++	++	+	++	40
164.	*Vicia sativa.*L.	++	+++	+++	+++	+++	++	+++	+++	+++	+++	+++	+++	+++	++	
165.	*Xanthium indicum* Koen. ex Roxb	+++	+++	-	+++	+++	-	+++	+++	+++	-	+++	+++	+++	+++	
166.	*Xanthium italicum*	+++	+++	-	+++	+++	-	+++	+++	+++	-	+++	+++	+++	-	
167.	*Xanthium strumerium* Koenig.	++	++	++	++	++	++	++	+	++	++	++	++	+	+	

7.0 INFORMATION ON INTERCEPTED PESTS AT VARIOUS QUARANTINE STATIONS IN BANGLADESH

Table-42: Information on Intercepted of pests at various Quarantine stations

Serial No.	Name of Port	Plant/Plant Product	Country of Origin	Intercepted pests	Severity (High/Medium/Low)	Remarks
1.	Banglabandha TetuliaPanchagarh	Wheat	India	1. Rice weevil (Sitophilousoryzae) 2. Khapra beetle(Trogodermagranarium) 3. Red flour beetle (Triboliumcasteneum) 4.Storage fungi (Aspergillussp and Peneciliumsp)	High	Date of interception is 17.01.18. Only this consignment is intercepted within last two years. No release order (PC) was issued and the whole infested consignment (190 M T) is kept in the store of the Custom Authority.
2.	Hili, HakimpurDinajpur	Clean Rice	India	Rice weevil (Sitophilousoryzae)	Low	Frequency of interception was three times i.e on 26.2.18, 02.07.18 & 12.11.18
3.	Hili, HakimpurDinajpur	Wheat	India	Rice weevil (Sitophilousoryzae)	Low	Frequency of interception was two times i.e on 02.07.18 & 12.11.18
4.	Hili,	Maiz	India	Rice weevil	Low	Frequency of interception was three

Serial No.	Name of Port	Plant/Plant Product	Country of Origin	Intercepted pests	Severity (High/Medium/Low)	Remarks
	HakimpurDinajpur			(Sitophilousoryzae)		times i.e on 26.02.18, 02.07.18 and 12.11.18
5.	OsmaniInternationl Airport	Dates	Abu Dhabi	Saw-toothed grain beetle()	High	Date of interception is 22.03.17
6.	Tamabil, Sylhet					
7.	Jakiganj, Sylhet					
8.	Sherpur					
9.	Bhomra, Satkhira	Rice, Raw cotton, apple, orange, grapes, mango, ginger & garlic etc				
10.	Benapole, Jessore	Raw jute, Jute bag, carpet, sesame oil, chili, rice etc	-			
11.	Mongla, Bagerhat	Wheat, rice, Lentil(Non seed), round logs etc	Thailand, Australia, India & Norway etc			
12.	Burimari, Patgram, Lalmonirhat	Kenaf seed Wheat bran, maiz/jute seed, rice, Lentil etc	India and Bhutan	-	-	On test low germination (38%) status of kenaf seed was found.
13.	Sea Port, Chattogram	Wheat	Russia	Saw toothed grain beetle: *Oryzaephillus surinamensis*	High	Back to the shipper
				Red flour beetle: *Tribolium castaneum*	Low	
				Storage fungi: *Aspergillus niger*	Low	

Serial No.	Name of Port	Plant/Plant Product	Country of Origin	Intercepted pests	Severity (High/Medium/Low)	Remarks
				Aspergillus flavus		
				Weed seed (Absent in Bangladesh)	Medium	
14.	Sea Port, Chattogram	Rice (Two containers 21000 mt)	India	Red flour beetle: *Tribolium castaneum*	Medium	Back to the shipper
				Saw toothed grain beetle: *Oryzaephillus surinamensis*	Medium	
				Granary weevil: *Sitophilus granarius*	Medium	
				Flat grain beetle: *Cryptolestes pusillus*	Low	
				Pirate bug: *Xylocoris flavipes*	-	
				Storage fungi: *Aspergillus niger*	Medium	
				Aspergillus flavus	Medium	
15.	Teknaf land port	-	-	-	-	No pest interception report was found.

8.0 APPENDICES

Appendix I: Terms of Reference (TOR) for selecting Consulting Firm for Making Pest List of Plants and Plant Products in Bangladesh

A. BACKGROUND

Pest risk analysis provides the rationale for phytosanitary measures for a specified PRA area. It evaluates scientific evidence to determine whether an organism is a pest. If so, the analysis evaluates the probability of introduction and spread of the pest and the magnitude of potential economic consequences in a defined area, using biological or other scientific and economic evidence. If the risk is deemed unacceptable, the analysis may continue by suggesting management options that can reduce the risk to an acceptable level. Subsequently, pest risk management options may be used to establish phytosanitary regulations.

For some organisms, it is known beforehand that they are pests, but for others, the question of whether or not they are pests should initially be resolved.

The pest risks posed by the introduction of organisms associated with a particular pathway, such as a commodity, should also be considered in a PRA. The commodity itself may not pose a pest risk but may harbour organisms that are pests. Lists of such organisms are compiled during the initiation stage. Specific organisms may then be analyzed individually, or in groups where individual species share common biological characteristics.

Less commonly, the commodity itself may pose a pest risk. When deliberately introduced and established in intended habitats in new areas, organisms imported as commodities (such- as plants for planting, biological control agents and other beneficial organisms, and living modified organisms (LMOs)) may pose a risk of accidentally spreading to unintended habitats causing injury to plants or plant products. Such risks may also be analyzed using the PRA process.

The PRA process is applied to pests of cultivated plants and wild flora, in accordance with the scope of the IPPC. It does not cover the analysis of risks beyond the scope of the IPPC.

Provisions of other international agreements may address risk assessment (e.g. the Convention on Biological Diversity and the Cartagena Protocol on Biosafety to that convention).

Procedure of Work in brief:

In 1991 there was a typed book published in the name of "An Annotated List of Important Disorders of Important Crop Plants of Bangladesh" by Dr. G.A. Fakir, Dr. M.A. Gaffer and Mr. M.U. Ahmad. This was the first book of its kind in Bangladesh but till date there were no efforts to make a Pest List of Plants and Plant Products in Bangladesh following the international standards and guidelines.

The intend to make a pest list of plants and plant products in Bangladesh is to (a) know which pests are present in Bangladesh (b) which pests we need to evaluate in the PRA and (c) (i) associated with the commodity (ii) present in exporting country (iii) reasonably likely to follow the pathway (iv) Quarantine pests for importing country. Pest list is the combination of pests associated with the host being analyzed (anywhere in the world) and Pests that occur in the export area (on any commodity). Pest list look like (example).

Actionable pests reported in Vietnam (in any country) and present in Bangladesh (on any hosts)

Pest Name	Evidence of presence in Bangladesh	Host Association	Plant part(s) Association	On harvested plant part(s)	Notes
Arthropods					
Acarl: Tenupalpidae					
Brevipalpus, Fredorionsis, Baker	**Peha and Bennett, 1995; Prado, 1991**	**CABI, 2012; Gonzalez, 2006; Peha and Bennett, 1995; Prado, 1991**	**Leaf, fruit, stem, aboot (CABI, 2012); leaf, fruit, stalk, twig, bark (Gonzalez, 2006); fruit (Renato and larral, 2003)**	**Yes**	**Plant part association based on feeding behavior of the species on its hosts in general.**
Coleoptera: Cureulionidae					
Naupacivs yavhogcaphus (Germar)	Peha and Bennett, 1995; Prado, 1991	CABI, 2013; Peha and Bennett, 1995; PPQ, 2002; Prado, 1991	Shoot, leaf, root, trunk, branch, bud (PPQ, 2002); leaf, root, trunk, bark, fruit (CABI, 2013)	No	Plant part association based on feeding behavior of the species on its hosts in general. see additional discussion in section 2.3
Hemiptera: Orthezildae					
Praciongorthezia oliyicola (Beingolea) (syn, Orthezia olivicola Beingolea)	Ben-Dov et al., 2012; Klein Koch and Waterhouse, 2000	Alata Condor, 1973; Peha and Bennett, 1995; Tijero, 1992	Leaf, twig (Aguilera and Grana, 1976)	No	
Thysanoptera: Thripidae					
Scirtotlurips inermis Priesner	Klein Koch and Waterhouse, 2000; Prado, 1991	Klein Koch and Waterhouse, 2000; Prado, 1991	Leaf (Mound and No Walker, 1982) Plant part association based on feeding behavior of the species on its hosts in general.	No	Scirtotlprips inermis in present in Califomia (Anonymous, 1972; Mound and Walker, 1982; Sakimura, 1986).

- **Scientific name of pest**
- **Distribution**
- Exporting country
- PRA area
- **Quarantine status**
- If widely distributed in
- Bangladesh, not a Q-pest
- **Plant part association**
- e.g., Fruit, leaves, roots, etc.
- **Associated with commodity at harvest**
- Does the pest follow the pathway?
- Based on plant part association and industry practices
- **Notes**
- **References**

The consultants of the consulting firm are required to have a good liaison/communication with the Agricultural Research Institutions/Organizations, relevant Universities, DAE and Plant Quarantine Wing of DAE, Agricultural products Importers and Exporters Association, Food Product Processing Industries, EPB, Private sector agricultural research institutions and Hortex Foundation etc.

For developing a pest list of plants and plant products it is required to know Commodity Information which contains:-

1. (a) Taxonomy (i) Genus level (ii) Species level (b) Parts of the plant being imported (c) Morphological characteristics (d) Biology of the commodity (i) Seasonality (growth, susceptibility to pests at various stages) (e) Degree of processing (f) Production practices (i) Pre-harvest to packaging(ii)Standard industry practices
2. Country Specific information (a) Pests associated with commodity (b) Production areas (c) Production practices (i) Harvest, post-harvest handling (Provided by NPPO of exporting country) (d) Taxonomy/Diagnostics (i) Include synonyms (ii) Distribution : Present in export area, Present in Bangladesh?, Host range, Part of plant attacked
3. Life cycle and feeding habits (i) Association with commodity at various life stages

3.1 Likely to remain with the commodity (follow the pathway),
- Mobility of pest, -Easily removed by post-harvest practices or not

4. Pest groups (a) Insect (b) Pathogen (c) Virus (d) Bacteria (e) Nematodes (f) Mollusks (g) Weeds etc
5. Port Interception data
5.1 Include on the pest list (a) may not have additional supporting evidence that the intercepted pest attacks the commodity, (b) Port data vs. passenger baggage data
5.2 Demonstrates a pathway for introduction

Uncertain host association/distribution

- A pest may occur in neighboring countries only need not require to include in list
- Add text before or after the list with this information
- Poor host association / only laboratory evidence of host association
- Can include in list but describe uncertainty in the "notes" column.

Example:

Organisms identified to the genus that are reported on *Annona cherimola* in Bangladesh and that have actionable or undermined regulatory status.

Pest Name	Evidence of presence in Bangladesh	Genus present in the Indo- sub continent	Regulatory status	Plant part(s) Association	On harvested plant part(s)	Remarks
Arthropods						
Coleoptera: Elateridae						
Conoderus spp.	Peha and Bennett, 1995	Yes (Booth et al., 1990; Hill, 1987)	U	Root, seed, seedling (Ghidiu, 2006; root, stem (Hill, 1987)	No	Plant part association based on general feeding behavior of the genus on its hosts.
Hemiptera: Pseudoeocclдae						
Pseudococcus sp.	PestID, 2013	Yes (Ben-Dov et al., 2013)	U	Fruit (PestID, 2013)	Yes	Association with A. cherumola fruit in Freedonia is based on 19 interceptions during preclearance of permit cargo (PestID, 2013)
NEMATODES						
Pratylenchus sp.	Ministerio de Agricultura, 1969	Yes (Norton et al., 1984)	U	Roots (Perry and Moens, 2006)	No	
Tylenchorhynchus sp.	Ministerio de Agricultura, 1969	Yes (Norton et al., 1984)	U	Roots (Perry and Moens, 2006)	No	
FUNGI and STRAMENOPILES						
Alternaria sp.	Mujica et al., 1980, Rina Acuna, 2010	Yes (Farr et al., 2013; Simmons, 2007)	U	Leaves, fruit (Rotem, 1994; Simmons, 2007)	Yes	
Cylindrocarpon sp.	Rina Acuna, 2010	Yes (Farr et al., 2013)	U	Roots (Rina Acuna, 2010)	No	
Phomopsis sp.	Rina Acuna, 2010	Yes (Farr et al., 2013)	U	Fruit (Rina Acuna, 2010)	No	
Phytopluhora sp.	Rina Acuna, 2010	Yes (Farr et al., 2013)	U	Roots (Rina Acuna, 2010)	No	

- **i.e., Genus sp.**
- Only include if reference(s) places the pest on the commodity AND in the exporting country.
- **Quarantine Pest?**
- YES if the genus does not occur in the importing country
- NO if the importing
- Exporting country has a no action policy for the genus.

The main elements of documentation are;

- Developing a pest list of plants and plant products in Bangladesh - Documenting the pest list
- Pest name
- Evidence of presence in Bangladesh
- Host association
- Plant part(s) association
- Identification of PRA areas
- Degrees of processing
- Uncertain host association and distribution
- Reference

B. Objectives:

The overall objective of developing the Pest list of plants and plant products by the SPCB Project is to support National Plant Protection Organization (NPPO) for knowing

(a) which pests are present in Bangladesh
(b) which pests we need to evaluate in the PRA and
(c) (i) which pests are associated with the commodity (ii) which pests are present in exporting country that may introduce into Bangladesh as an Invasive Alien Species (JAS) (iii) which pests are reasonably likely to follow the pathways (iv) which pests are Quarantine pests for importing country.

In principle there is no pest list exists in Bangladesh for which Plant Quarantine Wing of DAE has been suffering since long because Bangladesh cannot provide any pest list to the NPPO of the importing country when they asked to provide. It indicates that Bangladesh has no or a very few phytosanitay strength to comply with the WTO-SPS Agreement and IPPC which hampers our trade in the context of plants and plant products. So, it was essential to develop a pest list as soon as possible to cope with the situation.

The **Specific Objectives** of the recruitment of Developing Pest List/Making Pest List Consulting Firm are:

- Developing a list of all kinds of pest present in Bangladesh that attacks plants and plant products;
- While developing pest list the above mentioned guideline may be followed. Addition to the list like status of distribution (High/Medium/Low) is encouraged but deletion of any information of the guideline is unacceptable, &;
- Perform other responsibilities assigned by PD of SPCB.

C. Qualification and Experience:

The qualification and experience of developing pest list Consulting Firm should be as below -

- The consulting firm should have minimum 05 (Five) years professional experience in the relevant field of conducting survey and surveillance and risk analysis services or experience in conducting at least two pest risk analysis with the experience survey and surveillance.
- The consulting firm should have the specialists of entomologist and pathologist (specially working experience in survey and surveillance and report writing), agronomist (crop science), Specialists in botany and epidemiology will be given preference.
- The firm should have experience in management of similar nature of works.

D. Duties and Responsibilities:

The Consulting firm will be responsible for overall services required for developing a pest list of plants and plant products (but not limited to) to the PD for the following responsibilities:

- To manage all contracts of the planned developing a pest list of plants and plant products activities by the appointed consulting firm.
- The plan activities of the consulting firm for developing pest list should be endorsed by the PD/NPPO.
- Provision for arrangement of workshop for preparation and finalization of Inception report is encouraged.
- The completion of developing pest list process should involve the visit of phytosanitary experts (PRA Consultant, PD and or any of the Phytosanitary Expert) to the country carrying out such type activities.
- Liaison/communication with all Agricultural Research Institutions, relevant Universities, Plant Quarantine Wing of DAE, Importers Association, Food Product Processing Industries, Exporters and Importers Association, EPB, FAO, AVRDC & IRRI local office, Hortex Fourldation and DAE is a must.
- Consultation with CABI is mandatory.
- Arrange a validation workshop before submission of final PRA report.
- Submission of final Pest List (soft and 50 hard copies) for publication.

E. Working area and procedure

The Consulting firm will Collect raw and reliable data from the aforesaid areas by field visit, interviewing or by strong communication. Evaluation of secondary data is essential. The proposed work areas (but not limited to) are as follows;

22. Bangladesh Agricultural Research Institute (All stations and centres)
23. Bangladesh Rice Research Institute (All stations and centres)
24. Wheat and Maize Research Institute (All stations and centres)
25. Bangladesh Jute Research Institute (All stations and centres)
26. Bangladesh Institute of Nuclear Agriculture (All stations and centres)
27. Bangladesh Tea Research Institute
28. Bangladesh Forest Research Institute
29. Bangladesh Agricultural University, Mymensingh
30. Sher-e-Bangla Agricultural University, Dhaka
31. Bangabandhu Sheikh Mujibur Rahman Agricultural University
32. University of Dhaka
33. University of Chittagong
34. University of Rajshahi
35. Hajee Mohammad Danesh Science and Technology University
36. Khulna University
37. Patuakhali Science and Technology University
38. Sylhet Agricultural University
39. All entry points of Plant Quarantine Stations
40. Jahanghirnagar University, Savar, Dhaka.
41. Deputy Directors of Centers of Chapaigonj, Baradi, Rahmatpur, Noorbag, Keotkhali, Ramu, Balagata, Keotkhali, Khejurbagan
42. Deputy Directors of Agricultural Extension of all point of entry plant quarantine station districts with Comilla, Norshingdhi, Faridpur, Mymensingh, Bogra, Manikgonj, Rajshahi, Noakhali, Rangamati.

F. Selection Method, Duration and Remuneration:

The Consulting firm will be selected by QCBS following PPR 2008. The PRA work should be completed within 150 (one hundred & fifty) days from the date of Contract Signing. The proposed financial proposal must include VAT & Taxes. The payment will be made including VAT and Tax as per NBR rules. There will be no provision for advance payment.

Appendix II: Format for collecting information on Insect pests and Mites of different Plants and Plant products in Bangladesh

Sl. No.	Plant/ plant product with Scientific name	English name of Insect pests	Scientific name	Order	Family	Plant parts affected	Status	Rating	Reference
1.									
2.									
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									

Appendix III: Format for collecting information on Diseases of different Plants and Plant products in Bangladesh

Sl. No.	Plant/ plant product with Scientific name	Name of Diseases	Causal organism	Plant part(s) affected	Status (high/ medium/low)	Rating	Reference
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							

Appendix IV: Format for collecting information on Weeds of different Plants in Bangladesh

Sl. No.	Plants with Scientific name	Name of Weeds	Scientific name	Time of occurrence	Status (high/ medium/low)	Rating	Reference
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							

Appendix V: Format for Summarized Presentation of all Pests of Plants and Plant products in Bangladesh

Sl. No.	Scientific name of Pest	Host	Rating	Reference Table
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Appendix VI: Format for showing Distribution of Pests of Plants and Plant products in 14 Agricultural Regions of Bangladesh

Sl. No.	Scientific name of Pest	Distribution in Agricultural Regions														Reference Table
		Dhaka	Mymensingh	Rajshahi	Bogra	Rangpur	Dinaspur	Jessore	Khulna	Barisal	Faridpur	Comilla	Sylhet	Chittagong	Rangamati	
1.																
2.																
3.																
4.																
5.																
6.																
7.																
8.																
9.																
10.																

Appendix VII: Format for collecting information on Intercepted of pests at various Quarantine stations in Bangladesh

Sl. No.	Name of Port	Plant/ Plant Product	Country of Origin	Intercepted Pest	Severity (High/ Medium/ Low)	Remarks
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						

Appendix VIII: Persons met during Information collection of different Institutions

A. DAE Head Quarter, Khamarbari, Dhaka.

- **Md. Azahar Ali,** Director, PQW, DAE, Khamarbari, Dhaka.
- **Dr. Mohammad Ali,** Project Director, SPCB Project, Khamarbari, Dhaka.
- **Md. Ahsan Ullah,** Consultant, PRA, SPCB Project
- **Mrs. Merina Jebunnahar,** Sr. M & E Officer, SPCB Project

B. DAE Field Level Officers

- ***Field Service Wing***

1. Nilphamari
- Abul Kashem Azad, Deputy Director
- Md. Sirajul Islam, ADD (Crop)

2. Lalmonirhat
- Mr. Bidhubhuson Roy, DD
- Md. Narujjaman, ADD (Crop)

3. Kurigram
- Dr. Mostafizul Rahman, Deputy Director
- Mr. Sasty Chandra Roy, ADD (Crop)
- Mr. Samsujjaman, UAO, Nageswari
- Md. Masudur Rahman, UAO, Bhurungamari

4. Rangpur
- Dr. Md. Sarwarul Haque, Deputy Director
- Md. Matlubar Rahman, ADD (PP)

5. Naogaon
- Mr. Monojit Kumar Mallik, Deputy Director
- Md. Mahabubur Rahman, ADD (PP)

6. Comilla
- Mr. Dilip Kumar Adhikari, Deputy Director
- Mr. Ayub Mahmud, ADD (PP)

7. Sirajganj
- Md. Habibul Haque, Deputy Director
- Md. Abdullah, ADD (PP)

8. Noakhali
- Dr. Ma. Abul Hossain, Deputy Director
- Md. Basirul Alam, ADD (PP)

9. Pabna

- Md. Azahar Ali, Deputy Director
- Dr. Md. Azizur Rahman ADD (PP)

10. Laxmipur

- Md. Belal Hossain Khan, Deputy Director
- Mr. Kishore Kumar Majumder, ADD (Crop)

11. Feni

- Md. Jayenuddin, Deputy Director
- Mr. Ekram Uddin, ADD (Crop)

12. Chandpur

- Md. Abdur Rashid, Deputy Director
- Dr. Md. Zakir Hossain, ADD (PP)

13. B. Baria

- Md. Abu Naser, Deputy Director
- Md. Omar Faruq, ADD (PP)

14. Thakurgaon

- Md. Abtab Hossain, Deputy Director
- Md. Mahbubur Rahman, ADD (Crop)

15. Jaypurhat

- Mr. Surendra Nath Roy, Deputy Director
- Md. Anowar Hossain Khan, DTO

16. Gaibandha

- Md. Shawkat Osman, Deputy Director (In-charge)
- Md. Abul Kalam Azad, ADD (PP)

17. Panchagarh

- Md. Abu Bakkar Siddique, Deputy Director
- Md. Shamsuddin Mia, ADD (Crop)

18. Dinajpur

- Md. Touhidul Iqbal, Deputy Director
- Mr. Biplop Kumar Mohanta, ADD (PP)

19. Rajshahi

- Md. Shamsul Alam, Deputy Director, Khamarbari, Rajshahi
- Mr. Bimal Kumar Pramanik, ADD (PP), Deputy Director Office, Khamarbari, Rajshahi
- Md. Abdul Wadud, ADD (Horticulture), Deputy Director Office, Khamarbari, Rajshahi

20. Chapai Nawabgonj

- Dr. Md. Saiful Alam, ADD (Crop), Deputy Director Office, Khamarbari, Chapai Nawabgonj
- Md. Yeasin Ali, ADD (PP), Deputy Director Office, Khamarbari, Chapai Nawabgonj

21. Sylhet

- Md. Abul Hashem, DD, DAE, Khamarbari, Sylhet
- Md. Salahuddin, DTO, DAE, Khamarbari, Sylhet
- Mr. Bimol Chandra Shome, ADD (Crop), DAE, Khamarbari, Sylhet

22. Sherpur

- Md. Ashrafuddin, DD, DAE, Khamarbari, Sherpur
- Md. Akhruzzaman, ADD (PP), Deputy Director Office, DAE, Sherpur

23. Barisal

- Haridas Sikari, Deputy Director, Barisal

24. Bhola

- Binoy Krishna Debnath, Deputy Director, Bhola

25. Madaripur

- G. M. A. Gafur, Deputy Director, Madaripur

26. Sariatpur

- Rifatul Hasan, Deputy Director, Sariatpur

27. Kushtia

- Bibhitibhuson, Deputy Director, Kushtia,
- Dr. Hayat Mahmood, ADD (Crops), Kushtia

28. Meherpur

- Dr. Akhtaruzzaman, Deputy Director, Meherpur
- Abu Saleh, ADD (PP), Meherpur

29. Chuadanga

- Naim As-Sakib, Deputy Director, Chuadanga
- Sufi Md. Rafikuzzaman, ADD (PP), Chuadanga

30. Jenaidah

- G. M. Abdur Rauf, Deputy Director, Jenaidah
- Mr. Bijoy Krishna Haldes, ADD (PP), Jenaidah

31. Magura

- Md. Zahidul Amin, Deputy Director, Magura
- Mr. Gobindra Kumar Joarder, SAAO, Magura

32. Faridpur

- Mr. Kartik Chandra Chakrabarti, Deputy Director, Faridpur

33. Rajbari

- Dr. M. Mosaharaf Hossain, ADD (Crops), Rajbari

34. Khulna

- Md. Abdul Latif, Deputy Director, Khulna
- Hasan Warisul Kabir, ADD (Crops), Khulna

35. **Bagerhat**
    - Md. Altabuddin, Deputy Director, Bagerhat

36. **Satkhira**
    - Mr. Arabinda, Deputy Director, Satkhira

37. **Jessore**
    - Md. Emdad Hossain SEK, Deputy Director, Jessore

38. **Narail**
    - Mr. Chinmoi Roy, Deputy Director, Narail

39. **Gopalgonj**
    - Samir Kumar Goswami, Deputy Director, Gopalgonj
    - Horolal Madhu, Training officer, Gopalgonj

40. **Patuakhali**
    - Ridoissar Datta, Deputy Director, Patuakhali

41. **Barguna**
    - Md. Motiur Rahman, Deputy Director, Barguna

42. **Jhalokathi**
    - Md. FazlulHaq, Deputy Director, Jhalokathi

43. **Pirojpur**
    - Abu Hena Md. Jafar, Deputy Director, Pirojpur

44. **Bandarban**
    - Md. Altaf Hossain, Deputy Director, Bandarban

45. **Chattogram**
    - Md. Aminul Haque Chowdhury, Deputy Director, Agrabad, Chattogram
    - Md. Gias Uddin, Deputy Director Office, Agrabad, Chattogram

46. **Rangamati**
    - Mr. Paban Kumar Chakma, Deputy Director, Rangamati

47. **Khagrachori**
    - Mohammad Sofor Uddin, Deputy Director, Khagrachori

- ***Plant Quarantine Wing***

Plant Quarantine Station (PQS)

1. **Chapai Nawabgonj**
    - Md. Shohir Uddin Ahmad, DD, PQS, Sonamosjid Land port, Chapai Nawabgonj

2. **Sylhet**
    - Mr. Arun Chandra Roy, ADD, PQS, Osmani International Airport, Sylhet

3. **Sylhet**
   - Md. Mamunur Rashid, Sub-Assistant Plant Quarantine Officer, Tamabeel, PQS, Sylhet.

4. **Sylhet**
   - A K M Fazley Munim, Quarantine Entomologist, PQS, Zakigonj, Sylhet.

5. **Sherpur**
   - Md. Alamgeer Hossain, Plant Quarantine Officer, PQS, Nakugaon, Nalitabari, Sherpur

6. **Satkhira**
   - Md. Ziaul Islam, Deputy Director, Bhomra PQS, Satkhira

7. **Khulna**
   - Mr. Ratan Kumar Sarker, Deputy Director (PQS), Mongla Sea Port, Khulna

8. **Jessore**
   - Md. Abdul Qader, Deputy Director (PQS), Benapole Land port, Jessore
   - Md. Jahangir Alam, Quarantine Pathologist, Benapole Land port, Jessore

9. **Panchogarh**
   - Md. Abu Mohaddesh, Quarantine Ento, PQS, Banglabandha Land port, Tetulia, Panchogarh

10. **Dinajpur**
    - Md. Mahmudul Hasan Musa, Q. Patho. PQS, Hili Land port, Hakimpur, Dinajpur

11. **Lalmonirhat**
    - Md. Shahadat Hossain, ADD, PQS, Burimari Land port, Patgram, Lalmonirhat

12. **B.Baria**
    - Md. Habibullah, DD, Land port Akhaura, B.Baria

13. **Comilla**
    - Md. Iqbal Hossain, ADD (In-charge), Land port Bibir bazar, Comilla

14. **Chattogram**
    - Md. Zahirul Islam, DD, Sea Port, Agrabad, Chattogram
    - Syed Munerul Hoque, Quarantine Pathologist, Sea Port, Agrabad, Chattogram

- ***Horticulture Wing***

Horticultural Centers (HC)

1. **Chapai Nawabgonj**
   - Dr. Md. Saifur Rahman, Deputy Director, Horticulture Centre, Kalayanpur, Chapai Nawabgonj

2. **Rajshahi**
   - Md. Ahedur Rahman, Senior Horticulturist, Horticulture Centre, Rajshahi

3. Sylhet

- Md. Raihan Parvez Roni, Horticulturist, Horticulture Centre, Mehedibag, Sylhet.

4. Barisal

- Sapan Kumar Halder, Deputy Director, HC, Rahmatpur, Barisal

5. Madaripur

- Md. Saiful Islam, Deputy Director, HC, Mostafapur, Madaripur

6. Faridpur

- M. Shahidullah, Deputy Director, HC. Bhazandanga, Faridpur

7. Khulna

- Md. Khandakar Moazzem Hossain, Deputy Director (Hort.), Daulatpur, Khulna

8. Jessore

- Mr. Binoy Kumar Saha, Deputy Director (Hort), Khoirtola, Jessore

9. Rangpur

- Md. Maududul Islam, DD, Horticulture Centre, Burirhat, Rangpur

10. Comilla

- Mr. Surojit Chandro Datta, DD, Horticulture Centre, Sashangacha, Comilla

11. Feni

- Md. Abul Kalam Azad Bhuya, DD, Horticulture Centre, Panchgachia, Feni
- Mrs. Sharmin Akhtar, Horticulturist, Horticulture Centre, Panchgachia, Feni

12. Dinajpur

- Mr. Prodip Kumar Guha, DD, Horticulture Centre, Dinajpur
- Mr. Nayon Kumar Shaha, Horticulturist, Horticulture Centre, Dinajpur

13. Naogaon

- Mr. A.N.M. Anowarul Hasan, Sr. Horticulturist, Horticulture Centre, Badalgachi, Naogaon

14. Pabna

- Md. K.J.M. Abdul Awal, DD, Horticulture Centre, Tebunia, Pabna

15. Pabna

- Md. Hossain Shahid Sohorawardi, Horticulturist, Horticulture Centre, Ishurdi, Pabna

16. Cox's Bazar

- Mr. Khokon Chandra Ghosh, DD, Horticulture Centre, Ramu, Cox's Bazar
- Md. Nurul Alam, Horticulturist, Horticulture Centre, Ramu, Cox's Bazar

17. Bandarban

- Md. Mizanur Rahman, DD, Horticulture Centre, Balaghata, Bandarban

18. Khagrachari

- Md. Moazzem Hossain, DD, Horticulture Centre, Khejurbagan, Khagrachari

C. Bangladesh Agricultural Research Institute (BARI)

1. Chapainawabgonj

- Md. Yousuf Ali, Scientific Officer, RARS, Chapai Nawabgonj
- Dr. Alim Uddin, Principal Scientific Officer, Fruit Research Station, Chapainawabgonj

2. Moulvibazar

- Dr. M. Sorof Uddin, SSO, Regional Citrus Research Station, Moulvibazar.

3. Jamalpur

- Dr. Mosharraf Hossain, PSO, Plant Pathology, RARS, Jamalpur
- Md. Asaduzzaman, SSO, Agronomy, RARS, Jamalpur
- Dr. M A Mannan, PSO, Entomology Division, RARS, Jamalpur

4. Barisal

- Dr. Md. Golam Kibria, PSO, RARS, Rahmatpur, Barisal

5. Madaripur

- Dr. Babu Lal Nug, CSO, RPRC, Madaripur
- Md. Shahiduzzaman, SO, RPRC, Madaripur

6. Khulna

- Dr. Harun-ur-Rashid, PSO, Daulatpur, Khulna

7. Satkhira

- Mr. Ishakul Islam, PSO, Benerpota, Satkhira

8. Pabna

- Dr. M.A. Rouf, SSO (Ento), RARC, Ishurdi, Pabna
- Md. Shamsul Alam, SO, Agro., Ishurdi, Pabna

9. Rangpur

- Dr. Rais uddin Chowdhury, CSO, Burirhat Farm, Rangpur

10. Comilla

- Dr. Md. Obaidullah Kawsar, PSO, RARC, Comilla

11. Comilla

- Dr. Md. Haider Hossain, PSO, OFRD, Shasongacha, Comilla

12. Thakurgaon

- Dr. Md. Rafiquzzaman, PSO, Thakurgaon

13. Panchogarh

- Dr. Habibur Rahman, PSO, Debiganj, Panchogarh

14. Chattogram

- Dr. Md. Khalilur Rahman, CSO, RAS, Hathazari, Chattogram

15. Khagrachori

- Dr. Munshi Rashid Ahmad, CSO, RAS, Hill Agri. Research Station, Khagrachori

16. Gazipur

- Dr. Md. Sowkat Ali Khan, SSO (Agronomy), Gazipur
- Dr. Md. Shahadat Hossain, PSO (Entomology), HRC, Gazipur
- Mrs. Firoza Khatun, CSO (Plant Pathology), Gazipur

D. Bangladesh Rice Research Institute (BRRI)

1. Gazipur

- Dr. M A Latif, PSO & Head Plant Pathology Division, Gazipur
- Dr. Tahmid Hossain Ansari, PSO, Plant Pathology Division, Gazipur
- Dr. Ashik Iqbal Khan, PSO, Plant Pathology Division, Gazipur
- Dr. M. Anwar Hossain, Former CSO, Plant Pathology Division, Gazipur
- Dr. Sheikh Shamiul Haque, PSO & Head, Entomology Division, Gazipur
- Dr. M. Mosaddek Hossain, PSO, Entomology Division, Gazipur
- Md. Khairul Alam Bhuiyan, PSO, Agronomy Division, Gazipur

2. Barisal

- Dr. M. Alamgir Hossain, Chief Scientific officer, Sagardi, Barisal
- Dr. Mohammad Hossain, PSO, Sagardi, Barisal

3. Satkhira

- Dr. M. Ibrahim, PSO, Benerpota, Satkhira

4. Rangpur

- Mr. Tanjilur Rahman Mondol, SO, Rangpur
- Dr. Md. Abu Bakar Siddik Sarkar, PSO, Rangpur

5. Feni

- Dr. Rafiqul Islam, PSO, Sonagazi, Feni
- Md. Mahabubur Rahman, SO, Sonagazi, Feni

6. Shasongacha, Comilla

- Dr. Md. Mamunur Rashed, SSO, Shasongacha, Comilla

E. Bangladesh Institute of Nuclear Agriculture (BINA)

1. Mymensingh

- Dr. Jahangeer Alam, Director, Planning and Training, (Ex head Entomology), Mymensingh.
- Dr. Luthfar Rahman Mollah, SSO, Entomology Division, Mymensingh.
- Dr. Md. Abul Kashem, PSO & Head, Plant Pathology Division, Mymensingh.
- Dr. Mahbuba Kaniz Hasna, SSO, Plant Pathology Division, Mymensingh.
- Dr. Md. Ibrahim Khalil, SSO, Plant Pathology Division, Mymensingh.

2. Satkhira

- Al-Arafat, Scientific Officer, Benerpota, Satkhira

3. Pabna

- Dr. Rokonuzzaman, SSO, Ishurdi, Pabna

4. Comilla

- Mrs. Sifate Rabbana Khanom, SSO, Shasongacha, Comilla

F. Bangladesh Tea Research Institute (BTRI)

1. Moulavibazar

- Dr. Mohammad Ali, Director, Srimongol, Moulavibazar.
- Md. Jahangir Alam, SO, Entomology Division, Srimongol, Moulavibazar.
- Md. Moshiur Rahman Akanda, SO, Plant Pathology Division, Srimongol, Moulavibazar.

2. Panchagarh

- Dr. Mohammad Shameen Al Mamun, SSO, BTRI & PD, Northern Bangladesh Project, Bangladesh Tea Board, Regional Office, Panchagarh

G. Bangladesh Jute Research Institute (BJRI)

1. Dhaka

- Dr. Md. Mahbubul Islam, CSO, Dhaka
- Mrs. Jannatul Ferdous, SO, Dhaka
- Dr. Saleh M. Ashraful Islam, SO (Plant Pathology), Dhaka
- Dr. Md. Nazrul Islam, PSO (Entomology), Dhaka

2. Rangpur

- Dr. Md. Abul Fazal Mollah, PSO, Regional Jute Research Centre, Rangpur

3. Chandina, Comilla

- Md. S.M. Shahariar Parvez, SSO, Regional Jute Research Centre, Chandina, Comilla

4. Nashipur, Dinajpur

- Md. Tanvir Rahman, SO, Regional Jute Research Centre, Nashipur, Dinajpur

5. Faridpur

- Dr. M. Mojibar Rahman, SSO, Regional Jute Research Station, Faridpur

H. Cotton Development Board (CDB)

1. Dhaka

- Dr. Md. Farid Uddin, Executive Director, Khamarbari, Dhaka
- Md. Kamrul Islam, Programme Director, Khamarbari, Dhaka

2. Jessore

- Md. Kutub Uddin, Chief Cotton Dev. Officer, Jessore
- SM Jakir Bin Alam, Cotton Dev. Officer, Jessore

3. Rangpur

- Md. Zillur Rahman, CCDO, Rangpur zone, Rangpur

4. Thakurgaon

- Md. Fazle Rabbi, CCDO, Thakurgaon

5. Dinajpur

- Md. H.M. Saifullah Azad, SSO, Dinajpur

6. Bandarban

- Mr. Mong Sanu Marma, SSO, Bandarban

I. Bangladesh Forest Research Institute (BFRI)

1. Khulna

- S. M. Sohaib Khan, ACF, Khulna

J. Forest Research Institute (FRI)

1. Chattogram

- Dr. Md. Ahsanur Rahman, DFO, Forest Protection Division, Chattogram
- Shameema Nasrin, Field Investigator, Forest Protection Division, Chattogram

K. Bangladesh Sugar crop Research Institute (BSRI)

1. Pabna

- Dr. Md. Amzad Hossain, Director General, Ishurdi, Pabna
- Dr. Md. Ataur Rahman, PSO, Division of Entomology, Ishurdi, Pabna
- Dr. Md. Shamsun Rahman, PSO, Division of Plant Pathology, Ishurdi, Pabna.
- Dr. Md. Al-Imran, SO, Agronomy, Ishurdi, Pabna.

L. Wheat & Maize Research Institute

1. Dinajpur

- Dr. Naresh Chandra Deb Barma, DG, Nashipur, Dinajpur
- Md. Abdul Hakim, SSO, Nashipur, Dinajpur

M. Sugar Mill Corporation (SMC)

1. Dinajpur

- Md. Asmat Ali, GM (Agri.), Setabganj Sugar Mill, Dinajpur

2. Thakurgaon

- Md. Mazharul Islam, GM (Agri.), Thakurgaon Sugar Mill, Thakurgaon

3. Panchogarh

- Md. Mazharul Islam, GM, Panchogarh Sugar Mill, Panchogarh

N. University

1. Rajshahi University

- Dr. Md. Saiful Islam, Professor, Dept. of Crop Science, Faculty of Agriculture
- Dr. Md. Mosharrof Hossain, Professor, Dept. of Zoology
- Dr. Md. Kawsar Hossain, Professor, Dept. of Crop Science

2. BSMRAU, Salna, Gazipur

- Dr. Ashraf Ali Khan, Professor, Department of Plant Pathology
- Dr. Md. Khorshed Alam Bhuiyan, Professor, Department of Plant Pathology
- Dr. Md. Nasimul Bari, Professor, Department of Agronomy
- Dr. Md. Ramizuddin, Professor, Department of Entomology

3. Sylhet Agricultural University, Sylhet

- Prof. Dr, M.A.H.H Mahfuzul Haque, Department of Plant Pathology
- Prof. Dr. Abdul Mukit, Department of Plant Pathology
- Prof. Dr. Asaduddoula, Department of Plant Pathology
- Dr. M Monirul Islam, Associate Prof., Department of Plant Pathology
- Dr. Md. Abdur Razzak Choudhury, Associate Professor, Department of Entomology
- Prof. Dr. Md. Nazrul Islam, Department of Agronomy

4. BAU, Mymensingh.

- Prof. Dr. Bahadur Meah, Plant Pathology Department
- Prof. M Atikur Rahman, Plant Pathology Department
- Prof. Dr. Md. Rashidul Islam, Plant Pathology Department
- Dr. K.M. Golam Dastogeer, Assistant Professor, Plant Pathology Department
- Prof. Dr. Mahbuba Jahan, Department of Entomology

5. Khulna University

- Prof. Dr. Asaduzzaman, Professor,
- Mst. Sabiha Sultana, Associate. Professor,

6. Patuakhali Science & Technology University

- Hamidur Rahman, Professor, Entomology, Dhumki, Patuakhali
- Dr. Zahed Pervez, Professor, Pathology, Dhumki, Patuakhali
- Dr.S M. Asraful Islam, Assoc. Professor, Pathology, Dhumki, Patuakhali
- Dr. Sultan Ahmed, Professor, Agronomy, Dhumki, Patuakhali

7. Haji Danesh Science & Technology University, Dinajpur

- Dr. Md. Alomgir Hossain, Prof. Dept of Entomology
- Md. ATM Shafiqul Islam, Dept. of Plant Pathology
- Md. Shafiqul Islam Sikdar, Dept. of Agronomy

8. Chattogram University

- Prof. Dr. Md. Aktar Hossain, Dept. of Forest Entomology, Institute of Forestry and Environmental Sciences
- Prof. Dr. Ismail Miah, Dept. of Zoology
- Prof. Dr. Md. Harun-ur-Rashid, Dept. of Botany

9. Jahangir Nagar University

- Prof. Zahed Uddin Mahmood Khan, Dept. of Botany
- Prof. Dr. Md. Abdullah hel Baqui, Dept. of Zoology

10. University of Dhaka

- Prof. Dr. Md. Naimul Naser, Dept. of Zoology
- Prof. Dr. Md. Nurul Islam, Dept. of Botany

11. Sher-e-Bangla Agricultural University, Dhaka

- Prof. Dr. Md. Rafiqul Islam, Dept. of plant pethology
- Prof. Dr. Md. Jafar Ullah, Dept. of Agronomy
- Dr. Nur Mohal Akhter Banu, Dept. of Entomology

Center for Resource Development Studies Ltd. (CRD
13C/8C, Babor Road, Mohammadpur, Dhaka-1207, Bangladesh
e-mail: crdslbd@yahoo.com; Tel: 88-02-55020295