

## The genus *Phyllosticta* in India\*)

By Vasant Gurunath Rao \*\*)

(M. A. C. S. Biological Labs, Poona-4, India).

The writer undertook a comprehensive and systematic survey of the fungus genus, *Phyllosticta* in Bombay-Maharashtra \*) and contributed a series of papers (Rao, V. G., Ref. Nos. 37 to 42). This paper presents a comprehensive Host Species Index of the genus *Phyllosticta* reported from India so far in addition. The species have been arranged alphabetically.

1. — *Phyllosticta atangii* Hasija on *Alangium lamarckii*. Thw.
2. — *albizinae* Vasant Rao on *Albizia labbeck* Benth.
3. — *alii* Tehon et Daniels on *Allium cepa* L.
4. — *althaeina* Sacc. on *Althaea rosea* L.
5. — *ambrosioides* Thuem. on *Chenopodium album* L. & *Chenopodium giganteum* L.
6. — *amorphophallicola* Vasant Rao on *Amorphophallous campanulatus* Bl.
7. — *anonae-squamosae* Vasant Rao on *Anona squamosa* L.
8. — *arachidis-hypogaeae* Vasant Rao on *Arachis hypogaeae* L.
9. — *araliae* Sacc. et Berl. on *Aralia* sp.
10. — *arecae* Died. on *Area catechu* L.
11. — *artabotrycola* Vasant Rao on *Artabotrys odoratissima* Br.
12. — *artocarpicola* Batista on *Artocarpus incisa* L.
13. — *artocarpina* (Syd & Butler) Syd on *Artocarpus integrifolia* L. & *Artocarpus heterophyllous* Lam.
14. — *aspidopterydae* Ananthanarayanan on *Aspidopterys cordata* A. Juss.
15. — *Phyllosticta asteris* Bres on *Callistephus chinensis* Bergmans.
16. — *bacilliformis* Padwick and Merh. on *Chenopodium album* L.
17. — *barleriae* da Costa and Mundk. on *Barleria* sp.
18. — *bauhiniae* Cooke on *Bauhinia purpurea* L.
19. — *bischofia* da Costa and Mundk. on *Bischofia* sp.
20. — *bosensis* Bose and Mathur on *Ricinus communis* L.
21. — *bougainvillicola* Vasant Rao on *Bougainvilleae spectabilis* Willd.
22. — *brassicae* (Curr.) Wested on *Brassica oleraceae* var. *botrytis* L.; *B. oleraceae* var. *capitata* L.; *B. oleraceae* var. *caulorapa* DC. and *B. juncea* L.
23. — *briosiana* Traverso on *Acalypha* sp.
24. — *buddleiae* Syd. and Butler on *Buddleia* sp.
25. — *buteae* Syd. on *Butea frondosa* Roxb.
26. — *butleri* da Costa and Mundk. on *Hoya* sp. and *Hoya wightii* Hook.
27. — *bauhiniae* Cooke on *Bauhinia purpurea* L.
28. — *cajani* Syd. on *Cajanus cajan*, Mill.
29. — *caladii* Batista on *Caladium bicolor* L.
30. — *cannicola* Vasant Rao on *Canna indica* L.
31. — *capparidicola* Speg. on *Capparis* Sp.
32. — *capparis-heyneanae* da Costa and Mundk. on *Capparis heyneana* L.

\*) A part of the author's Ph. D. (Agri) Thesis approved by the University of Poona, Poona, India 1964.

\*\*) Research Fellow in Mycology and Plant Pathology.

33. — *capsici* Speg. on *Capsicum annum* L.
34. — *caricae-papayae* Allesch. on *Carica papaya* L.
35. — *carissae* Kalebhr. and Cooke on *Carissa spinavum* DC.
36. — *cassiae-occidentalis* Vasant Rao on *Cassia occidentalis* L.
37. — *cassiae-torae* Vasa Rao on *Cassia tora* L.
38. — *celosiae* Thuem. on *Celosia cristata* L.
39. — *cestricola* Vasant Rao on *Cestrum nocturnum* L.
40. — *chrysanthemi* Ellis and Dearn. on *Chrysanthemum* sp. and *Chrysanthemum indicum* L.
41. — *citrullina* Chester on *Citrullus vulgaris* Sch.
42. — *clerodendri* Syd. and Butler on *Clerodendron* sp.
43. — *cocculi* Thuem. on *Anamirta cocculus* W. & A.
44. — *cocos* Cooke on *Cocos nucifera* L. & *Caryota urens* L.
45. — *codiaeicola* Died. on *Codiaeum* sp.
46. — *coffeicola* Speg. on *Coffea liberata* L. & *Coffea arabica* L.
47. — *coffeyicola* Vasant Rao on *Coix lachryma-jobi* L.
48. — *combreticola* P. Henn. on *Combretum ovalifolium* Roxb.
49. — *commelinicola* Young on *Commelina benghalensis* L.
50. — *confertissima* Ellis and Everh. on *Ulmus integrifolia* Roxb.
51. — *crinicola* Siemaszko on *Crinum* sp.
52. — *crotalariae* Speg. on *Crotalaria juncea* L.
53. — *crotonina* Vasant Rao on *Croton* sp.
54. — *crotonophila* Speg. on *Croton* sp.
55. — *cucurbitacearum* Sacc. on *Cucurbita* sp.
56. — *cyamopsidis* Vasant Rao on *Cyamopsis tetragonoloba* (L.) Taub.
57. — *cycadina* Pass on leaves of *Cycas revoluta* Thunb.; *Sansevieria cylindrica* Thunb. & *S. macrophylla* Thunb.
58. — *dahliaeicola* Burn. on *Dahlia variabilis* Desf.
59. — *dalbergiicola* Sydow. on *Dalbergia melnoxylon* G. & P. & *Dalbergia lanceolaria* L.
60. — *delhiensis* Chona and Mungal on *Capparis sepiaria* L.
61. — *desmodiicola* Died. on *Desmodium* sp., *D. tiliaefolium* L. & *D. laxiflorum* DC.
62. — *dioscoreae* Cooke on *Dioscorea* sp. & *D. alata* L.
63. — *diospyri* Syd. and Butler on *Disopyros embryopteris* Pers.
64. — *dolichi* Brun. on *Dolichos biflorus* L. & *D. lablab* L.
65. — *draceneae* Griff and Maubl. on *Dracaena lindii* Berk.
66. — *draconis* Berk. on *Dracaena lindii* Berk.
67. — *elaeidis* Vasant Rao on *Elaeidis guineensis* Jacq.
68. — *elettariae* Chowdhury on *Elettaria cardamomum* Mont.
69. — *epichloes* Thirumal. on stromata of *Epichloe cinerea* B. & R. Br.
70. — *eribotryae* Thuem. on *Eriobotrya japonica* Lindl.
71. — *eriodendri* Died. on *Eriodendron anfractuosum* DC.
72. — *eucalypti* Thuem. on *Eucalyptus globulus* L.
73. — *exigua* Syd. on *Quercus* sp.
74. — *ficicola* Pt. on *Ficus glomerata* Roxb.
75. — *fici* Bres. on *Ficus repens* Roth.
76. — *flavidus* Sacc. on *Callistemon indica* Roxb.
77. — *gastonis* Roum. on *Musa paradisiaca* L.
78. — *geranii* Ell. and Ev. on *Geranium* sp.
79. — *gerbericola* Batista on *Gerbera jamesonii* Bolus
80. — *gladioloides* Batista on *Gladiolus* sp.
81. — *glaucispora* Delacr. on *Nerium odorum* Soland.
82. — *gliricidicola* Vasant Rao on *Gliricidia maculata* L.
83. — *glumarum* (Ellis and Tracy) Miyake on *Oryza sativa* L.

84. — *glycines* Thuern. on *Glycine hispida* Max.
85. — *glycosmidis* Syd. & Butler on *Glycosmis pentaphylla* Correa.
86. — *Phyllosticta gomphrenicola* Speg. on *Gomphrena globosa* L.
87. — *gossypina* Ell. et Mart. on *Gossypium hirsutum* L.
88. — *grewiae* Died. on *Grewia asiatica* L.
89. — *gymnosporicola* Vasant Rao on *Gymnosporia rothiana* M.
90. — *hasijai* Agarwal on *Acacia melanoxylo* R. Br.
91. — *hedychii* Petr. on *Hedychium coronarium* Koenig
92. — *hederae* Sacc. and Roum. on *Hedera helix*.
93. — *heterophragmae* Chona & Munjal on *Heterophragma adenophyllum* Seem.
94. — *hibiscina* Ellis & Everh. on *Hibiscus cannabinus* L. & *H. esculentus* L.
95. — *hortorum* Speg. on *Solanum melongena* L.
96. — *Phyllosticta humuli* Sacc. & Speg. on *Humulus lupulus* L.
97. — *ingae-dulcis* Died. on *Inga dulcis* Willd. & *Pithecolobium dulce* Benth.
98. — *impatiens* Siemaszko on *Impatiens balsamina* L.
99. — *ipomoeae* Ellis and Kellerman on *Ipomoea* sp.
100. — *ixorae* Rangel on *Ixora brachiata* L.
101. — *jasminicola* Vasant Rao on *Jasminum sambac* Ait.
102. — *jasmini-pubescentis* Vasant Rao on *Jasminum pubescens* Willd.
103. — *khandalensis* Vasant Rao on *Pogostemon parviflorus* Benth.
104. — *kigeliae* Died. on *Kigelia pinnata* DC.
105. — *lactucicola* Hara & Ogawa. on *Lactuca sativa* L.
106. — *lagenariae* Passer. on *Lagenaria leucantha* (Dutch) Rusby.
107. — *lagerstroemiae* Ell. & Ev. on *Lagerstroemia* Sp.
108. — *limonum* Lucas & Da Camara on *Citrus medica* var. *acida* L.
109. — *lohogadensis* Vasant Rao on *Bridelia retusa* Spreng.
110. — *lycopersici* Peck. on *Lycopersicon esculantum* Mill.
111. — *Macropycnidia* Hasija on *Solanum melongena* L.
112. — *magnoliae* Sacc. on *Magnolia* sp.
113. — *mahabaleshwariensis* Vasant Rao on *Embelia viridiflora* Scheff.
114. — *marantaceae* P. Henn on *Maranta* sp.
115. — *martyniae* Thuern. on *Martynia diandra* Glox.
116. — *melii* Vasant Rao on *Michelia champaca* L.
117. — *microconidia* Hasija on *Pogostemon plectranthoides* Desf.
118. — *minusopsidis-elengi* Vasant Rao on *Minusops elengi* L.
119. — *miurai* Miyake on *Oryza sativa* L.
120. — *morifolia* Pass. on *Morus alba* L.
121. — *moringicola* da Costa and Mundk. on *Moringa* sp.
122. — *marmorata* Cooke on *Mallotus philippinensis* Muell.
123. — *mortoni* Fair on *Mangifera indica* L.
124. — *mucunae* Cif. et Frag. on *Mucuna* sp.
125. — *murrayae* Chandra & Tandon on *Murraya exotica* L.
126. — *myroxyli* da Costa and Mundk. on *Myroxyylon toluiferum* H. B. & K.
127. — *nicandricola* Vasant Rao on *Nicandra physaloides* Gaertn.
128. — *pandanicola* Young on *Pandanus tectorius* Soland. & *Pandanus fascicularis* L.
129. — *perseae* Ell. et Mart. on *Persea americana* Mill.
130. — *persicae* Sacc. on *Pyrus malus* L.
131. — *phaseolina* Sacc. on *Phaseolus vulgaris* L. & *Ph. mungo* var. *radiatus* L.
132. — *phaseoli-lunati* Vasant Rao on *Phaseolus lunatus* L.
133. — *piperis-nigri* Vasant Rao on *Piper nigrum* L.
134. — *pirina* Sacc. on *Pyrus communis* L. & *Pyrus malus* L.
135. — *pisi* West. on *Pisum sativum* L.
136. — *pleopeltidis* Vasant Rao on *Pleopeltidis* sp.
137. — *plumbaginicola* Vasant Rao on *Plumago zeylanica* L.

138. — *plumierae* F. Tassi, on *Plumeria alba* L.
139. — *polyalthicola* Vasant Rao on *Polyalthia longifolia* Benth.
140. — *pongamae* Sydow, on *Pongamia glabra* Vent.
141. — *pothosina* Vasant Rao on *Pothos scandens* L.
142. — *pratima* Chowdhury on *Premna bengalensis* Clarke.
143. — *prunicola* (Opiz) Sacc. on *Prunus armeniaca*; *P. persica* S. & Z.; *P. communis* L. & *P. puddum*. Roxb.
144. — *psoraleae* (Cooke) Tassi on *Psoralea corylifolia* L.
145. — *religiosa* Syd. on *Ficus religiosa* L.
146. — *roberti* Boyer and Jacz. on *Ficus elastica* L.
147. — *rosae* Desm. on *Rosa* sp.
148. — *ruscigena* Sacc. on *Ruscus aculeatus* L.
149. — *sacchari* Speg. on *Saccharum officinarum* L.
150. — *sapindi-emarginati* Vasant Rao on *Sapindus emarginatus* Vahl.
151. — *sapoticola* Vasant Rao on *Achras sapota* L.
152. — *sedgwickii* da Costa & Mundk. on *Grewia viliaefolia* Vahl.
153. — *sesami* Bohovik on *Sesamum indicum* L.
154. — *sesbaniae* Syd. on *Sesbania grandiflora* Pers.
155. — *sissoo* Died. on *Dalbergia sissoo* Roxb.
156. — *solitaria* Ellis & Everh. on *Malus sylvestris* L.
157. — *solani* Hasija on *Solanum melongena* L.
158. — *sorghina* Sacc. on *Andropogon sorghum* Brot.
159. — *spinacea* Zimm. on *Spinacea oleracea* L.
160. — *sterculicola* Trav. on *Guazuma tomentosa* Kunth.
161. — *sultat* Chowdhury on *Carica papaya* L.
162. — *symploci* Syd. on *Symplocos* sp.
163. — *tamarindicola* Vasant Rao on *Tamarindus indica* L.
164. — *tectonae* Syd. on *Tectona grandis* L.
165. — *tephrosiae* Agarwal on *Tephrosia purpurea* Pers.
166. — *tricoloris* Syd. and Butler on *Viola odorata* L.
167. — *trilobachnes* Vasant Rao on *Trilobachne* sp.
168. — *vignae* Speg. on *Vigna catjang* Walp.
169. — *violae* Desm. on *Viola odorata* L.
170. — *viticola* Sacc. et Speg. on *Vitis* sp.
171. — *zeae-maydis* Saccas. on *Zea mays* L.
172. — *zingiberi* Ramakrishnan on *Curcuma longa* L. & *Zingiber officinale* Rosc.
173. — *zinniae* P. Brun. on *Zinnia elegans* Jacq.

#### Acknowledgements.

The writer is deeply indebted to Prof. M. N. Kamat for his absorbing interest, encouragement and guidance throughout the course of this study and to the Director M. A. C. S., Labs. Poona-4 for the facilities. He is also thankful to I. C. A. R. and U. G. C., New Delhi for the award of Research Fellowship during the years (1960—1962) and (1962—1964) respectively and to Dr. F. Petrak, Wien (Austria) for kindly going through the manuscript.

#### References.

1. Argawal, G. P., 1961: Fungi causing Plant diseases at Jabalpur (Madhya Pradesh) III, J. Indian Bot. Soc. **40**: 404—408.
2. — 1962: Fungi causing plant diseases at Jabalpur (Madhya Pradesh) VIII. Mycopathologia. **17**: 309—314.
3. — & S. K. Hasija, 1961: Zungi causing plant diseases at Jabalpur (Madhya Pradesh) V. Proc. Nat. Acad. Sci. India. **31**: 99—108.

4. Ananthanarayanan, S., 1964: A new leaf-blotch of bread-fruit from India. *Plant Dis. Repr.* **48**: 292—293.
5. — 1964: A new species of *Phyllosticta* and its associated ascigerous stage. *Mycopathologia*. **22**: 96—98.
6. Anonymous, 1950: List of common names of Indian Plant diseases. *Indian J. Agric. Sci.* **20**: 107—142.
7. Atheya, S. C. & B. Singh, 1962: A new leaf spot disease of *Capsicum annuum* L. *Sci. & Cult.* **28**: 85—86.
8. Bilgrami, K. S., 1963: Leaf spot diseases of some common ornamental plants. *Proc. Nat. Acad. Sci. India*. **33**: 429—452.
9. Bose, S. K., and S. C. Mathur, 1949: A new leaf spot disease of Castor (*Ricinus communis* L.) *Curr. Sci.* **18**: 210—211.
10. Chandra, S., 1964: Three fungi new to India *Curr. Sci.* **33** (14); 440—441.
11. Chona, B. L. & R. L. Munjal, 1955: Notes on Miscellaneous Indian Fungi II, *Indian Phytopath.* Vol. 8 (2): 184—198.
12. — — 1956: Notes on Miscellaneous Indian Fungi III. *Indian Phytopath.* **9** (1): 53—66.
13. — — & J. N. Kapoor, 1956: Notes on Miscellaneous Indian Fungi IV. *Indian Phytopath.* **9** (2): 125—132.
14. Chowdhury, S., 1958: Notes on fungi from Assam. *Lloydia*. **21**: 152—156.
15. DaCosta, G. C. and B. B. Mundkur, 1948: A revision of the genus *Phyllosticta* in India. *Proc. Nat. Inst. Sci. India*. **14**: 55—63.
16. Desai, M. V. & K. P. Patel, 1961: Leaf blight of *Dracaena* incited by *Phyllosticta darconis*. *Plant Dis. Repr.* **45**: 203.
17. Hasija, S. K., 1962: Some foliicolous Deuteromycetes from Rewa (M. P.) *Proc. 49th Indian Sci. Congr. Part III*. 246.
18. — 1962: Additions to the fungi of Jabal, pur (Madhya Pradesh) I. *Mycopathologia* **18**: 84—92.
19. — 1962: Additions to the fungi of Jabalpur (Madhya Pradesh) II. *Proc. Nat. Acad. Sci. India*. **32**: 413—416.
20. Jain, A. C., B. G. Nikam, S. N. Kulkarni & O. P. Sharma, 1960: Fungi of Gwalior & Indore region. *The Vikram* **4**: 181—187.
21. Joshi, N. C., 1958: Fungi of Ajmer (Rajasthan) III. *Proc. Nat. Acad. Sci. India*. **28**: 303—307.
22. — & K. P. T. Vishist, 1959: Fungi of Ajmer (Rajasthan) IV. *Proc. Nat. Acad. Sci. India* **29**: 147—150.
23. Mathur, R. S., J. P. Agnihotri & R. N. S. Tyagi, 1962: Occurrence of a serious disease of spinach from India. *Cur. Sci.* **31**: 107—108.
24. Padwick, G. W. & J. L. Merh, 1943: Notes on Indian Fungi I. *Mycol. Pap. Imperial Mycol. Inst.* **7**: 1—7.
25. — 1950: *Manuel of Rice Diseases*. C. M. I. Kew, Surrey, (England), 198 pp.
26. Pathak, N. C. and R. N. Ghosh, 1962: Fungi of Uttar Pradesh. *Bull. Nat. Bot. Garden. (C. S. I. R.) Lucknow, India Publ. No.* **62**: 97—99.
27. Patel, M. K., M. N. Kamat and V. P. Bhide, 1949: Fungi of Bombay. *Suppl. I. Indian Phytopath* **2**: 142—155.
28. Prasad, S. S. & B. D. Sinha, 1962: Fungi causing diseases at Muzafarpur-I. *Proc. Nat. Acad. Sci. India* **32**: 435—438.
29. Mitter, J. H. & R. N. Tandon, 1938: Fungi of Nainital-II. *J. Indian Bot. Soc.* **17**: 177—182.
30. Mundkur, B. B., 1938: Fungi of India supplement I. *I. C. A. R. Monogr.* **12**: 54 pp.
31. Ramakrishnan, T. S., 1942: A leaf spot disease of *Zingiber officinale* caused by *Phyllosticta zingiberi* n. sp. *Proc. Indian Acad. Sci. Sec. B.* **15**: 167—171.



32. Rao, V. G., 1962: A new *Phyllosticta* leaf spot of *Sapindus emarginatus* Vahl. from India. *Curr. Sci.* **31**: 475—476.
33. — 1963: Some new pycnidial fungi on *Mimusops elengi* Linn. from India. *Mycopathologia*. **19** (13): 225—228.
34. Rao, V. G., 1963: Some new records of Fungi-Imperfectio from India. *Sydowia Ann. Mycol.* **16**: 41—45.
35. — 1963: Some new records of Follicolous Fungi-Imperfecti from India. *Bull. Bot. Soc. Coll. Sci. Nagpur (India)*, **4** (2): 54—57.
36. — 1963: Some new records of Sphaeropsidales from India. *Inst. de Micol. Univ. Recife (Brazil) Publ. No.* **383**: 1—13.
37. — 1963: The genus *Phyllosticta* in Bombay-Maharashtra I. *Sydowia Ann. Mycol.* **16**: 275—283.
38. — 1963: The genus *Phyllosticta* in Bombay-Maharashtra II. *Mycopathologia* **20** (1—2): 60—70.
39. — 1964: The genus *Phyllosticta* in Bombay-Maharashtra III. *Jour. Univ. Poona. Sci. & Tech. Section (In Press)*.
40. — 1964: The genus *Phyllosticta* in Bombay-Maharashtra IV. *Mycopathologia* **22** (2—3): 157—166.
41. — 1964: The genus *Phyllosticta* in Bombay-Maharashtra V. *Mycopathologia* **23** (2): 125—128.
42. — 1964: The genus *Phyllosticta* in Bombay-Maharashtra VI. *Mycopathologia*. (In press).
43. — 1964: Studies on Part. I. Market & Storage diseases of Fruits & Vegetables, Part II. Contributions towards our knowledge of the fungus genus *Alternaria*, Part III. The fungus genus *Phyllosticta* in Bombay-Maharashtra. Ph. D. (Agri) Thesis University of Poona, India pp. 313. (unpublished).
44. Roy, A. K., 1964: Occurrence of *Periconia sacchari* Johnst. and *Phyllosticta sacchari* Speg. on Sugarcane in Assam. *Indian Phytopath* **17** (1): 75.
45. Sudhir Chandra and R. N. Tandon, 1964: A new species of *Phyllosticta* on the leaves of *Murraya exotica* L. *Curr. Sci.* **33** (13): 409—410.
46. Summanwar, A. S. & V. P. Bhide, V. P. 1962: Leaf spot of turmeric (*Curcuma longa* L.) caused by *Phyllosticta Zingiberi* Ramakrishnan J. *Indian bot. Soc.* **41**: 313—315.
47. Sydow, H. and E. J. Butler, 1916: Fungi Indiae Orientalis. Pars. V. *Ann. Mycol.* **14**: 177—220.
48. — and J. H. Mitter, 1935: *Fungi incidi* II. *Ann. Mycol.* **33**: 46—71.
49. Tandon, R. N. & K. S. Bilgrami, 1957: Leaf spot disease of *Artocarpus heterophyllus* caused by *Phyllosticta artocarpina*. *Proc. Nat. Acad. Sci. India.* **27**: 204—209.
50. Tandon, R. N. & K. S. Bilgrami, 1961: Some leaf spot diseases. *Curr. Sci.* **30**: 348—349.
51. — & Sudhir Chandra, 1964: Suppl. to the list of Indian Fungi. (1957—1962). *Univ. Allahabad. Studies*, 1963—64, Allahabad (India): 117—120.
52. Thirumalachar, M. J., 1948: Some new or interesting fungi. *Bull. Torrey Bot. Club.* **75**: 175—177.
53. Tunstall, A. C., 1927: Vegetable parasites of the tea plant. The blight. *Quart. J. Indian Tea Assoc.* **3**: 73—86.
54. Vasudeva, R. S., 1960: The fungi of India. I. C. A. R. New Delhi *Sci. Monograph.* 223—227 (Revised Ed. of E. J. Butler & G. R. Bisby of 1931).
55. Uppal, B. N., M. K. Patel and M. N. Kamat, 1934: The fungi of Bombay, Bombay. *Dept. Agric. Res. Bull.* **76**: 1—56.

# ZOBODAT - [www.zobodat.at](http://www.zobodat.at)

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Sydowia](#)

Jahr/Year: 1965/1966

Band/Volume: [19](#)

Autor(en)/Author(s): Rao Vasant Gurunath

Artikel/Article: [The genus \*Phyllosticta\* in India. 117-122](#)