

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

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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. — *allii* 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.

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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. — *coffaeicola* 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 *Myroxylon 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.

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#### 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.

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