

Diversity of foliicolous micromycobionts in Munnar and Wyanad forest regions of Kerala

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The study is carried out during the period from 1997-2000 in Munnar and Wyanad regions of Kerala State. The study resulted in recording 105 taxa. Of these, 80 belong to Meliolaceae ; 20 belong to Asterinaceae and 5 belong to Fungi Imperfecti. The study forms the base line data for the region.

Key Words : Foliicolous fungi, Munnar, Wyanad forests, Kerala

INTRODUCTION

The foliicolous micromycobionts or leaf infecting microfungi are well known in causing plant diseases. These fungi bring biochemical changes such as activities in the host plants. However, the chemical composition and utilitarian aspect of these fungi is to be studied. The present work was carried out between the years 1997-2000 and which forms the first of its kind for the regions in providing the base-line data.

STUDY AREA

Munnar is in Idukki district. Both Idukki and Wyanad districts lie in the hilly regions of Kerala State and are separated by a Palghat gap, located at an altitude ranging from 900 to 2000 m, rain fall from 2000 to 3000 mm, temperature ranges from 13-32°C. Along with the natural high altitudinal sholas and savannas, the study area comprises Eucalyptus and Wattle plantations.

In Munnar region, Mannavan shola is the largest shola forest having an area of 370 hectares ; Rajamala comes under Eravikulam National Park, comprises about 97 sq. km. ; Chinnar with an area of 90 sp. km. In Wyanad region, Manandavadi.

Thirunelli, Banasuran mala and Chembra or Meppadi hills have been covered (Chandrasekhar *et al.*, 1998 ; Shetty and Vivekananthan, 1971).

METHODOLOGY

Infected plant parts collected along with its twig, preferably with flowers and fruits, to facilitate the identity of the host plant. Infection pattern, date of collection, altitude, type of forest, additional information regarding host plant etc. are recorded in the field. Collections pressed in between the blotters, changed to fresh blotters every day so as to ensure their dryness.

In the laboratory, nail polish technique (Hosagoudar and Kapoor, 1984) used for ectophytic fungi to study them *in situ*, while, sections were made for innate fungi.

OBSERVATIONS

The identified taxa are presented here.

Meliolaceae

1. *Amazonia gordonicola* Hosag. *et al.*

On leaves of *Gordonia* sp. (Theaceae), Banasuran mala, Wyanad, Kerala, April 16, 1999, C.K. Biju.

2. *Amazonia peregrina* Sydow
On leaves of *Maesa indica* (Roxb.) DC. (Myrsinaceae), Rajamala, Idukki, Kerala, Oct. 11, 1998, C.K. Biju.
3. *Amazonia psychotriae* Henn. var. *microspora* Hosag. et al.
On leaves of Rubiaceae member, Mannavan shola, Idukki, Kerala, Sept. 16, 1999, C. K. Biju.
4. *Amazonia vaccinii* Hosag. et al.
On leaves of *Vaccinium* sp. (Vacciniaceae), Banasuran mala, Wyanad, Kerala, Nov. 20, 1998, C.K. Biju.
5. *Appendiculella gaultheriae* Hosag. et al.
On leaves of *Gaultheria fragrantissima* Wall. (Ericaceae), Mannavan shola, Idukki, Kerala, Jan. 5, 1999, C.K. Biju.
6. *Appendiculella shettyi* Hosag. et al.
On leaves of *Gordonia obtusa* Wall. ex. Wight & Arn. (Theaceae), Mannavan shola, Munnar, Idukki, Kerala, Jan. 5, 1999, C.K. Biju.
7. *Appendiculella vacciniacearum* Hosag. et al.
On leaves of *Vaccinium leschenaultii* Wight (Vacciniaceae), Mannavan shola, Idukki, Kerala, Sept. 29, 1998, C.K. Biju.
8. *Appendiculella vivekananthanii* Hosag. et al.
On leaves of *Gordonia obtusa* Wall. Ex. Wight & Arn. (Theaceae), Mannavan shola, Munnar, Idukki, Kerala, Jan. 5, 1999, C.K. Biju.
9. *Armatella actinodaphnes* Hosag. et al.
On leaves of *Actinodaphne* sp. (Lauraceae), Banasuran mala, Wyanad, Kerala, April 16, 1999, C.K. Biju.
10. *Armatella apolloniadis* Hosag. et al.
On leaves of *Apollonias arnottii* Nees (Lauraceae), Rajamala Hills, Idukki, Kerala, Sept. 14, 1999, C.K. Biju.
11. *Armatella caulicola* Hosag. et al.
On leaves of *Litsea* sp. (Lauraceae), Mannavan shola, Idukki, Kerala, Jan. 6. 1999, C.K. Biju.
12. *Armatella litseae* Yates var. *boninensis* Katumoto & Harada
On leaves of *Neolitsea scrobiculata* (Meisner), Gamble (Lauraceae), Banasuran mala, Wyanad, Kerala, Nov. 19, 1999, C.K. Biju.
13. *Asteridiella cyclopoda* (Stev.) Hansf. var. *vernoniae* Hosag. et al.
On leaves of *Vernonia arborea* Buch.-Ham. (= *Vernonia monosis* Benth. ex Clarke) (Asteraceae), Mannavan shola, Idukki, Kerala, Nov. 19. 1999, C.K. Biju.
14. *Asteridiella entebbeensis* (Hansf. & Stev.) Hans. var. *glochidio* Hosag. et al.
On leaves of *Glochidion* sp. (Euphorbiaceae), Mannavan shola, Munnar, Idukki, Kerala, Jan. 5, 1998, C.K. Biju.
15. *Asteridiella gaultheriae* Hosag. et al.
On leaves of *Gaultheria indica* Wall. (Ericaceae), Rajamala, Munnar, Idukki, Kerala, May 13, 1999, C.K. Biju.
16. *Asteridiella glycosmidis* Hosag. et al.
On leaves of *Glycosmis pentaphylla*. (Retz.), DC. (= *G. cochinchinensis sensu* Gamble Rutaceae), Manandavadi, on the way to Wyanad, Kerala, April 16, 1999, C.K. Biju.
17. *Asteridiella scolopiae* Hosag.
On leaves of *Scolopia crenata* (Wight. & Arn.) Clos (Flacourtiaceae), Chembra peak, Wyanad, Kerala, April 14, 1999, C.K. Biju.
18. *Asteridiella triloba* (Wint.) Hansf.
On leaves of *Mukia* sp. (Cucurbitaceae), Mannavan shola, Munnar, Idukki, Kerala, Jan. 1, 1999, C.K. Biju.
19. *Asteridiella triloba* (Wint.) Hansf. var. *momordicae* Hosag. et al.
On leaves of *Momordica* sp. (Cucurbitaceae), Mannavan shola, Idukki, Kerala, Jan. 5, 1999, C.K. Biju.
20. *Asteridiella vivekananthanii* Hosag.
On leaves of *Clerodendron viscosum* Vent. (Verbenaceae), Chembra hills. Wyanad, Kerala, Nov. 18, 1998, C.K. Biju.
21. *Asteridiella wyanadensis* Hosag. et al.
On leaves of *Mallotus* sp. (Euphorbiaceae), Hansf., Chembra, Wyanad, Kerala, April 4, 1999, C.K. Biju.
22. *Basavamyces litseae* Hosag. et al.
On leaves of *Litsea* sp. (Lauraceae), Mannavan shola, Idukki, Kerala, Sept. 16, 1999, C.K. Biju.
23. *Irenopsis gordoniae* Hosag. et al.
On leaves of *Gordonia* sp. (Theaceae), Mannavan shola, Munnar, Idukki, Kerala, Jan. 5, 1999, C.K. Biju.
24. *Irenopsis triumfettae* Stev. var. *indica* Hosag. & Abraham,
On leaves of *Triumfelta rhomboidea* Jaeg. (Tiliaceae), Banasuran mala, Wyanad, Kerala, Nov. 19, 1998, C.K. Biju.
25. *Irenopsis vaccinii* Hosag. et al.

On leaves of *Vaccinium leschenaultii* Wight (Vacciniaceae), Rajamala, Idukki, Kerala, Sept. 11, 1998, C.K. Biju.

26. *Meliola actephilae* Hosag. et al.

On leaves of *Actiphila excelsa* (Dalz.), Muell.=Arg. (Euphorbiaceae), Tirunelli, Wyanad, Kerala, April 15, 1999, C.K. Biju.

27. *Meliola allophyli-concanici* Hosag.

On leaves of *Allophyllus serrulatus* Radlk. (Sapindaceae), Banasuran mala, Wyanad, Kerala, Nov. 18, 1998, C. K. Biju.

28. *Meliola banasuranii* Hosag. et al.

On leaves of *Actinodaphne* sp. (Lauraceae), Banasuran mala, Wyanad, Kerala, April 16, 1999, C. K. Biju.

29. *Meliola bicornis* Wint.

On leaves of *Flemingia* sp. (Fabaceae), Banasuran mala, Wyanad, Kerala, Nov. 19, 1998, C.K. Biju.

30. *Meliola cadigensis* Yates var. *glycosmidis* (Kapoor) Hosag.

On leaves of *Glycosmis pentaphylla* (Retz.) Dc. (= *Glycosmis cochinchinensis* sensu Gamble) (Rutaceae), Tirunelli, Wyanad, Kerala, Oct. 11, 1998, C.K. Biju.

31. *Meliola cadegensis* Yates var. *toddaliae* Hosag. et al.

On leaves of *Toddalia* sp. (Rutaceae), Banasuran mala, Wyanad, Kerala, Nov. 19, 1998, C.K. Biju.

32. *Meliola cholakadensis* Hosag. et al

On leaves of Lauraceae member, Rajamala, Idukki, Kerala, Sept. 8, 1998, C.K. Biju.

33. *Meliola cymbopogonis* Kapoor.

On leaves of *Cymbopogon* sp. (Poaceae), Chembra hills, Wyanad, Kerala, Nov. 18, 1998, C.K. Biju.

34. *Meliola drapanochaeta* Sydow var. *insignis* Hosag.

On leaves of *Litsea* sp. (Lauraceae), Rajamala, Munnar, Idukki, Kerala, Jan. 7, 1999, C.K. Biju.

35. *Meliola erythropali* Hosag.

On leaves of *Erythralum populifolium* (Arn.) Mast. (Erythralaceae), Chembra, Wyanad, Kerala, April 4, 1999, C.K. Biju.

36. *Meliola gardenariae* Hansf. & Thirum. var. *indica* Hosag. et al.

On leaves of *Gardneria ovata* Wall. (Loganiaceae), Rajamala, Idukki, Kerala, Nov. 18, 1999, C. K. Biju.

37. *Meliola glanduliferae* Hosag. et al. On leaves of *Olea glandulifera* Well Ex. G. Don (Oleaceae),

Banasuran mala, Wyanad, Kerala, April 16, 1999, C. K. Biju.

38. *Meliola groteana* Sydow var. *maesae* Hosag. et al.

On leaves of *Maesa indica* (Roxb.) DC., (Myrsinaceae), Chembra hills, Wyanad, Kerala, Nov. 18, 1998, C.K. Biju.

39. *Meliola henryi* Hosag.

On leaves of *Canthium rheedii* DC. (Rubiaceae), Rajamala, Munnar, Idukki, Kerala, Aug. 15, 1998, C.K. Biju.

40. *Meliola henryi* Hosag. var. *oldenlandiae* Hosag. et al.

On leaves of *Hedyotis stylosa* R. Br. Ex. Wight & Arn. (Rubiaceae), Mannavan shola, Idukki, Kerala, Jan. 5, 1999, C.K. Biju.

41. *Meliola hydei* Hosag. et al.

On leaves of *Psychotria* sp. (Rubiaceae), Rajamala, Munnar, Idukki, Kerala, Jan. 7, 1999, C.K. Biju.

42. *Meliola indica* Sydow & Butler var. *careicola* Hosag. et al.

On leaves of *Careya arborea* Roxb. (Lecythidaceae), Banasuran mala, Wyanad, Kerala, Nov. 19, 1998, C.K. Biju.

43. *Meliola jasmini* Hansf. & Stev. var. *microspora* Hosag. et al.

On leaves of *Jasminum* sp. (Oleaceae), Banasuran mala, Wyanad, Kerala, Nov. 19, 1998, C.K. Biju.

44. *Meliola kanniyakumariana* Hosag.

On leaves of *Hedyotis stylosa* R. Br. ex. Wight & Arn. (Rubiaceae), Rajamala hills, Idukki, Kerala, Sept. 25, 1998, C.K. Biju.

45. *Meliola knoxiicola* Hosag. et al.

On leaves of *Knoxia* sp. (Rubiaceae), Mannavan shola, Idukki, Kerala, Jan. 5, 1999, C.K. Biju.

46. *Meliola ligustricola* Hosag. et al.

On leaves of *Ligustrum perrottettii* DC. (Oleaceae), Banasuran mala, Wyanad, Kerala, Nov. 19, 1998, C.K. Biju.

47. *Meliola litseae* Sydow var. *keralensis* Hosag.

On leaves of *Litsea* sp. (Lauraceae), Mannavan shola, Munnar, Idukki, Kerala, India, Nov. 19, 1999, C.K. Biju.

48. *Meliola litseae* Sydow var. *rotundipoda* Hansf.

On leaves of *Actinodaphne* sp. (Lauraceae), Banasuran mala, Wyanad, Kerala, April 16, 1999, C.K. Biju.

49. *Meliola mackenzieae* Hosag. et al.

On leaves of *Mackenzia gracilis* (Bedd.) Bremek.

- (Acanthaceae), Mannavan shola, Idukki, Kerala, Sept. 24, 1998, C.K.Biju.
- 50. *Meliola malabarensis*** Hansf.
On leaves of *Olea dioica* Roxb. (Oleaceae), Banasuran mala, Wyanad, Kerala, April 16, 1999, C.K.Biju.
- 51. *Meliola mannavanensis*** Hosag. *et al.*
On leaves of *Litsea* sp. (Lauraceae), Mannavan shola, Idukki, Kerala, Sept. 23, 1998, C.K.Biju.
- 52. *Meliola mayapiicola*** Stev. var. *indica* Hosag.
On leaves of *Chionanthus mala-elangi* (Dennst.) P.S. Green (= *Chionanthus malabaricus* Wall. Ex. G. Dony Bedd.) (Oleaceae), Banasuran mala, Wyanad, Kerala, Nov. 11, 1998, C.K.Biju.
- 53. *Meliola memecyli*** Sydow var. *microspora* Hosag. *et al.*
On leaves of *Memecylon gracile* Bedd. (Melastomataceae), Mannavan shola, Munnar, Idukki, Kerala, Nov. 19, 1999, C.K. Biju.
- 54. *Meliola millettiae-chrysophyllae*** Deight var. *indica* Hosag.
On leaves of *Derris benthamii* (Thw.) Thw. (Fabaceae), Banasuran mala, Wyanad, Kerala, Nov. 19, 1998, C.K.Biju.
- 55. *Meliola neanotidis*** Hosag. *et al.*
On leaves of *Neanotis monosperma* (Wall. ex Wight & Arn.) Lewis (Rubiaceae), Mannavan shola, Idukki, Kerala, June 2, 2000, C.K.Biju.
- 56. *Meliola neolitseeae*** Yamam.
On leaves of *Neolitsea cassia* (L.) Kosterm. (= *Neolitsea zeylanica* (Nees) Merr.) (Lauraceae), Banasuran mala, Wyanad, Kerala, Nov. 19, 1999, C.K.Biju.
- 57. *Meliola oldenlandiae*** Hansf. & Stev.
On leaves of *Hedyotis* sp. (Rubiaceae), Mannavan shola, Idukki, Kerala, Oct. 23, 1998, C.K.Biju.
- 58. *Meliola oldenlandiae*** Hansf. & Stev. var. *indica* Hosag. *et al.*
On leaves of *Hedyotis* sp. (Rubiaceae), Rajamala hills, Idukki, Kerala, Sept. 25, 1998, C.K.Biju.
- 59. *Meliola otophorae*** var. *Yates indica*. Hosag. & Ravikumar
On leaves of *Lepisanthes senegalensis* (Juss. & Poir.) Leenh. (Sapindaceae), Chinnar, Munnar, Kerala, July 1, 1998, C.K.Biju.
- 60. *Meliola phyllostachydis*** Yamam. var. *microspora* Hosag. *et al.*
On leaves of *Sinarundinaria microphylla* (Munro) Chao & Renv. (Poaceae), Mannavan shola, Idukki, Kerala, Sept. 20, 1998, C.K.Biju.
- 61. *Meliola pogostemonis*** Hansf.
On leaves of *Pogostemon* sp. (Lamiaceae), Rajamala, Idukki, Kerala, Sept. 15, 1998, C.K.Biju.
- 62. *Meliola rajamalaensis*** Hosag. *et al.*
On leaves of *Litsea* sp. (Lauraceae), Rajamala, Idukki, Kerala, Sept. 14, 1999, C.K.Biju.
- 63. *Meliola ravii*** Hosag. *et al.*
On leaves of *Ixora elongata* Heyne ex G. Don. (Rubiaceae), Rajamala, Idukki, Kerala, May 13, 1999, C.K.Biju.
- 64. *Meliola rubiella*** Hosag. *et al.*
On leaves of *Rubus* sp. (Rosaceae), Rajamala, Idukki, Kerala, Sept. 25, 1998, C.K.Biju.
- 65. *Meliola strobilanthicola*** Hosag. *et al.*
On leaves of *Strobilanthus amabilis* (= *Leptacanthus amabilis* (Clarke) Bremek. Clarke) (Acanthaceae), Mannavan shola, Munnar, Idukki, Kerala, Jan. 5, 1999, C.K.Biju.
- 66. *Meliola suttonii*** Hosag. *et al.*
On leaves of *Litsea* sp. (Lauraceae), Rajamala, Idukki, Kerala, Sept. 14, 1999, C.K.Biju.
- 67. *Meliola tabernaemontanae*** Speg.
On leaves of *Tabernaemontana* sp. (Apocynaceae), Mannavan shola, Idukki, Kerala, Jan. 5, 1999, C.K.Biju.
- 68. *Meliola tecleae*** Hansf. var. *toddaliae-asiaticae* Hansf.
On leaves of *Toddalia asiatica* (L.) Lam. (Rutaceae), Mannavan shola, Munnar, Idukki, Kerala, Jan. 6, 1999, C.K.Biju.
- 69. *Meliola telosmae*** Rehm var. *bogoriensis* Hansf.
On leaves of Asclepiadaceae member, Rajamala, Munnar, Idukki, Kerala, Jan. 7, 1999, C.K.Biju.
- 70. *Meliola tenella*** Pat. var. *atalantiae* (Pat.) Hansf.
On leaves of *Atalantia monophylla* (L.) Correa (Rutaceae), Chinnar, Munnar, Idukki, Kerala, July 1, 1998, C.K.Biju.
- 71. *Meliola teramnicola*** Hosag. *et al.*
On leaves of *Teramnus labialis* (L.f.) Spreng. (Fabaceae), Mannavan shola, Munnar, Idukki, Kerala, Jan. 5, 1999, C.K.Biju.
- 72. *Meliola themediicola*** Hosag. *et al.*
On leaves of *Themeda triandra* Forssk. (Poaceae), Chembra hills, Wyanad, Kerala, Feb. 17, 2000, C.K.Biju.
- 73. *Meliola unonicola*** Hosag. & Abraham
On leaves of *Meiogyne pannosa* (Dalz.) Sinclair

(=*Unona pannosa* Dalz.) (Annonaceae), Banasuran mala, Wyanad, Kerala, April 16, 1999, C.K.Biju.

74. *Meliola vittalii* Hosag. *et al.*

On leaves of *Symplocos* sp. (Symplocaceae), Chembra, Wyanad, Kerala, April 14, 1999, C.K.Biju.

75. *Meliola vivekananthanii* Hosag. *et al.*

On leaves of *Antidesma zeylanica* Lam., (= *A. alexiteria*) L. (Stilaginaceae), Chinnar, Munnar, Idukki, Kerala, May 12, 1999, C.K.Biju.

76. *Meliola wendlandiae* Hosag.

On leaves of *Wendlandia thyrsoidea* (Schultes) Stev. (Rubiaceae), Chembra hills, Wyanad, Kerala, Nov. 18, 1998, C.K.Biju.

77. *Meliola zanthoxyli* Hansf.

On leaves of *Zanthoxylum tetraspermum* Wight & Arn. (Rutaceae), Mannavan shola, Idukki, Kerala, June 2, 2000, C. K. Biju.

78. *Meliola ziziphi* Hansf. & Thirum

On leaves of *Ziziphus* sp. (Rhamnaceae), Banasuran mala, Wyanad, Kerala, April 16, 1999, C.K.Biju.

79. *Prataprjella rubi* Hosag. *et al.*

On leaves of *Rubus micropetalus* Gardn. (Rosaceae), Mannavan shola, Idukki, Kerala, Jan. 5, 1999, C.K.Biju.

80. *Prataprjella turpiniicola* (Hosag.) Hosag.

On leaves of *Turpinia malabarica* Gamble (Staphyleaceae), Mannavan shola, Idukki, Kerala, India, Oct. 23, 1998, C.K.Biju.

ASTERINACEAE

81. *Asterina arecearum* Hosag. *et al.*

On leaves of *Calamus* sp. (Poaceae) Munnar, Idukki, Kerala, Nov. 11, 1998, C.K.Biju.

82. *Asterina cissi* Hughes

On leaves of *Vitis* sp. (Vitaceae) Rajamala, Munnar, Idukki, Kerala, Sept. 09, 1998, C.K.Biju.

83. *Asterina cryptocariicola* Hosag. *et al.*

On leaves of *Cryptocarya bourdillonii* Gamble (Lauraceae), Rajamala, Munnar, Idukki, Kerala, Oct. 25, 1998, C.K.Biju.

84. *Asterina diplopoda* Sydow

On leaves of *Solanum ferox* L. (Solanaceae), Mannavan shola, Munnar, Idukki, Kerala, Sept. 23, 1998, C.K.Biju.

85. *Asterina elaeagni* (Sydow) Sydow & Petrak.

On leaves of *Elaeagnus* sp. (Elaeagnaceae), Kadalar, Munnar, Idukki, Kerala, Jul. 1, 1998,

C.K.Biju.

86. *Asterina goosii* Hosag & Balakr.

On leaves of *Mahania leschenaulti* (Wall. ex Wight & Arn.) Takeda (Berberidaceae), Mannavan shola Munnar, Idukki, Kerala, Sept. 23, 1998, C.K.Biju.

87. *Asterina jambolana* Kar & Maity

On leaves of *Syzygium* sp. (Myrtaceae), Tirunlly, Wyanad, Kerala Sept. 13, 1998, C.K.Biju.

88. *Asterina lauracearum* Hosag. *et al.*

On leaves of *Cinnamomum* sp. (Lauraceae), Mannavan shola, Munnar, Idukki, Kerala, Sept. 24, 1998, C.K.Biju.

89. *Asterina lobeliacearum* Hosag. *et al.*

On leaves of *Lobelia nicotianifolia* Roth ex Schultes (Lobeliaceae), Mannavan shola, Munnar, Idukki, Kerala, Jan. 05, 1998, C.K.Biju.

90. *Asterina lobulifera* Sydow

On leaves of *Glochidion* sp. (Euphorbiaceae), Mannavan shola Munnar, Idukki, Kerala, Sept. 24, 1998, C.K.Biju.

91. *Asterina meliosmae-simplicifoliae* Hosag. *et al.*

On leaves of *Meliosma simplicifolia* (Roxb.) Walp. (Sabiaceae), Mannavan shola Munnar, Idukki, Kerala, Sept. 24, 1998, C.K.Biju.

92. *Asterina miliusae* Hosag. *et al.*

On leaves of *Miliusa* sp. (Annonaceae), Rajamala, Munnar, Idukki, Kerala, Sept. 14, 1999, C.K.Biju.

93. *Asterina neolitsiicola* Hosag. *et al.*

On leaves of *Neolitsea* sp. (Lauraceae), Rajamala, Munnar, Idukki, Kerala, Sept. 09, 1998, C.K.Biju.

94. *Asterina pogostemonis* Petrak.

On leaves of *Pogostemon* sp. (Lamiaceae), Rajamala, Munnar, Idukki, Kerala, Sept. 14, 1999, C.K.Biju.

95. *Asterina suttonii* Hosag. *et al.*

On leaves of *Symplocos* sp., Rajamala, Munnar, Idukki, Kerala, Sept. 14, 1999, C.K.Biju.

96. *Asterina tertia* var. *africana* Doidge

On leaves of Acanthaceae member Mannavan shola Munnar, Idukki, Kerala, Sept. 23, 1998, C.K.Biju.

97. *Asterina theacearum* Hosag. *et al.*

On leaves of *Eurya* sp. Rajamala, Munnar, Idukki, Kerala, Jul 07, 1998, S. Shiburaj.

98. *Asterina xanthoxyli* Hosag. *et al.*

On leaves of *Xanthoxylum flavascence* Chinnar, Idukki, Kerala, Jul. 1, 1998, C.K.Biju.

99. *Prillieuxina elaeagni* Hosag. *et al.*

On leaves of *Elaeagnus kiloga*, Pothundy dam, Idukki, Kerala, Sept. 25, 1998, C.K.Biju.

100. *Schiffnerula camelliae* (Sydow, Sydow & Butler) Hughes
On leaves of *Thea sinensis* L. (Theaceae), Rajamala, Munnar, Idukki, Kerala, June 30, 1998, C.K.Biju.

FUNGI IMPERFECTI

101. *Ampullifera foliicola* Deight
On leaves of *Neolitsea scrobiculata*, (Meisner) Gamble (Lauraceae), Banasuran mala, Wyanad, Kerala, Nov. 19, 1999, C.K.Biju.
102. *Asterostomella daphniphylli* Hosag. & Ravikumar
On leaves of *Daphniphyllum neilgherrense*, Mannavan shola Munnar, Idukki, Kerala, Sept. 23, 1998, C.K.Biju.
103. *Questeriella tephrosiae* Hosag. et al.
On leaves of *Tephrosia tinctoria*, Chembra peak, Wyanad, Kerala, Nov. 18, 1999, C.K.Biju.
104. *Sarcinella vernoniae* (Dearn. & Barth.) Hughes
On leaves of *Vernonia peninsularis*, Banasuran mala, Wyanad, Kerala, Sept. 19, 1999, C.K.Biju.
105. *Spiropes armatelicola* Hosag. et al.

On leaves of *Actinodaphnae* sp. (Lauraceae), Banasuran mala, Wyanad, Kerala, April 16, 1999, C. K.Biju.

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