

#### **D-04: Distribution of Family *Hymenophyllaceae* in Sri Lanka**

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Pteridologists accept that the family *Hymenophyllaceae* belongs to Leptosporangiate group of ferns, commonly referred to as "filmy ferns". The common name "Filmy ferns" has arisen due to the filmy nature of the blade which is an outstanding character of the family as a whole. They are found only in places where there is moisture throughout the year.

According to the Copeland (1938) classification, Sri Lanka represents 9 genera viz. *Mecodium*, *Meringium*, *Microtrichomanes*, *Pleuromannes*, *Gonocormus*, *Didymoglossum*, *Selenodesmium*, *Microgonium* and *Crepidomanes*. However, according to Sledge (1968), Sri Lanka represents 18 species.

The present study was designed to examine the pattern of distribution of *Hymenophyllaceae* species in Sri Lanka.

Extensive field explorations were done in different climatic zones of Sri Lanka to locate *Hymenophyllaceae* species. In addition, a herbarium survey was carried out to note the collection localities of previous investigators. The herbarium survey was done both at National Herbarium, Peradeniya and Kew Herbarium, England.

During the field and herbarium investigation a total of 18 species were recorded;

1. *Crepidomanes campanulatum* (Roxb.) Jayasekara,
2. *C.intramarginale*, (Hook. & Grev.) Copel.
3. *C.bilabiatum* (Nees & Blume) Copel.
4. *C. kurzii* (Bedd.) Tagawa & K.Iwatsu.,
5. *Didymoglossum exiguum*, (Bedd.) Copel.
6. *D.wallii* (Thwaites) Copel.
7. *Gonocormus prolifer* (Blume) Prantl,
8. *G.saxifragoides* (Presl.) Bosch,
9. *Meringium denticulatum* (Swartz) Copel.
10. *M.macroglossum* (Bosch) Copel.
11. *Microgonium motleyi* Bosch,
12. *M. bimarginatum* Bosch,
13. *Microtrichomanes nitidulum* (Bosch) Copel.
14. *Meconium gardneri* (Bosch) Jayasekara,
15. *M.polyanthos* (Swartz) Copel.
16. *M. javanicum* (Spreng.) Copel.
17. *Pleuromanes pallidum* (Blume) Presl
18. *Selenodesmium obscurum* (Blume) Copel.

Although the herbarium specimens represented all the above species, the collection of fresh plants was possible only of 13 species from 4 Districts. This is an indication of rarity of some species. Their district-wise occurrence is as follows:

Nuwara Eliya District, 1, 14, 15 and 16, Ratnapura District, 2, 5, 7, 9, 10, 12, 13, 15,16 and 18. Matale District, 8 and 10. Badulla District, 1, 9 and 14.

Many *Hymenophyllaceae* species show preference to the wet zone montane and lowland areas. The most widely distributed species is 1, 9, 14, 15, 16 and it occurs in 3 districts out of the 4 the studied. When they grow in the dry zone areas the habitats are always moist and shady, particularly on hill tops.