

On the collection of bryophytes from South-West India

D.Y.Joshi

Department of Botany, A.G. College (Research Centre), Karve Road, Pune-411 004, India

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The bryophytic flora of various localities from the rain forests of South-West India is being reported. The vegetation of these localities have remained mostly unexplored, though casual references to them appear in the literature. It was, therefore, thought worthwhile to explore the area bryologically and to prepare a checklist of the bryophytic species.

Key-words- South-West India, Bryophyta.

THERE is a dearth of information about the bryologically rich areas of South-West India; especially Goa, Mercara, Yercaud, Ooty and Kodaikanal (Map 1). Barring work done by Chopra (1938); Rao and Udar (1957); Srinivasan (1974) and Townsend (1988), there are stray references to bryophytes from these localities. During 1990, 1991 and 1992, collections of bryophytes were made from the aforesaid localities, the outcome of which is this first hand consolidated report.

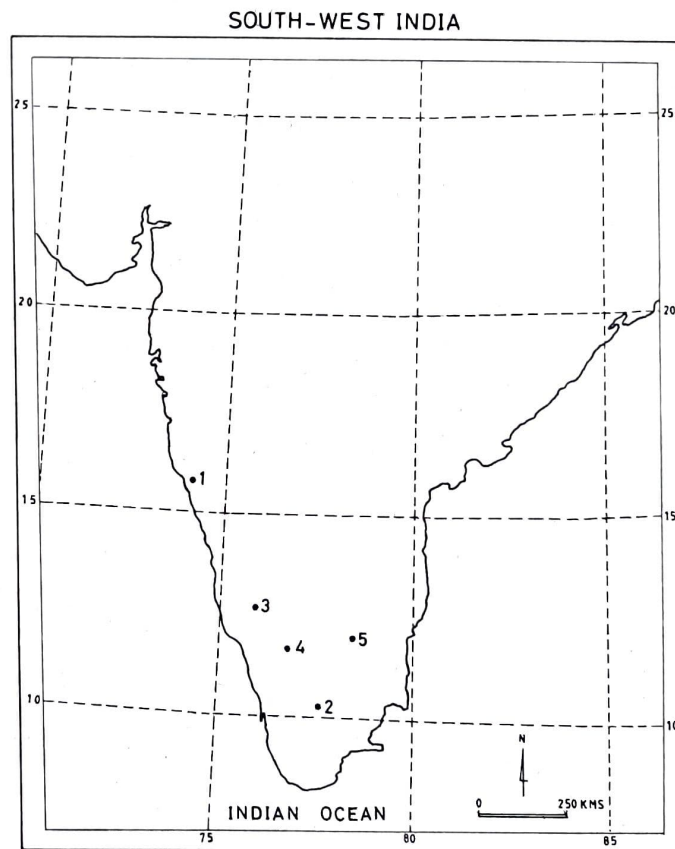
The hills and hillocks of South-West India are geographically formed of basaltic lava of varying thickness, the top part of which is laterite. The natural house of the South-West Indian bryophytes is situated within the belt of 10° - 16° North latitude and 74° - 79° East longitude. The altitude of the hills range between 1000 to 3000 metres. These hills are favoured with rains by two monsoon winds, viz., the South-West in the months of May to July and the North-West during October and November. The temperature ranges between 2° to 33°C and the annual rainfall is between 240 to 450 cm. The hottest months are March, April and May.

Collections and List of Localities

Voucher specimens are deposited at the Bryophyte Herbarium of the Botany Department, A.G. College (Research Centre), Karve Road, Pune-411 004, India. The sequential placement of the hepatic taxa is according to Schuster's system of classification (1958), with the alteration that Anthocerotae has been placed at the top of the list, while the mosses have been arranged according to the classification suggested by Dixon (1924). A list of collection sites (Map - 1) by collection numbers follows:

200-229 Goa. November 6th, 7th and 8th 1990.
Anmode Ghat, Castle Rock, Doodhsagar.

- 230-260 Mercara. September 19th and 20th 1992.
Abbey falls, Talacauvery Hills.
- 261-300 Ooty. October 2nd, 3rd and 4th 1991, and
September 26th and 27th 1992. Ooty Garden,
Sim's Park (Coonoor), Kotagiri, Thodabetta,
Metupallayam Ghat and Four-Road Shola.
- 301-349 Yercaud. September 22nd and 33rd 1992.
Killiyur falls, Shevaroyan Hills.



Map 1. Localities of collection. 1. Goa; 2. Kodaikanal; 3. Mercara; 4. Ootacamund; 5. Yercaud

350-400 Kodaikanal. October 6th, 7th and 8th 1991 and September 29th and 30th 1992. Bryant Park, Silvercaskode, Shembagnur, Pillar's Rock, Priest's Walk, Bear Shola falls, Chettiyar Park and Perumal Hill Shola.

LIST OF SPECIES

Anthocerotae

Anthocerotaceae

Anthoceros crispulus (Mont.) Douin. - 236, 274, 309 & 359.

Hepaticae

Sub-Class- Jungermanniidae

Cephaloziaceae

Cephalozia indica Udar & Kumar-278

Jungermanniaceae

Jungermannia (Plectocolca) tetragona Lindb. - 200, 240, 280, 313 & 361.

Plagiochilaceae

Plagiochila himalayensis St. - 279, 312.

Porellaceae

Porella densifolia St. Hatt. - 201, 241, 314, & 362.

Lejeuneaceae

Schiffneriolejeunea indica (St.) Udar & Awasthi - 281.

Dicranolejeunea yoshinagana (Hatt.) Mizut. - 282.

Ptychanthus striagus (L. et L.) Ness - 202 & 239.

Lejeunea chinensis st. - 242.

L. diaphana st. - 204 & 243.

L. indica Udar & Awasthi - 244, 284 & 365.

L. flava (Sw.) Nees - 203, 246, 283, 315 & 363.

L. wallichiana Lehm. - 245 & 364.

Harpalejeunea indica St. - 316.

Ptychocoleus fertilis (R.B1.N.) Dum. - 317.

Fossombroniaceae

Fossombronia himalayensis Kash. 205, 238, 275, 310 & 360.

Pallaviciniaceae

Pallavicinia canaras Gray - 206, 235, 272 & 358.

Aneuraceae

Riccardia multifera (L.) Gray - 207, 277 & 311.

Sub-Class - Marchantiidae

Targioniaceae

Targionia hypophylla (Mich.) L. - 208 & 350.

T. indica Udar & Gupta - 230 & 262.

Cyathodium tuberosum Kash. - 209, 231, 263 & 302.

Lunulariaceae

Lunularia cruciata (L.) Dum. - 234, 271 & 357.

Aytoniaceae

Reboulia hemisphaerica (L.) Raddi. - 237, 269 & 308.

Plagiochasma articulatum Kash. - 210, 264, 303, & 351.

P. appendiculatum L. & L. - 211, 265, 304 & 352.

P. simlenis Kash. - 305.

P. intermedium L. & G. - 306.

Cryptomitrium himalayense Kash. - 266, 307 & 353.

Cleveaceae

Athalamia pinguis Falconer - 273.

Marchantiaceae

Marchantia polymorpha L. - 268 & 355.

M. palmata Nees - 233, 267 & 354.

Dumortiera hirsuta Reinw., Bl. & Nees - 270 & 356.

Ricciaceae

Riccia crystallina L. - 212 & 301.

R. fluitans L. - 213 & 261.

Musci

Fissidentaceae

Fissidens ceylonensis Doz. & Moil - 214, 251, 285 & 370.

Dicranaceae

Campylopus richardii Brid. 286, 318 & 371.

Pottiaceae

Hyophila involuta (Hook.) Jaeg. - 215, 252, 287, 319 & 372.

Grimmiaceae

Grimmia ovalis (Hedw.) Lindb. - 353.

Funariaceae

Funaria hygrometrica Hedw. - 216, 253, 288, 320 & 374.

Bryaceae

Bryum coronatum Schwaegr. - 217, 254, 289, 321 & 375.

Rhodobryum giganteum (Schwaegr.) par. - 290 & 376.

Mniaceae

Mnium rostratum Schrad. - 218, 255, 291, 322 & 377.

Bratramiaceae

Bartramidula bartramioides (Griff.) Wijk. & Marg. 378.

Orthotrichaceae

Macromitrium moorcroftii (Hook. & Grev.) Schwaegr. - 256, 292, 326 & 379.

Trachypodaceae

Trachypodopsis serrulata (P. Beauv.) Fleisch. - 293, 327 & 380.

Hookeriaceae

Hookeria acutifolia Hook. & Grev. - 219, 257, 294 & 381.

Thuidiaceae

Claopodium assurgens (Sull. & Lesq.) Card. - 295 & 382.

Thuidium cymbifolium (Doz. & Molk.) Doz. & Molk. - 296 & 383.

Entodontaceae

- Entodon ruicundus* (Mitt.) Jaeg. 220, 258, 297, 323 & 384.
Erythrodontium julaceum (Schwaegr.) par. - 385.
 Plagiotheciaceae
Plagiothecium neckeroideum B.S.G. - 298 & 386.
 Hypanaceae
Taxiphyllum taxirameum (Mitt.) Fleisch. - 387.
Hypnum cupressiforme Hedw. - 299, 324 & 388.
 Hylacomiaceae
Macrothamnium macrocarpum (Reinw. & Hornsch.) Fleisch. - 389.
 Polytrichaceae
Pogonatum microstomum (Schwaegr.) Brid. - 222, 259, 328 & 390.
Polytrichum junipericum Hedw. - 221, 260, 300, 325 & 391.

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REFERENCES

- Chopra, R.S. 1938. Notes on Indian Hepatics. I, South-India. *Proc. Ind. Acad. Sci.* 7b: 239-251.
 Dixon, H.N. 1924. *The student's handbook of British mosses*. London.
 Rao, A.R. & Udar, R. 1957. On a collection of liverworts from Yercaud, South-India. *Jour. Indian bot. Soc.* 36(3): 328-334.
 Schuster, R.M. 1958. Keys to the orders, families and genera of Hepaticae of America, North of Mexico. *Bryologist* 61: 1-66.
 Srinivasan, C. 1974. *Studies in the mosses of South-India*. Annamalai University Publication, Sivakashi Printers, Annamalainagar, India.
 Townsend, C. 1988. Mosses from the Nandi Hills, Mysore State, India. *Jour. Bryol.* 15(2): 289-291.