

Forest litter hyphomycetes from Andhra Pradesh, India V. A new species of *Monodictys* Hughes

N. Krishna Rao & C. Manoharachary

Department of Botany, Osmania University, Hyderabad 500 007, Andhra Pradesh, India

Krishna Rao, N. & Manoharachary, C. 1993. Forest litter Hyphomycetes from Andhra Pradesh, India V. A. new species of *Monodictys* Hughes. *Geophytology* **23**(2):299-300.

Key-words—Microfungi, Litter, New taxon, *Monodictys*.

MANY forest localities of Andhra Pradesh, India, remain unexplored for microfungi. For the past several years the authors have been engaged in the collection and study of dematiaceous hyphomycetes associated with plant litter in these habitats.

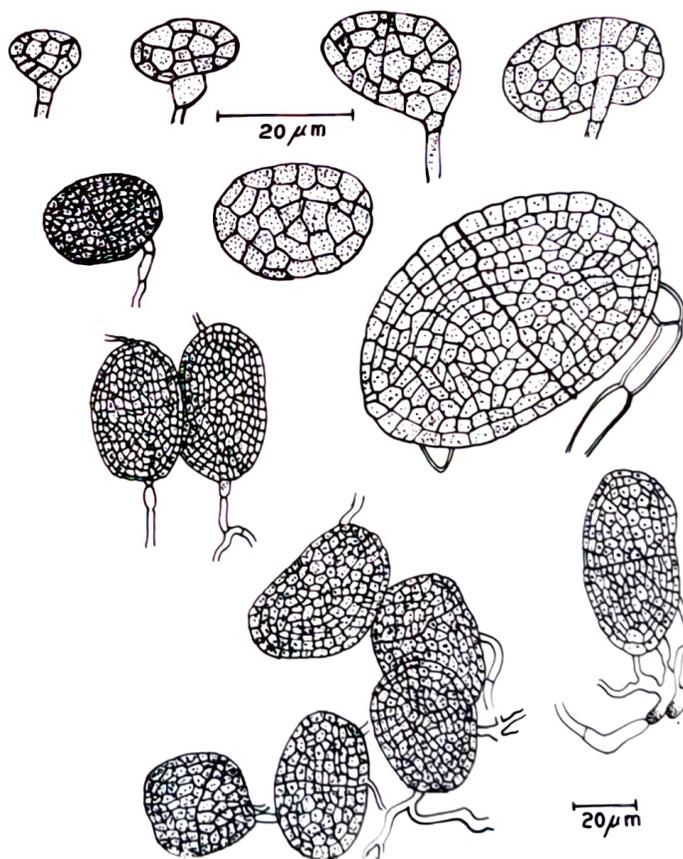
In one of these surveys, an interesting hyphomycetes was found colonizing dead wood of an unidentified plant. Critical study revealed it to be congeneric with *Monodictys* Hughes. The present collection is comparable to *M. lepraria* (Berk.) M.B. Ellis (1976) in possessing muriform, ellipsoidal to ovoidal conidia which are 80-110 x 30-50 μm . However, the present fungus is different in having slightly larger conidia and also in bearing primary median septum which is absent in *M. lepraria*. The present species is comparable to *Monodictys striata* (Petch) Vasant Rao & de Hoog in bearing muriform conidia often with a median septum. Though the primary median septum forms a prominent character in the conidia of present fungus, the conidia of the present collection are much bigger than the conidia of *Monodictys striata* besides differing in other characters (Vasant Rao & de Hoog, 1986). Hence a new species is proposed for this fungus of the present collection.

Monodictys subramanianii Krishna Rao & Manoharachary, Anamorph. sp. nov.

Text-fig. 1

Coloniae brunneae vel atrobunneae vel intermedie. Mycelium immersum. Stromata, setae, et hyphopodia nulla. Conidiophora semi-micronemata, ramosa, irregularia, recta vel flexuosa, pallide brunneae, laevia, usque 40 μm longa. Cellulae conidiogenae monoblasticae, integratae, terminales, determinatae, doliformes. Conidia solitaria, sicca, acrogena. simplicia, muriformia, ovalia vel ellipsoidea raro irregularia brunnea,

laevia, septo medio primary prominenti, 60-120 x 40-50 μm .



Text-figure 1. Conidiophores, conidial development and conidia.

In ligno emortuo non agnito lecto 27 November 1984, India Andhra Pradesh, Kurnool District, Gundlabrahmaswaram. Holotypus-IMI 296866; Isotypus OUMH/NKR 126.

Colonies brown to dark brown. Mycelium immersed, stroma, setae and hyphopodia absent. Conidiophores semi-macronematous, irregular, straight or flexuous, pale brown, smooth up to 40 μm in length. Conidiogenous cells monoblastic, integrated, terminal determinate, doliiform. Conidia solitary, dry, acrogenous, simple, muriform, oval, ellipsoidal, rarely irregular in shape, brown, smooth, primary median septum remaining prominent, 60-120 x 40 - 50 μm , conidial secession schizolytic.

Specimen examined - India, Andhra Pradesh, Kur-nool District, Gundlabrahmaswaram. On unidentified dead wood, collected 27 November, 1984
HOLOTYPE : IMI 296866. Isotypus OUMH/NKR 126.

Etymology - This species is named in honour of Prof. C.V. Subramanian, formerly Director of the Centre for Advanced Studies in Botany, Madras, in recognition of his outstanding contributions to the study of Hyphomycetes.

Monodictys subramanianii differs from all other described species of *Monodictys* (Ellis, 1971, 1976; Hughes, 1958) in possessing oval to ellipsoidal,

muriform, brown conidia that are larger than those of any reported species. The conidia are also unusual in having a distinct primary median septum that remains prominent throughout conidium development even though many additional septa are laid down as the conidium matures.

ACKNOWLEDGEMENTS

N. Krishna Rao thanks Dr B.C. Sutton and Dr P.M. Kirk, CMI, Kew, U.K. for their help in the identification of the fungus. We thank Dr F.A. Uecker for preparing the Latin diagnosis. Grateful thanks are to Prof R.D. Goos, University of Rhode Island, U.S.A. for his valuable suggestion.

REFERENCES

- Ellis, M.B. 1971. *Dematiaceous Hyphomycetes*. Commonwealth Mycological Institute.
- Ellis, M.B. 1976 *More dematiaceous Hyphomycetes*. Commonwealth Mycological Institute.
- Hughes, S.J. 1958. Revisiones hyphomycetum aliquot cum appendice de nominibus rejiciendis. *Canad. J. Bot.* **36**: 727-837.
- Vasant Rao & De Hoog, G.S 1986. New or Critical Hyphomycetes from India. *Studies in Mycology* **28**. CBS Baarn, Netherlands.