Some Slime-Moulds from Southern India-VII.

By V. Agnihothrudu*) and C. C. Chinnappa**).

35. Lycogala exiguum Morgan in J. Cincinn. Soc. nat. Hist. 15, p. 21, 1843; Martin, G. W., North American Flora, Vol. I. Fungi Myxomycetes, p. 21, 1949; Lister, G., Mycetozoa, p. 199, 1925 as Lycogala epidendrum Fries. var. exiguum Lister.

This form was collected only once from Karadibetta Estate. The deep honey coloured aethalia thickly beset with purplish, later on turning black, scale-like mottles are characteristic of this species. In the local form, the scales show characteristic tesellate appearance. Herb. T. F. R. 5., on rotting wood, Coll. V. A., Karadibetta Estate, Saklespur, 15/8/1964.

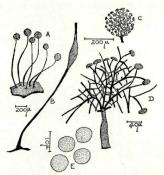


Fig. 1. Clastroderma debaryanum A. Blytt. — A. A group of sporangia. — B. Stipe showing the swelling. — C. A sporangium which has shed its spores with peridial plates and capillitium. — D. Part of the capillitium showing peridial plates attached to the capillitial ramifications. — E. Spores.

36. Clastroderma debaryanum A. Blytt., in Bot. Zeit. 38, 343, 1880; Lister, G., Mycetozoa, p. 161, 1925; Martin, G. W., North American Flora, Vol. I, Fungi., Myxomycetes, p. 86, 1949.

Plasmodium not observed. Sporangia upto 1.2 mm in height, gregarious globose, stipitate upto 200 μ in diameter, pale dirty brown;

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peridium membranous, persistent only in polygonal plates attached to the ultimate branches of the capillitium. Stalk slender, dark, rugose and enclosing refuse matter, smooth, solid, transluscent, brown. A little above the middle there is a swelling on the stalk enclosing refuse matter; columella short, dividing into primary branches of the capillitium. Capillitium composed of pale brown threads, forking three or four times, sparingly anastomosing at the surface, the ultimate branchlets attached singly or 2—3 together to the persistent plates of sporangial wall. Spores almost hyaline in transmitted light, smooth, spherical 7—9 (—10) u in diameter. (Fig. 1.)

On rotten wood, Balehonnur, Herb. T. F. R. 6, Coll. C. C. C.

37. Hemitrichia vesparium (Batsch) Macbride North American Slime-moulds, 203, 1899; Lister, G., Mycetozoa, pp. 218—219, 1925; Martin, G. W., North American Flora, Vol. I, Fungi, Myxomycetes, p. 59, 1949.

Plasmodium not observed. Total height of the sporangia upto 2 mm. Sporangia clavate or subcylindrical, stipitate, 3—5 sporangia are clu-

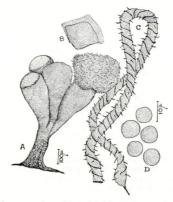


Fig. 2. Hemitrichia vesparium (Batsch) Macbride. — A. A cluster of sporangia. — B. The peridial wall. — C. Capillitum. — D. Spores.

stered together, upto 0.5 mm in diameter, glossy, dark brick red at the base, sporangial wall membranous above, thickened with granular impregnations below. The dehiscence takes place at the top in the form of a shallow dome leaving a deep cup filled with a tangle of capillitial threads and spores; stalk membranous, upto 1 mm high usually furrowed and rugose. No spore-like cells are seen enclosed in the lumen of the stipe. Capillitium consisting of a mass of sparingly branched threads, orange red in colour, which are upto 5 μ in diameter and marked with 4—5 spiral bands and hyaline spines. Spores, hyaline in transmitted light, yellowish en masse, upto 9 μ in diameter, almost smooth. (Fig. 2.)

On undetermined decaying wood (shade tree?) Coffee Research Station Campus, Balehonnur. Herb. T. F. R. 7. Coll. C. C. C,

 Trichia affinis de Bary, Fuckel. Jahrb. Nass. Ver. Nat. 23—24, 336, 1870; Lister, G., Mycetozoa p. 205, 1925; Martin, G. W., North American Flora, Vol. I, Fungi, Myxomycetes, p. 32, 1925.

Plasmodium not observed. Sporangia globose or obovoid, sessile; crowded on a membranous hypothallus, upto 30 sporangia were seen in the cluster, 0.5—1 mm in diameter ochraceous yellow or dirty golden brown, peridium thin, pale yellow, falling away in small fragments. Capillitium consisting of long cylindrical elaters, measuring upto 6 μ in diameter with conical or pointed ends, marked with 3—4(—5) spiral bands, generally smooth; some of the elaters have minute scattered spines. Spores reticulate with 2—4 meshes per hemisphere; spherical, hyaline (Fig. 3.).

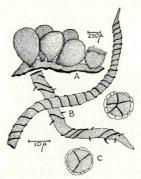


Fig. 3. Trichia affinis de Bary. — A. A group of Sporangia. — B. Elaters. — C. Spores.

Herb. T. F. R. 8. Coll. C. C. C. — Coffee Research Station Campus, Balehonnur.

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