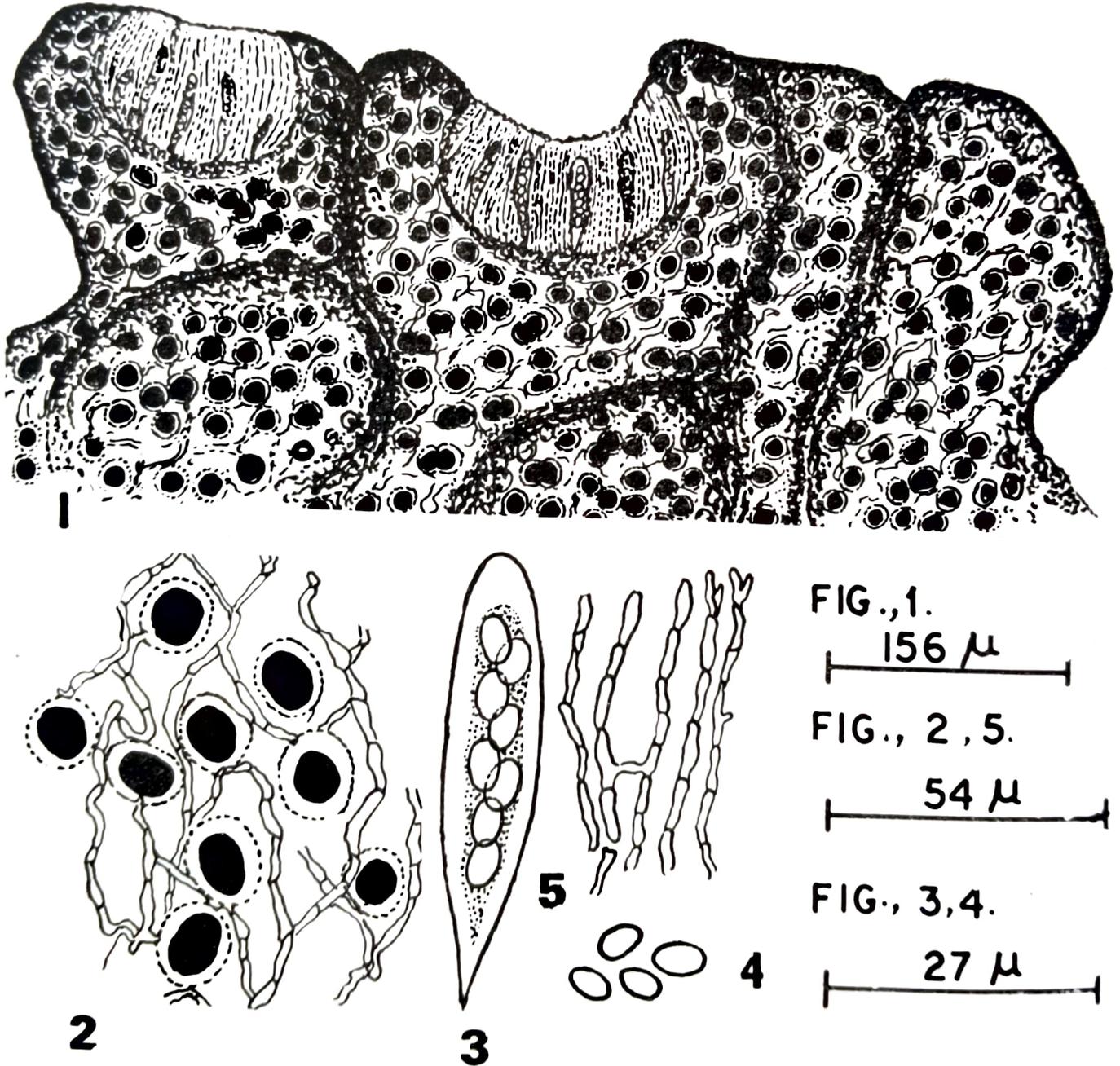


ADDITIONS TO THE LICHEN FLORA OF INDIA—IV

During the course of our investigations on the lichens of Palni Hills, Tamil Nadu, an interesting lichen—*Phylliscum testudineum* Henss. has been discovered. The genus and the species are first reports from India. The genus *Phylliscum* Nyl. ex Mass. is characterized by the gelatinous, minutely lobulate black thallus with blue-green alga as phycobiont, punctiform apothecia immersed in the lobules and colourless simple spores. HENSSEN (1963) placed the genus in the family Lichinaceae, a view currently widely accepted, though the genus had been placed in the family Pyrenopsidaceae by ZAHLBRUCKNER (1926). The



Figs. 1-5 *Phylliscum testudineum* Henss. 1. Section of lobules through apothecia, 2. Algal cells with gelatinous sheath and surrounded by hyphae, 3. An ascus, 4. Spores, 5. Paraphyses.

genus comprises 6 species, each having restricted distribution in Asia, Europe and America. *Phylliscum testudineum* Henss. is known from Brazil, and its present occurrence in India is interesting in that it adds one more taxon to the list of several taxa of lichens that have distributional pattern common between India and Brazil. The details of the species are as follows :

Phylliscum testudineum A. Henssen, *Svensk Bot. Tidsk.* **57** : 153, 1963. (Text-figs. 1-5).

Thallus saxicolous, in small irregular black patches, each patch of compactly aggregated minute lobules, and attached centrally by a short umbilicus ; lobules rounded to irregular in shape, 0.2-0.4 mm broad and 0.5-0.8 mm thick, homoiomerous ; phycobiont a blue-green alga, uniformly distributed throughout the thallus, algal cells rounded to spherical, 6-11 × 6-9 μm, surrounded by a gelatinous sheath and by irregularly branched hyphae. Apothecia numerous, immersed in the lobules, 0.15-0.4 mm in diameter, disc punctiform, closed to open, concave ; margin indistinct ; exciple thalloid. Epithecium blackish brown, 7-10 μm ; hymenium gelatinous, colourless, 67-76 μm high, K—, I+ deep blue ; hypothecium colourless of compact hyphae, 15-20 μm thick. Asci cylindrical to clavate, thin walled, 34-50 × 10-14 μm, 8 spored ; spores not easily liberated from the ascus, colourless, simple, oval-ellipsoid, 6.8-8.5 × 3.8 μm ; paraphyses simple to forked above, septate, apices slightly thickened, 1.5 μm thick. Pycnidia immersed in the lobules, usually rounded, 50-60 μm in diameter ; conidiophores short, pyconidia cylindrical, colourless, 1.7-2 × 1.7 μm. Thallus K—, C—, KC—, P—.

Locality—Tamil Nadu, Palni Hills, Kodaikanal, Bear Shola, Singh 70.834 (LWU, Herb. Henssen) ; Oothu area, near Hill View, Singh 70.1200 (LWU).

The taxon shows a close similarity to *Phylliscum tenue* Henss., *P. macrosporum* Henss. but differs in smaller spores, and immersed apothecia.

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