

Some Interesting Ascomycetes from India*

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With 3 figures

Zusammenfassung

Vier Ascomyceten aus Indien, davon drei neue Arten werden beschrieben. Die Gattung *Cycloshizon* P. HENN. ist ebenfalls neu für Indien.

The paper presents an account of four Ascomycetes of which three are described as new species. The genus *Cycloshizon* constitutes a new record to India. The materials of these fungi have been deposited at the Ajrekar Mycological Herbarium, M.A.C.S., Poona.

1. *Cycloshizon oleae-dioicae* sp. nov. (Fig. 1)

Superficial mycelium absent, epiphyllous. Hypostroma developing in the living tissue. Superficial part is flat, shield-shaped forming isolated and scattered crusts on the concentrically developed circular spots, measuring 6–10 mm in diam. Hypostroma measuring 228–304×76–85 μ with central sterile tissue, and in epidermal layer. Wall of the hypostroma thick, carbonaceous, measure 19–22.8 μ . Shield black, elongated, radiating, cells long and narrow, dark-brown. Hypostroma uniloculate, locules open with an ostiole, developing on the cuticle, measuring 114–152 μ broad and 57–64.6 μ height. Asci clavate or egg-shaped, bitunicate with strongly thickened apex, measuring 38–45.6×15.2–19 μ . Asci surrounded by mucilaginous, olivaceous brown, paraphysoides, which at times form an epithecium. Ascospores unequally two-celled, hyaline at first but later become light brown, 11.4–15.2×5.7–7.6 μ .

Parasitic on leaves of *Olea dioica* ROXB. (F. Oleaceae) Leg. D. V. NARENDRA at SAGAR (Karnataka) on 18. 10. 1972 (AHM 2187, Holotype).

Mycelio superficiali nullo. Stroma epiphyllò, scuto nigro formanti, 6–10 mm diam. Hypostroma parietatibus carbonaceis instructo, 228–304/76–85 μ . Ascis clavatis, 38–45,6/15,2–19 μ . Ascosporis bicellulatis, hyalinis vel pallide

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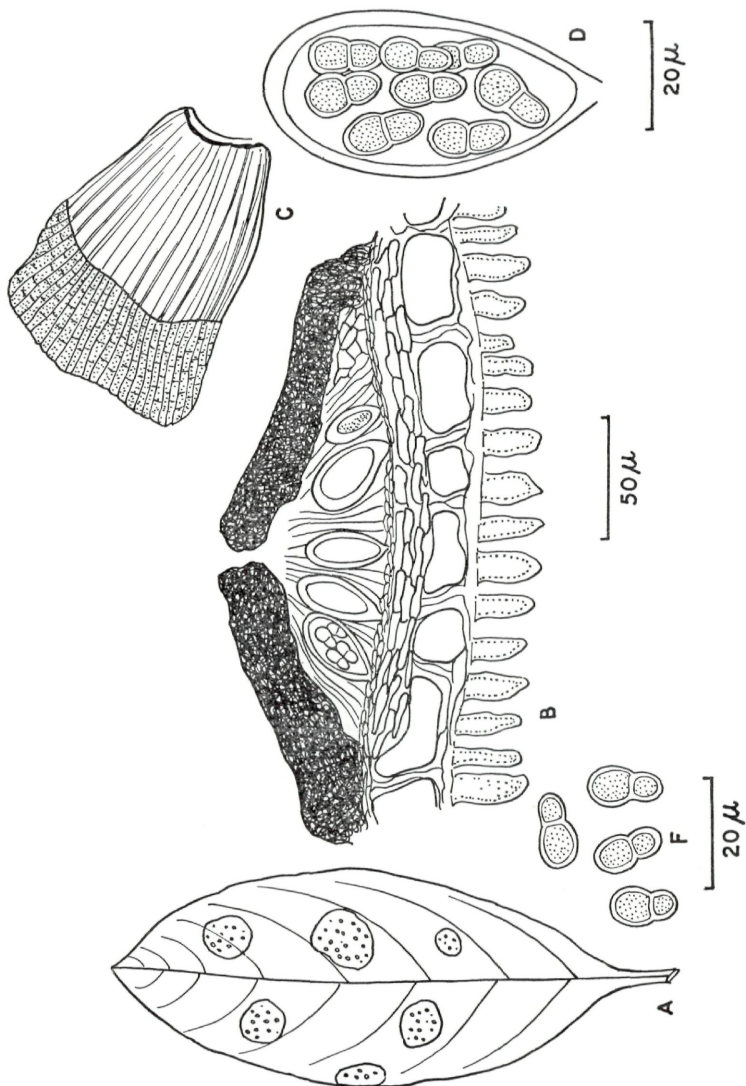


Fig. 1. *Cycloshizon oleae-dioicae* sp. nov. — A. Habit — B. Vertical section of the hypostroma — C. Part of the shield — D. Ascus with ascospores — E. Ascospores — F. Ascospores

brunneis, 11,4—15,2/5,7—7,6 μ . Ad vfolios *Oleae dioicae* in India. 18. X. 1972, leg. Narendra (AMH, 2187, holotypus).

Remarks: No species of *Cyclosporium* has been known to parasitize plants of *Olea dioica*, even though this genus has been reported to occur on other species of *Olea*. The present collection of *Cyclosporium* differs from the type species *C. brachylaenae* (REHM) P. HENN. in having comparatively smaller hypostromata, consisting of thick-walled and carbonaceous cells. Hypostromata on the present species are mostly uniloculate and rarely close to each other. It also differs from *C. porrigo* (CKE.) VON ARX, which is typified by a compact stroma with more than two or three locules grouped together. On the basis of these character differences the present collection is described here as a new species. The genus *Cyclosporium* forms a new generic record to India.

2. *Didymosphaeria sagaria* sp. nov. (Fig. 2)

Stroma dark, sub-epidermal, flat und spreading. Ascostromata sub-epidermal, immersed in stroma, becoming erumpent, uniloculate, measure 225—460 \times 204—289 μ . Asci clavate to cylindrical, long with rounded apex, octosporous, arranged in wall layers, stipitate, measure 114—133 \times 7.6—9.5 μ . Ascospores cylindrical with rounded ends, brown, uniseriate, 2-celled, 15.2—19 \times 3.8—5.7 μ . Pseudoparaphyses filiform and numerous.

On dead stems Leg. D. V. NARENDRA at SAGAR (Karnataka), on 19. 10. 1972 (AMH 2311, Holotype).

Stroma nigro, subepidermali, plano, Ascostroma subepidermali vel erumpentio, uniloculato, 255—460/204—289 μ . Ascis clavatis vel cylindraceis, ad apicem rotundatis, octosporis, 114—133/7,6—9,5 μ . Ascosporis cylindraceis, ad apicem rotundatis, brunneis, bicellulatis, 15,2—19/3,8—5,7 μ . Ad ramentum in India. 19. X. 1972, leg. Narendra (AMH, 2311, holotypus).

Remarks: The present collection of *Didymosphaeria* differs from other known species significantly in its morphology. The specific epithet of the above proposed new species represents the place of collection viz. SAGAR, Karnataka (India).

3. *Phyllachora microcenta* (B. et Br.) SACC. (Syll. Fung. 2: 595, 1883).

Infection spots amphigenous, scattered, measuring 0.5—2 mm in diam. Stromata sphaerical to irregular raised on the upper surface of the leaf, shining, scattered, sometimes aggregated, intra-epidermal. Perithecia one to many per stroma, flask-shaped, measure 340—425 \times 204—255 μ . Asci clavate, sub-sessile, octosporous, measuring 38—76 \times 9.5—15.2 μ . Ascospores distichous, more or less globose, hyaline, measure 9—10.8 μ in diam.

Inciting tar spots on leaves of *Artocarpus integrifolia* L. (F. Moraceae). Leg. D. V. NARENDRA at SAGAR (Karnataka) on 20. 10. 1972, (AMH 1919).

Remarks: This species of *Phyllachora* is very rare and the present collection constitutes only the second report from India. Besides, the same has been collected for the first time on *Artocarpus integrifolia* L.

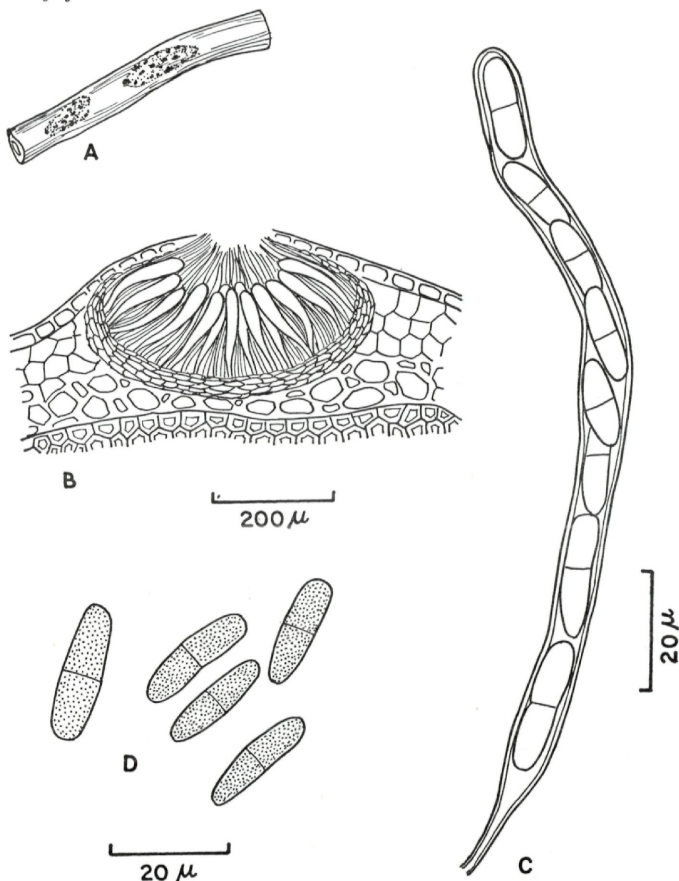


Fig. 2. *Didymosphaeria sagaria* sp. nov. — A. Habit — B. Section of perithecium — C. Ascus — D. Ascospores

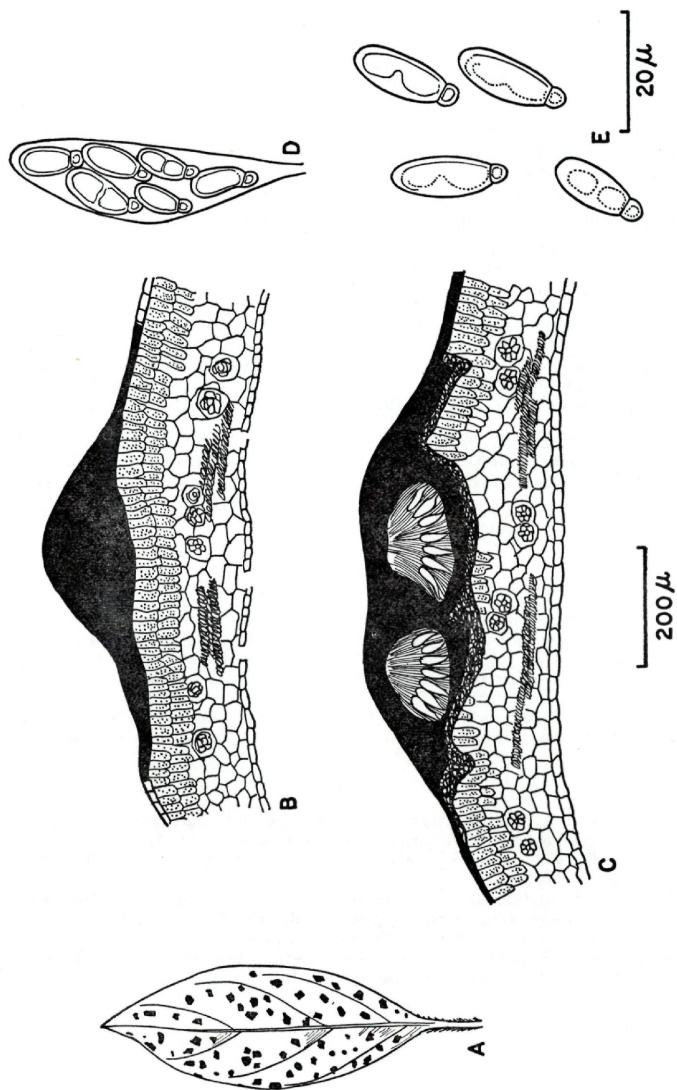


Fig. 3. *Rehmiodothis indicus* sp. nov. — A. Habit — B. Stroma — C. Section through stroma — D. Ascus with ascospores — E. Ascospores

4. *Rehmiodothis indicus* sp. nov. (Fig. 3)

Infection spots epiphyllous, black, shining and tar-spots like, scattered, sometimes coalescing, stroma developing in between the epidermis and cuticle, measure $510-884 \times 136-255 \mu$. Perithecia subglobose, 1-2 per stroma, measure $170-306 \times 102-187 \mu$. Clypeus thick and dark, ostiolate, ostiole lined with periphyses. Asci in parallel layers, unitunicate, hyaline, 8-spored, measure $38-53, 2 \times 11.4-15.2 \mu$. Ascospores oblong to egg-shaped, light-coloured, unequally 2-celled, constricted at septa, biseriata, measure $11.4-15.2 \times 3.8-5.7 \mu$.

On living leaves of *Melastoma malabathricum* L. (F. Melastomaceae). Leg. D. V. NARENDRA at COORG (Karnataka) on 2. 8. 1971 (AMH 2198, Holotype).

Maculis nigrescentibus, dispersis, subepidermalibus vel subcuticularibus formantibus, $510-884/136-255 \mu$. Peritheciis subglobosis, $170-306/102-187 \mu$. Clypeo nigro, ostiolato. Ascis unitunicatis, hyalinis, $38-53/11,4-15,2 \mu$. Ascosporis $11,4-15,2/3,8-5,7 \mu$, oblongis vel ellipsoideis. Ad folios *Melastomis malabathrici* in India. 2. VIII. 1971, leg. Narendra (AMH, 2198, holotypus).

Remarks: No species of *Rehmiodothis* has so far been reported on *Melastoma malabathricum* L. The present species on comparison with other species as well as *R. osbeckiae* THEISS. & SYD. (the type species) differs greatly in the morphology of stroma, dimensions of perithecia, asci and ascospores.

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