

Additions to the Coelomycetes of India

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An account of some Coelomycetous fungi recorded for the first time in India is presented. They are *Coleophoma cylindrospora* (Desm.) Höhn., *Coleophoma crateriformis* (Dur. & Mont.) Höhn., *Coniella castaneicola* (Ell. & Ev.) Sutton, and *Marssonina rosae* (Lib) Died. A detailed description of the fungi are given.

Key Words - Coelomycetes Fungi New records.

ADDITIONS TO THE COELOMYCETES OF INDIA Our knowledge concerning the occurrence and distribution of Coelomycetes is inadequate. During the course of our studies on south Indian Coelomycetes, we observed that several species were new records for India and description of these fungi was needed. Therefore the new records of Coelomycetes are briefly described and illustrated.

1. *Coleophoma cylindrospora* (Desm.) Höhn. *Ber. dtsh. Bot. Ges.* 37 : 14 (1919). Figs. 1, 5, 6. = *Sphaeropsis cylindrospora* Desm. *Ann. Sci. Nat. 3 Ser. 11* : 277 (1849).

Conidiomata pycnidial, subspherical to flattened, unilocular, black, $200-250 \mu$ in diam., wall composed of brown, thick-walled *textura angularis*: basal part of the pycnidium thicker and broader than the side walls. Ostiole single, circular, slightly papillate, $25-30 \mu$ in diam. Conidiogenous cells phialidic, confined to the basal portion of the pycnidium, intermixed with paraphysis-like structures, ampulliform, hyaline, smooth, $5-7 \times 3-4 \mu$. Conidia cylindrical, aseptate, straight, hyaline to pale brown, with several globose guttules, $20-26 \times 2-2.5 \mu$.

Specimen examined On dead leaves of *Ilex wightii* (Aquifoliaceae) collected in Bombay

shola, Kodaikanal (altitude 2,400 M), Tamilnadu, 9.11.87. IC 124. *Coleophoma crateriformis* (Dur. & Mont.) Höhn. *Sber. Akad. Wiss. Wien.* 116: 637 (1907). Figs. 7, 8. = *Septoria crateriformis* Dur. & Mont. *Fl. Ager.* 1:590 (1846-49).

Conidiomata pycnidial, $100-150 \mu$ in diam: ostiole $15-20 \mu$ in diam. Conidiogenous cells $3-5 \times 2-3 \mu$. Paraphysis like structures absent. Conidia cylindrical, aseptate, straight, hyaline with one guttule at each end, $10-13 \times 2.0-2.5 \mu$.

specimen examined : On dead leaves of *Litsea wightiana* (Lauraceae), collected in Bombay Shola, Kodaikanal (altitude 2,400 M) Tamilnadu, 9.11.87. IC 132. *Coniella castaneicola* (Ell. & Ev.) Sutton, (Sutton 1980). Figs. 2, 4, 9, 10.. = *Gloeosporium castaneicola* Ell. & Ev. *Proc. Akad. nat-Sci. Philad.* 435 (1895).

Conidiomata pycnidial, globose, subepidermal, unilocular, $300-350 \mu$ in diam. wall composed of pale brown, *textura angularis*. Ostiole central, papillate, $20-25 \mu$ in diam. Conidiogenous cells arising from a basal pulvinate mass of pseudo-parenchyma situated at the base of the pycnidium, phialidic; ampulliform to cylindrical, straight, hyaline, smooth, $20-22 \times 2.5-3.0 \mu$. Conidia cylindrical, aseptate, slightly falcate to fusiform, pale brown, $25-30 \times 2.0-3.5 \mu$.

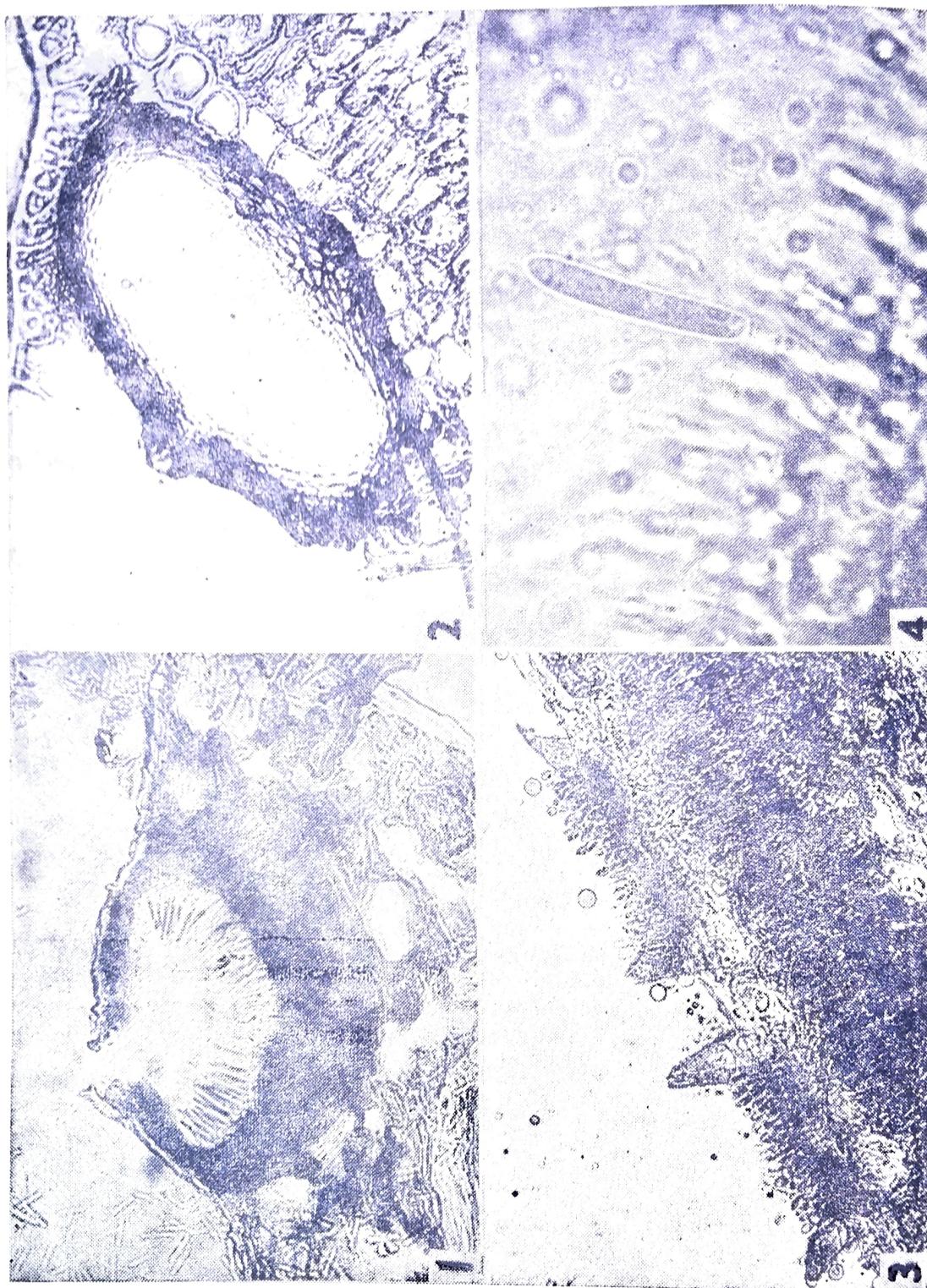
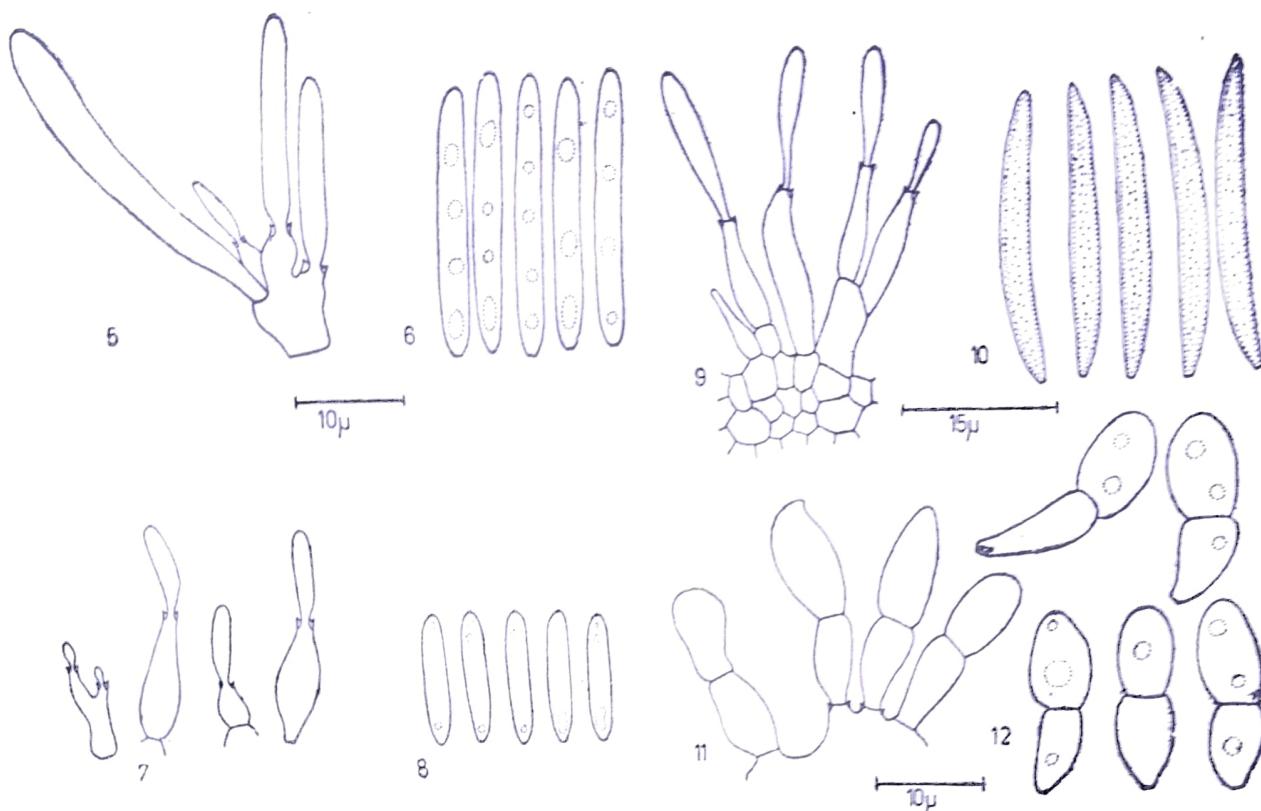


Fig. 1. Vertical section of Pychidial Conidioma (*Coleophoma Cylindrospora*) X 300 2. Vertical section of pycnidial conidioma (*Coniella castaneicola*) X 300 3. Vertical section of acervular conidioma (*Marssonina rosae*) X 300
4. Young developing conidium (*Coniella castaneicola*) X 1500.



5. Conidiogenous cells with developing conidia *Coleophoma cylindrospora* 6. Mature conidia *Coleophoma cylindrospora* 7. Conidiogenous cells with developing conidium (*Coleophoma crateriformis*) 8. Mature conidia (*Coleophoma crateriformis*) 9. Conidiogenous cells with young conidium (*Coniella castaneicola*) 10. Mature conidia (*Coniella castaneicola*) 11. Conidiogenous cells with young developing conidium (*Marssonina rosae*) 12. Cature conidia (*Marssonina rosae*).

Specimen examined On dead leaves of *Elaeocarpus ferrugineus* (Elaeocarpaceae) collected in Bombay shola, Kodaikanal, (altitude 2,400 M) Tamil nadu 9.11.87, IC 134. *Marssonina rosae* (Lib.) Died. Krypt. Fl. MK. Brandenb. 9:830 (1915). 3, 11, 12. = *Asteroma rosae* Lib. Mern. Soc. Linn. 5 :404 (1827).

Causing black spot of rose leaves, leaf spot black, circular, to irregular, 2-5 μ in diam. amphigenous. Conidiomata acervular, subcuticular, brown, conidiogenous cells arising from the base of the acervular cavity, annellidic with 1-2-annellations, doliiform to cylindrical, hyaline, smooth, 5-7 X 3-4 μ . Conidia hyaline, 1-septate, separating 2-unequal cells, slightly curved, base truncate, apex obtuse, constricted at the septum, guttulate, 15.0-18.0 X 5.0-5.5 μ .

Specimen examined On leaves of rose (var. Queen Elizabeth, Summer Holiday, Tapestry, Golden Master Piece, Princess Elizabeth, Sombrial, Laleenabert, Eclipse). Bryant park, 6.11. 1987 (altitude 2,300 M) Kodaikanal, Tamilnadu. IC 136, 137, 138, 139, 140, 141, 142, 143.

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