

Taxonomy of Some Indian Ascomycetes

By B. A. Ullasa

(M. A. C. S. Laboratory, Poona 4, India)

During his mycological survey for Ascomycetes of Coorg (Mysore State) and Mahabaleshwar (Maharashtra State) the writer encountered a few species of Ascomycetes which on critical examination and comparative studies with type material were found to need revision in their taxonomic status. This paper reports three species of Eusascomycetes one of which is considered as a synonym and the other two as new combinations.

1. *Stigmochora deightonii* (Syd.) von Arx in Muller & Arx Beitr. Kryptog. Flora Schweiz. 11 (2), 662 (1962).

Syn. *Endothella kanarensis* Ramkr. T. S. Proc. Ind. Acc. Sci. Sect. B. 35: 111 (1952).

This fungus was collected by the writer parasitizing leaves of *Albizzia* characterized by phyllachoracious infection resembling tarspots. Critical microscopic examination of such lesions revealed the presence of perithecia having asci with 2-celled hyaline ascospores on the basis of which the writer's collection was identified as *Stigmochora deightonii* (Syd.) von Arx.

Review of previous literature revealed that there was a report of *Endothella kanarensis* Ramkr. T. S. on *Albizzia odorotissima* Benth. made by Ramakrishnan T. S. (1952). The writer's collection was found to agree with this fungus in all respects. This agreement was further confirmed through examination and comparison of the type material of *Endothella kanarensis* Ramkr. T. S. obtained from New Delhi (HCIO No. 19815).

The genus *Endothella* Theiss. & Syd. was established by Theissen & Sydow (1915) for an ascomycete considering the ascospores to be 2-celled on the basis of mistaken identity due to the densely staining band in the equatorial region of the ascospores. This fungus was, therefore, reduced to Synonymy with the genus *Phyllachora* Nke. (von Arx, 1958; Muller & Arx, 1962).

The writer's collection characterized by 2-celled hyaline ascospores parasitizing *Albizzia* sp. is, therefore, placed in the phyllachoraceous genus *Stigmochora* Theissen & Sydow with which it agreed in all respects.

2. *Plagiostigme jambolana* (Ramkr. et al.) Ullasa comb. nov.

Syn. *Didymosphaeria jambolana* Ramkr. et al. Proc. Ind. Acc. Sci. Sect. B, 37: 84 (1953).

Plagiostigme deodikari Ananthanarayanan, Curr. Sci. 32: 561 (1963).

Two ascomycetes have been previously reported and described separately on *Eugenia jambolana* Lam. viz. *Didymosphaeria jambolana* by Ramkr. et al. (1953) occurring in close association with *Neobarclaya congesta* (Burk. & Br.) Petch. and later by Ananthanarayanan (1963) as *Plagiostigme deodikari* which also occurred in close association with *Neobarclaya natalensis* Syd. In an earlier paper Ananthanarayanan (1962) treated *Neobarclaya congesta* as synonymy of *Neobarclaya natalensis* Syd.

The writer's collection of an ascomycete from Coorg parasitizing *Eugenia jambolana* was examined critically and found to belong to the genus *Plagiostigme* Syd. with perithecia having long drawn out lateral or oblique necks and equally 2-celled ascospores initially hyaline later becoming sub-hyaline to dark at maturity. The writer's collection of *Plagiostigme* from Coorg was compared with the type material of *Didymosphaeria jambolana* Ramkr. et al. (HICO No. 20148) and *Plagiostigme deodikari* (M. A. C. S. Herb. No. 164) both of which were known to parasitize *Eugenia jambolana* Lam. and was found to agree in all respects with the two latter fungi including conidial association. Since the earlier epithet has priority in such cases the fungus is treated as a new combination.

3. *Polystigma mahabaleshwarensis* (Ananth.) Ullasa Comb. nov.

Syn. *Phyllachora mahabaleshwarensis* Ananth. Sydowia 17: 126 (1964) *Physalospora anamalaiensis* var. *mahabaleshwarensis* Chiplonkar, A. Sydowia (in Press, 1968).

This collection of an ascomycete made by the writer on the leaves of *Embelia viridiflora* Scheff. from Mahabaleshwar was identified as a species of *Polystigma* DC. with bright perithecial walls. Critical examination and comparative studies revealed that the writer's collection of *Polystigma* agreed with *Phyllachora mahabaleshwarensis* Ananthanarayanan (1964) and later revised as *Physalospora anamalaiensis* var. *mahabaleshwarensis* by Chiplonkar (1968) in all respects, all of which parasitize the same host viz. *Embelia viridiflora*. This was further confirmed through examination of the type material of *Phyllachora mahabaleshwarensis* obtained from M. A. C. S. (Herb. No. 156). The writer's collection, is therefore, treated as a new combination.

Physalospora anamalaiensis Ramkr. T. S. & K. (1950) (HCIO 18821) infecting *Embelia ribes* Burm. on microscopic examination was, however, found to be quite different in having distinct clypeus,

bright perithecia and the ascospores exhibit distinct mucilaginous layer when mounted in water. This fungus was found always associated with and unidentified pycnidial fungus to be described in a later communication.

Acknowledgement

The writer is grateful to Prof. M. N. Kamat for his deep interest and guidance, to Dr. E. Muller of his help in identification, to the Director, M. A. C. S., Poona 4 for financial and laboratory facilities and to Dr. S. P. Raychaudhury, Head, Dept. of Mycology & Plant Pathology, I. A. R. I., New Delhi for providing the type material.

Literature cited

1. Ananthanarayanan, S., 1962: On the Occurrence of *Neobarclaya natalensis* Syd. in India. *Curr. Sci.* **31**: 424—425.
2. — 1963: *Plagiostigme deodikarii* sp. nov. from India. *Curr. Sci.* **32**: 561—562.
3. — 1964: Studies in Indian Phyllachoraceae. III *Sydowia* **17**: 126—131.
4. von Arx, J. A., 1958a: Übere einige Ascomyceten aus südamerica. *Act. bot. Neel.* **7**: 503—518.
5. Chiplonkar, A., 1968: Identity and taxonomy of *Phyllachora mahabaleshwarensis*. *Sydowia* (in Press).
6. Muller, E. & von Arx, J. A., 1962: Beitr. Kryptog Flora Schweiz. **11** (2): 1—922.
7. Ramakrishnan, T. S. & K., 1950: Addition to the fungi of Madras VII *Proc. Ind. Acc. Sci. Sect. B*, **32**: 67—79.
8. Ramakrishnan, T. S., 1952: Additions to fungi of Madras XII *Proc. Ind. Acc. Sci. Sect. B*, **35**: 111—121.
9. Ramakrishnan, T. S., K. V. Seernivasan & N. V. Sundarum, 1953: Additions to fungi of Madras XIV. *Proc. Ind. Acc. Sci. Sect. B*; **37**: 83—97.
10. Theissen, F. & H. Sydow, 1915: Die Dothideales, *Annal. Mycol.* **13**: 149—746.

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Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Sydowia](#)

Jahr/Year: 1970/1971

Band/Volume: [24](#)

Autor(en)/Author(s): Ullasa B. A.

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