NOTES ON TWO INDIAN SPECIES OF RAVENELIA

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The spermogonial and aecial stages of Ravenelia evansii are described from recently collected material of Acacia arabica in India. Ravenelia deformis is discussed and referred to Uredo.

RAVENELIA EVANSII

Ravenelia evansii H. & P. Sydow (1912) was described as a new species on Acacia robusta Burch. from Pretoria, South Africa. Later, Mundkur & Thirumalachar (1946) described R. acaciae-arabicae as a new species on Acacia arabica Willd. from Mysore, India. Kapoor & Agarwal (1974) treated R. acaciae-arabicae Mundk. & Thirum., as a synonym of R. evansii Syd. Several authors including Butler & Bisby revised by Vasudeva (1960), Rangaswamy et al. (1970), Bilgrami et al. (1979) and Sarbhoy et al. (1980) reported the occurrence of R. evansii (syn. R. acaciae-arabicae) from other areas in India. The original description pertained mainly to the telial stage and pycnia were referred to as epiphyllous and sparse. Kapoor & Agarwal (1974) who examined the type specimen were unable to find any spermogonia.

Recently the authors collected rust-infected fruits of Acacia arabica showing spermogonia and aecia. Uredinia and telia were found on the leaves and the urediniospores and teliospores were morphologically similar to those of R. evansii. The spermogonial and aecial stages were found from December to March whereas uredinia and telia were found during most of the year. Culture work, however, was not carried out to prove the association but regular and continuous association of the spore stages over a 3-year period indicates the correlation is acceptable.

Spermogonia minute, usually associated with aecia, pale brown with a dark-coloured exudate at the ostiole, subcuticular, conical; determinate in growth without peridium; 40-55 pm high, 50-90 pm wide; flexuous hyphae and periphyses absent; spermatiophores aseptate, hyaline, smooth, thin-walled, arranged in a palisade-like hymenium. Aecia cupulate, in dense clusters, creamy white to pale yellow; aecial cups subepidermal, deep-seated, erumpent, pulverulent, averaging 300 x 180 pm, peridium well-developed; peridial cells rhomboid, angular, sometimes ellipsoid, 21-34 x 15-21 pm; wall hyaline, 2-5 pm thick, verrucose. Aeciospores catenulate, subglobose to ellipsoid, often angular, 20-27.4 x 17-20.4 pm, wall 1.5-2 pm thick, verrucose, germ pores 2-3, scattered.

The morphological features of the spermogonia described above show that they belong to type 3 of Hiratsuka & Cummins (1963) who also showed type 7 spermogonia to occur in R. versatilis Diet. Tyagi & Prasad (1972) have reported spermogonial type 3 in R. acaciae-senegalis Sanwal and R. tandonii Syd. It is interesting to note the anomaly that Kapoor & Agarwal (1974) treated R. tandonii Syd. as a synonym of R. versatilis Diet. which has type 7 spermogonia. The present investigation shows that R. evansii is a macrocyclic autoecious rust.

RAVENELIA DEFORMIS

Tyagi & Prasad (1978) described a new taxon under the name Ravenelia deformis. This report was based on a rust-infected specimen of Dichrostachys cinerea W. & A. The authors gave a Latin description of spermogonia, aecia and uredinia but not of telia. The name R. deformis Tyagi & Prasad, though validly published and legitimate, cannot be used for the name of a taxon in a teleomorphic genus because the description (and the type) did not

Figs 1–3. *Ravenelia evansi*.

Fig. 1. Aecial cups on the fruits of *Acacia arabica* (× 2).

Fig. 2. Cross-section of the fruit showing subcuticular spermogonia (× 450).

Fig. 3. Cross-section of the fruit showing peridiate aecia (× 100).
Notes and brief articles

include details of the teleomorph (Art. 59, International Code of Botanical Nomenclature). In accordance with article 59.3 which allows the legitimate combination of the epithet in an anamorphic genus, the following nomenclatural change is made.


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REFERENCES


CRYPTASCOMA, A NEW GENUS OF THE VALSACEAE

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Cryptascoma bisetula gen. et sp.nov., collected on unidentified dead twigs from Kodaikanal, Pulney Hills, Southern India is described and illustrated. The fungus is classified in the Diaporthales.

An interesting ascomycete was collected on unidentified dead twigs from Kodaikanal in the Pulney Hills, Madurai Dt, Tamil Nadu State. The aim of this paper is to present a description of the fungus and to discuss its taxonomy.

Cryptascoma gen.nov.

Etym. kryptos (G), hidden et ascoma (L), peritheciun


Species typica: Cryptascoma bisetula sp.nov.

Stroma absent. Perithecia in groups, immersed within the host tissue, vertically-oriented, partially erumpent, ostiolate. Peridium two-layered: an outer layer of thin-walled, brown cells and an inner layer of thin-walled, hyaline cells. Ostiole periphryste. Asci unitunicate, thin-walled, ellipsoid, becoming free in the perithecial cavity, non-amyloid, 8-spored. Ascospores fusiform, 1-septate, with an appendage at each end of the cell. Appendage simple, filiform. Paraphyses absent.

Cryptascoma bisetula sp.nov. (Figs 1-9)

Stroma absens. Perithecia immersa in substrato, 2-5 aggregata, raro solitaria, globosa vel planate globosa

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