

Contribution to our knowledge of Ascomycetes of India. XIV.

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(With figs. 3)

The present paper constitutes fourteenth in the series published earlier (1960—1966) and deals with the description of new species of ascomycetes eg. *Wettsteinia phoenicis* sp. nov., on *Phoenix sylvestris* Roxb., *Diaporthe acaciae* sp. nov. on *Acacia arabica* Willd. and *Dothidea ilicis* sp. nov. on *Ilex europaeus* Royle. These have been presented as new to science on the basis of comparative morphological studies and host specificity.

44. *Wettsteinia phoenicis* sp. nov.

Perithecia dispersa, solitaria vel greges minutos formantia, basi applanata, ostiolo papilliformi erumpentia, brunnea vel obscura,

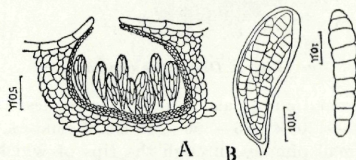


Fig. 1. *Wettsteinia phoenicis*.

110—160 × 150—180 μ; asci pauci, breviter stipitati, crasse tunicati, antice incrassati, 8-sporei, 65—96 × 16—22 μ; sporae fusiformes, biseriatae, primum hyalinae, postea flavo — brunneae multiseptatae ad septa constrictae, muco hyalino obvolutae, 24—26 × 6—9.5 μ.

Perithecia scattered, embedded in the host tissue, solitary or rarely in groups, with a flattened base, projecting out with a papillate ostiolo, brown to dark in colour, 110—160 × 150—180 μ. Asci few originating from basal region, shortly stipitate, bitunicate, hyaline, heavily double walled at the apex, 8 spored, 65—96 × 16—22 μ. Ascospores fusiform, biseriate, hyaline, later changing to yellow brown, transversely septate and no vertical septa, constricted at septum, with gelatinous coat on outer wall, 24—36 × 6—9.5 μ.

Collected on dead rachis of *Phoenix sylvestris* Roxb., in the month of March 1966, Aurangabad, Leg. S. T. Tilak and deposited in the herbarium of Marathwada University under number MUH. 201 (Tilak type).

45. *Diaporthe acaciae* sp. nov.

Stromate late effuso, corticis superficiem nigrificante, intus plus minusve distincte marginato; perithecia pauca circinantia vel congesta, $330-420 \times 225-350 \mu$, ostiolis convergentibus erumpentia; asci clavati, 8-spori, $64-88 \times 6.4-8 \mu$; sporae biseriatae, fusiformes, grosse $6-8$ -guttulatae, 1-septatae, ad septum constrictae, $14.4-17.6 \times 4-5 \mu$.

Stromatic area usually wide spreading, the dorsal zone usually blacking the surface of the bark, ventral zone always present at the

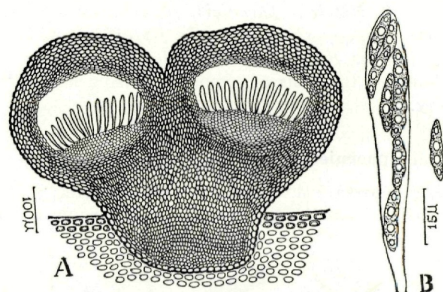


Fig. 2. *Diaporthe acaciae*.

margin of the stromatic area and usually more or less traceable beneath it. Perithecia $330-420 \times 225-350 \mu$, in small clusters, within the bark raising it into small pimples through the tips of which the clusters of black ostioles emerge. Asci clavate measuring from $64-88 \times 6.4-8 \mu$, 8 spored, lying loose in the cavity at maturity. Ascospores narrowly fusiform, hyaline, biseriate, constricted in the middle, with three to four oil drops in each, $14.4-17.6 \times 4-5 \mu$.

Collected on dead stems of *Acacia arabica* Willd., in the month December 1965, Aurangabad, Leg. S. T. Tilak and deposited in the herbarium of Marathwada University under number MUH. 202 (Tilak type).

46. *Dothidella ilicis* sp. nov.

Stroma superficiale, pulvinatum, uniloculare, cellulis superficialibus obscuris et crassiusculis, $270-400 \times 75-105 \mu$; asci numerosi, paraphysati, tenuiter tunicati, cylindracei, 8-spori, $45-65 \times 8-12 \mu$, sporae biseriatae, ellipsoideae vel cylindraceae, medio septatae, hyalinae, $9-15 \times 3-5.8 \mu$.

Stroma superficial, erumpent, cushion shaped, forming crusts, uniloculatae, outer cell walls dark and thick $270-400 \times 75-105 \mu$. Asci originating from basal cushion like fertile layer, numerous, paraphysate, unitunicate, pedicellate, cylindrical, 8 spored, $45-65 \times 8-12 \mu$. Ascospores bicelled, hyaline, biserially arranged, elliptic to cylindric, transverse septum in the middle, $9-15 \times 3-5.8 \mu$.

Collected on dead twigs of *Ilex europaeus* Royle, in the month of October 1965, Kodaikanal, Leg. S. T. Tilak and deposited in the herbarium of Marathwada University under number MUH. 203 (Tilak type).

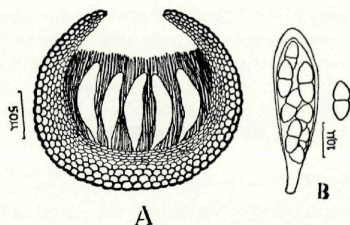


Fig. 3. *Dothidella ilicis*.

The Saccardian genus *Plowrightia* and *Dothidea* of Fries ex Fries have been now combined by Arx (1948) and Loffer (1957). Arx (1958) extensively studied the genus *Dothidella* which is characterised by sub cuticular hypostroma and hyaline two celled ascospores.

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