

## Contribution to our knowledge of Ascomycetes of India XXX.

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In the earlier papers (1960—1970) 113 ascomycetes have been described from India. The present paper constitutes continuation in the earlier series in which *Gibberidea zizyphi* sp. nov. on *Zizyphus glabrata* Wt., *Hypocrea munkii* sp. nov. on unidentified dicot host, *Trematosphaeria indica* sp. nov. on *Vitex negundo* L., and *Valsa kunzei* Fr. on *Caesalpinia pulcherrima* Swartz have been described. The first three are new species while the latter constitutes a new record to India.

### 114. *Gibberidea zizyphi* sp. nov.

Stroma nigrum, carbonaceum, in matricis superficie evolutum; perithecia stromati immersa, globosa, non ostiolata, 350—450  $\times$  330—500  $\mu$ ; asci cylindranei, stipitati, tenuiter tunicati, 8-sporei, 64—80  $\times$  6—8  $\mu$ ; sporae uniseriatae, vel irregulariter ordinatae, 3-septatae, hyalinae, pallide viridulae, guttulis 2—4 praeditae.

Stroma black, carbonaceous, superficial on the wood, perithecia immersed in stroma, globose, nonostiolate, 350—450  $\times$  330—500  $\mu$ . Asci cylindrical, stalked, unitunicate, 8-spored, originating from basal layer, 64—80  $\times$  6—8  $\mu$ . Ascospores hyaline to light green in colour, 3-septate, elliptic to fusoid, with 2—4 oil drops in each, uniseriate to irregularly arranged 15—24  $\times$  3—5  $\mu$ .

Collected on dead stems of *Zizyphus glabrata* Wt., at Shadipur in the month of January 1970, Leg. V. K. Jadhav.

### 115. *Hypocrea munkii* sp. nov.

Stroma pulvinatum in matricis superficie evolutum; perithecia in stromatis superficie immersa, ostiolata, subglobosa, 150—225  $\times$  110—170  $\mu$ ; asci cylindranei, breviter stipitati, tenuiter tunicati, aparaphysati, 16-sporei, 60—75  $\times$  3.8—4.8  $\mu$ ; sporae uniseriatae, globosae vel subglobosae, cunctinae, 3—4  $\times$  2.5—3.5  $\mu$ .

Stroma cushion shaped, on the bark, perithecia numerous, immersed in the upper part of the stroma, wall of perithecia distinct, ostiolate, subglobose 150—225  $\times$  110—170  $\mu$ . Asci narrowly cylindrical, thin walled, short stalked, unitunicate, aparaphysate, 16-spored, 60—75  $\times$

3.8—4.8  $\mu$ . Ascospores greenish, globose to subglobose, 1-celled, uniseriate,  $3-4 \times 2.5-3.5 \mu$ .

Collected on dead stems of unidentified dicot host at Kannad in the month of August 1970, Leg. V. K. Jadhav.

The genus *Chromocrea* was erected by Seaver (1910) to accommodate members similar to *Hypocrea* Fr. with greenish ascospores. This view was accepted by Mathieson (1952) and Dennis (1960). However Munk (1957) and Muller & Arx (1962) merged this genus in the earlier genus *Hypocrea* Fr. Except the slight colour variation in the ascospores the genus resembles *Hypocrea* Fr. and the authors are in agreement to accept the views expressed by Munk (1957) and Muller and Arx (1962).

The species has been described after Dr. Anders Munk in recognition of his outstanding contribution to the Pyrenomyces.

#### 116. *Trematosphaeria indica* sp. nov.

*Perithecia* dispersa, matrici plus minusve immersa, subglobosa, 480—675  $\times$  390—675  $\mu$ , ostiolo papilliformi praedita; asci late clavati, breviter stipitati, crassiuscule tunicati, 8-sporei, paraphysati, 130—190  $\times$  15—20  $\mu$ ; sporae fusiformes, obscure brunneae, 3-septatae, 24—38  $\times$  8—15  $\mu$ , striis 6—8 longitudinalibus praeditae.

*Perithecia* separate, partly embedded in host tissue, subglobose, 480—675  $\times$  390—675  $\mu$ , ostiolate, ostioles beaked. Asci broadly clavate, short stalked, bitunicate, 8-spored, paraphysate, 130—190  $\times$  15—20  $\mu$ . Ascospores 4-celled, fusiform, dark brown 24—38  $\times$  8—15  $\mu$ , with band like transverse septa and vertical striations from one end to other. These vertical striations are 6—8 in each ascospore.

Collected on dead stems of *Vitex negundo* L., at Hallali in the month of October 1968, Leg. V. K. Jadhav.

Muller and Dennis (1965) have described a similar species *Trematosphaeria striaspora* from Venezuela with 5—6 furrows in the ascospores. The present species differs in all the morphological features than *T. striaspora* besides it possesses distinct striations and lacks furrows.

#### 117. *Valsa kunzei* Fr.

Stroma immersed in the bark, erumpent with a disc. *Perithecia* numerous, immersed in the stroma, necks very long, sulcate, cylindrical, ostioles converge and become erumpent through a common opening, measuring 225—450  $\times$  200—375  $\mu$ . Asci are not fixed to definite hymenial layer, filling the perithecial cavity, asci clavate, unitunicate, 8-spored, thin walled, paraphyses not seen at maturity, 22—32  $\times$  4—6  $\mu$ . Ascospores perfectly hyaline, allantoid, biseriate, 6—8  $\times$  1.2—1.6  $\mu$ .

The genus *Valsa* Fr. has been previously reported to have conidial stage *Cytospora* Ehre., by Munk (1953) and Kobayashi (1970). However in the present collection no conidial stage was observed. The present species of *Valsa* is a new report to the India besides being collected on a hitherto unreported host.

Collected on dead stems of *Caesalpinia pulcherrima* Swartz., at Daulatabad in the month of October 1970, Leg. V. K. Jadhav.

The type materials have been deposited in the herbaria of Cryptogamiae Indiae Orientalis New Delhi.

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