

Ascomycetes of India:

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During his investigations of Ascomycetes, the writer came across the following fungi which on critical study are described to be new to science.

1. *Fracchiaea indica* Talde, sp. nov. (Fig. 1).

Ascocarps in groups, superficial, subglobular, thick walled, each perithecium separated by a distinct wall, $225-369 \times 300-400 \mu$. Spines dark brown, nonseptate, pointed at ends, $15-30 \mu$ long (Fig. 1 A). Asci originating from the base of ascocarp, aparaphysate, shortly pedicillate, hyaline, unitunicate, cylindrical $110-120 \times 15-30 \mu$ (Fig. 1 B). Ascospores numerous, hyaline, allantoid to fusoid $6-7.6 \times 1-2 \mu$.

Perithecia gregaria, superficialia, subglobosa, pariete crasso praedita, $225-369 \times 300-400 \mu$, setis laxissime dispersis, continuis, abruptiuscule acuminatis, $15-20 \mu$ longis obiecta; asci crassiuscule clavati, antice late rotundati, postice paulatim attenuati, subsessiles vel brevissime stipitati, tenuiter tunicati, $110-120 \times 15-30 \mu$, polyspori; sporae polystichae vel irregulariter glomeratae oblongae vel subcylindraceae, utrinque obtusae, non vel parum attenuatae, raro rectae, plerumque inaequilatae vel suballantoideae, hyalinae, continuae, $6-7 \times 1-2 \mu$.

The fungus was collected on *Tamarindus indica* L. at kinwat forest in the month of June, 1968, which on critical examination was found to be different from the earlier described species and hence it is proposed to describe it as a new species on the basis of host relationship and comparative morphological characters.

The type material is deposited at M. A. C. S. Laboratories Poona under (M. A. C. S. Mycological Herb. No. 829) and I. A. R. I. New Delhi under (No. 30,025).

2. *Botryosphaeria butae*, Tilak & Kale (Fig. 2).

Stroma erumpent, perithecia have distinct walls from the stroma, carbonaceous, ostiolate, ostioles open, more or less flask shaped, measuring from $300-450 \times 720-420 \mu$. Asci many, stipitate, bitunicate, octosporous, cylindrical paraphysate, $122-209 \times 23-34 \mu$. Ascospores

hyaline, oblong, wider in the middle, thick walled, oftenly protoplasmic vacuoles seen, uni- or irregularly biseriata, $23-34 \times 19-22 \mu$.

The present fungus is similar to the earlier described spp. *Botryosphaeria butae* Tilak and Kale (1966). It differs only in the size and shape of asci. However it is considered as the same and constitutes a new host record for the species.

The fungus was collected on 10th Oct. 1968 at Aundha Nagnath on *Magnifera indica* L. and the type specimen deposited at I. A. R. I. New Delhi under (No. 30,027).

3. *Botryosphaeria ribis* Gross and Dug.

Stroma erumpent walls of the perithecia black-brown, cells elongated to polyhedral, perithecia $152-209 \times 180 \mu$, ostiolate, ostioles open. Asci sub-clavate, to cylindrical, bitunicate, paraphysate, stipitate, $92-103 \times 15-19 \mu$ octosporous, Ascospores oblong, wider in the middle, hyaline, protoplasm vacuolated uni or biseriata, $19-23 \times 5.7-7.6 \mu$

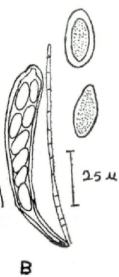
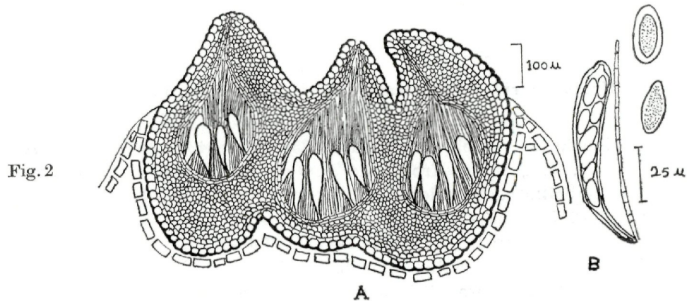
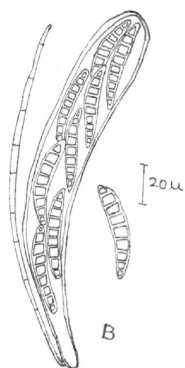
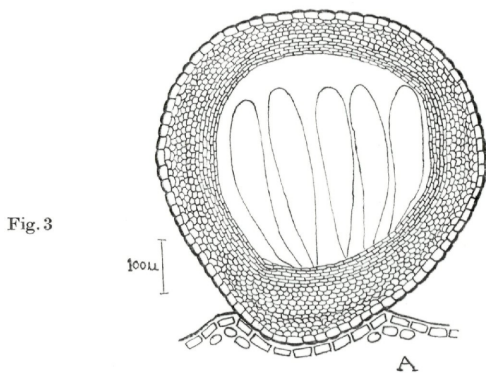
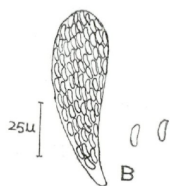
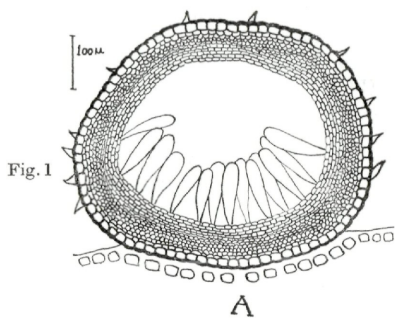
The present collection is similar to *Botryosphaeria ribis* Gross and Dug. and *Botryosphaeria xanthocephala* (Syed. and Butl.) Theiss. These two species are similar in many respects as can be seen from comparative table. Hence it is proposed to merge *B. xanthocephala* (Syd. and Butl.) Theiss. in *B. ribis* Gross and Dug.

Name of the Species	'Perithecia'	Asci	'Ascospores'	Authority
<i>B. ribis</i>	175—250 U (Bia.)	80—120 × 17—20 U	16—23 × 5—7 U	Cesati and de Notaris (1893)
<i>B. xanthocephala</i>	200—300 U (Dia.)	80—120 × 17—22 U	22—29 × 7.5—10 U	(Syd. and Butl.) Theiss
<i>B. Species</i>	152—209 × 180 U	91—102 × 15—19 U	19—23 × 5.7—7.6 U	New Collection

4. *Metasphaeria mahabaleshwariensis*, Talde, sp. nov. (Fig. 3).

Perithecia superficial, surrounded by a mat of mycelium, carbonaceous, globoid to subgloboid, separate, $435-500 \times 435-465 \mu$ (Fig. 3 A). Asci many, originating from the centre, cylindrical to subclavate shortly pedicellate, bitunicate, octosporous, paraphysate, measuring from $216-247 \times 23-34 \mu$ (Fig. 3 B). Ascospores hyaline, ellipsoideal to fusiform, pluriseptate, hyaline, $61-72 \times 7.6-9.5 \mu$.

Perithecia superficialia, mycelli subiculo insidentia carbonacea, globosa vel subglobosa, $435-500 \times 435-465 \mu$; asci subnumerosi, cylindracei vel cylindraceo-clavati, antice late rotundati, postice paul-



atim attenuati, brevissime et crassiuscule stipitati, paraphysati, octospori, 216—247 \times 23—34 μ ; sporae incomplete distichae, fusoideae, utrinque obtusiusculae, antice vix vel parum, postice plerumque distincte et paulatim attenuatae, plus minusve curvulae, raro fere rectae, hyalinae 6.1—7.2 \times 7.6—9.5 μ ; paraphyses subnumerosae, filiformes, remote septatae.

The fungus was, collected on *Syzygium comini* (L.) Skeels. at Mahabaleshwar in the month of December 1968 and is deposited at M. A. C. S. Laboratories Poona under (No. 828) and Ind. Agri. Res. Inst. New Delhi under (No. 30,026).

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References

- Mundkur, B. B. and Ahmad, S. (1946): Revisions of and additions to Indian fungi. II. Mycol. Pap. Imp. Mycol. Inst., 18: 11 Pp.
- Roy, A. J. (1967): Indian Phytopath. 20: 340—347.
- Saccardo, P. A. (1883): Sylloge fungorum 1: 93, II: 156 (1883) — XI: 295 (1895) — XVII: 585 (1905) — XXVI: 800—812 and 952 (1926).
- Singh, U. B. (1942): Stem brown disease of apple in Kumaon, Indian J. Agri. Sci. 12: 368—380.
- Tilak, S. T. (1966): Contributions to our knowledge of Ascomycetes of India — XI. Mycopath. et Mycol. app. 29: 369—372.
- & B. V. Srinivasulu (1967): Contributions to our knowledge of Ascomycetes of India — XV. Sydowia 20: 274—277.

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