
Studies on The Genus *Eutypella* From West Bengal

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Two species of the genus *Eutypella* (Nitschke) Sacc. viz. *Eutypella gymnosporiae* (Gambhir) Rappaz and *Eutypella zizyphi* H. & P. Sydow & Butler have been collected, figured and described from West Bengal during 1986. Out of the two species, *E. gymnosporiae* (Gambhir) Rappaz is a new record from India and *E. zizyphi* H. & P. Sydow & Butler is reported first time from the State of West Bengal.

Key words : Taxonomy, *Eutypella*, West Bengal.

The subgenus *Eutypella* was raised to generic rank and included under stromatic Pyrenomycetes having widely erumpent, cushion shaped stroma and crowded perithecia with long necks which are collectively erumpent. It was later merged with *Eutype*.

The fungal specimens were collected and their field data were recorded. The specimens were preserved dry and wet in 40 per cent formalin. Their characters were studied macroscopically and also by free hand sections stained in lactophenol-cotton blue. The measurements of different structures were taken and camera-lucida drawing were prepared. The taxonomic determinations were made with the help of relevant literature and experts.

DESCRIPTION

Key to the species :

- I. Asci p. sp. 21-26 μ m, ascospores not more than 7 μ m in length.
E. zizyphi
- II. Asci p. sp. 26-32 μ m, ascospores more than 7 μ m in length.
E. gymnosporiae

Eutypella zizyphi H. & P. Sydow & Butler, Fungi Indiae Orientalis.
Ann. Mycol. 9 : 372-421 (413). 1911.

(Fig. 1)

Stromata perfect and prominent, orbicular, up to 1 mm in diam., black, scattered or in groups, sometimes closely contiguous, pustuliform, at first covered by the bark, finally erumpent bursting or piercing the epidermis, closely embraced by the ruptured epidermis; perithecia 5-10 in a stroma, flask-shaped, monostichous,

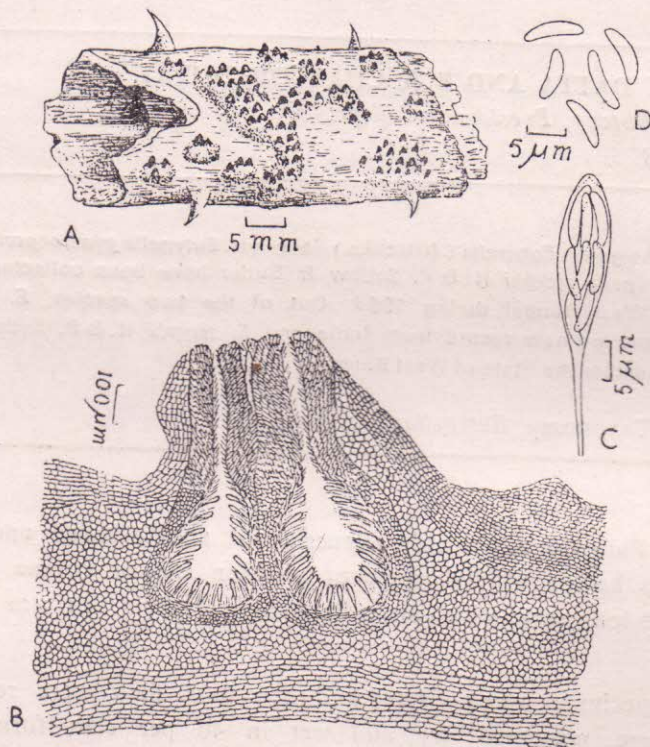


Fig. 1. *Eutypella zizyphi* : A. Habit, B. Section through stroma showing perithecia, C. Ascus showing arrangement of ascospores, D. Ascospores

602-966 x 266-448 μm , with converging necks terminating in 3-4 sulcate, black ostioles, erumpent in a fascicle through a flat disc with their tips more or less spreading; asci numerous, lining the base and sides of the perithecia, clavate-cylindrical, 34.2-43.2 (p. sp. 21-26) x 6.5-8 μm , long-stipitate, tip-round, unitunicate, octosporous, paraphysate; ascospores 8 in each ascus, biserial, allantoid, round at ends, slightly curved, hyaline to olivaceous, 6.2-7 x 1.6-2 μm .

Collected on the rotten wood of *Zizyphus jujuba* Lamk., Adisaptagram, Hooghly, West Bengal, India, 30.8.86, leg K. Datta, PCC 4366 (deposited at the Deptt. of Botany, Univ. of Massachusetts Amherst, U. S. A.).

Note : First time reported from West Bengal (Bilgrami *et al.*, 1979, 1981 ; Sydow and Butler, 1911).

Eutypella gymnosporiae (Gambhir) Rappaz.

Mycologia Helvetica 2 (3) : 477-478, 1987.

= *Diatrype gymnosporiae* Gambhir.

Curr. Sci. 48 : 123, 1979.

(Fig. 2)

Stromata scattered or in a groups, orbicular to elliptical, up to 1.5 mm long, pustule-like, at first buried in the inner bark, later erumpent bursting the overlying periderm ; black ostioles seen only from outside ; perithecia 2-10 in a stroma,

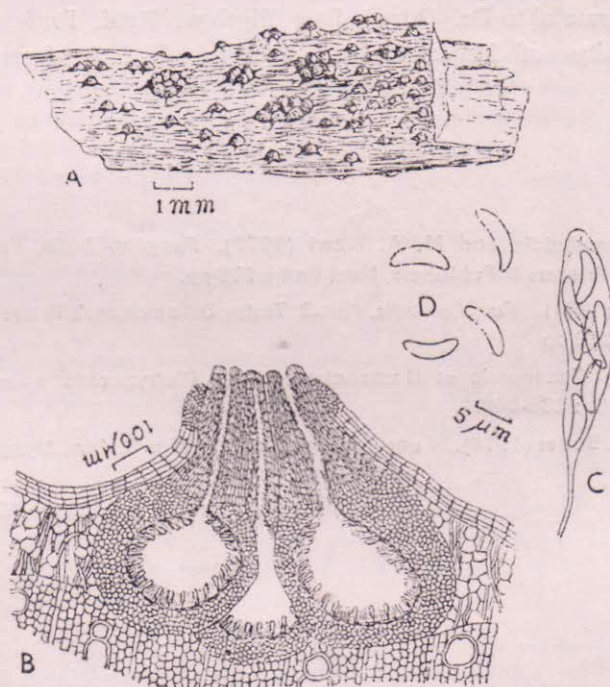


Fig. 2 *Eutypella gymnosporiae* : A. Habit. B. Section through stroma showing perithecia, C. Ascus showing arrangement of ascospores, D. Ascospores.

flask-shaped, $616-728 \times 312-434 \mu\text{m}$, with converging necks terminating into 3-4 sulcate, black ostioles, erumpent singly or in a fascicle in the centre of the pustule

which is closely embraced by the ruptured epidermis, above which they project but slightly; asci many, arising both from the base and sides of the perithecia; cylindric-clavate, long-stipitate, apex obtuse, unitunicate, 8-spored, 38-46 (p. sp. 26-32) $\times$ 7-8.1 μ m, paraphysate; ascospores biseriate to crowded, unicellular, allantoid, moderately curved, light hyaline to light olivaceous, 7-9 $\times$ 2.2-2.4 μ m.

Collected on the unidentified rotten wood, Domcol, Murshidabad, West Bengal, India, 18.9.1986; leg. K. Datta, PCC 4367 (deposited at the Dept. of Botany, Univ. of Massachusetts, Amherst, U. S. A.).

Note: First time reported from India (Bilgrami *et al.*, 1979, 1981; Rappaz, 1984).

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