long, 5·4–6·8 μ thick. Conidia formed singly at the apex of the conidiophore which after the first conidium has fallen sometimes proliferates through the scar and forms another conidium at the apex of the proliferation, straight or slightly flexuous, obclavate, truncate or rarely conico-truncate at the base, pale olivaceous-brown to olivaceous-brown, distal end sub-hyaline, wall either completely verrucose or proximal half verrucose, straight or constricted at the transverse septa, 7–39 septate, 50–311 μ long, 5·5–8 μ thick in widest part, tapering to 2·8–5·0 μ near the apex, 4·0–5·0 μ wide at the base, septa averaging 5·4–12 μ apart [Fig. 1 (*a*), 1 (*b*)].

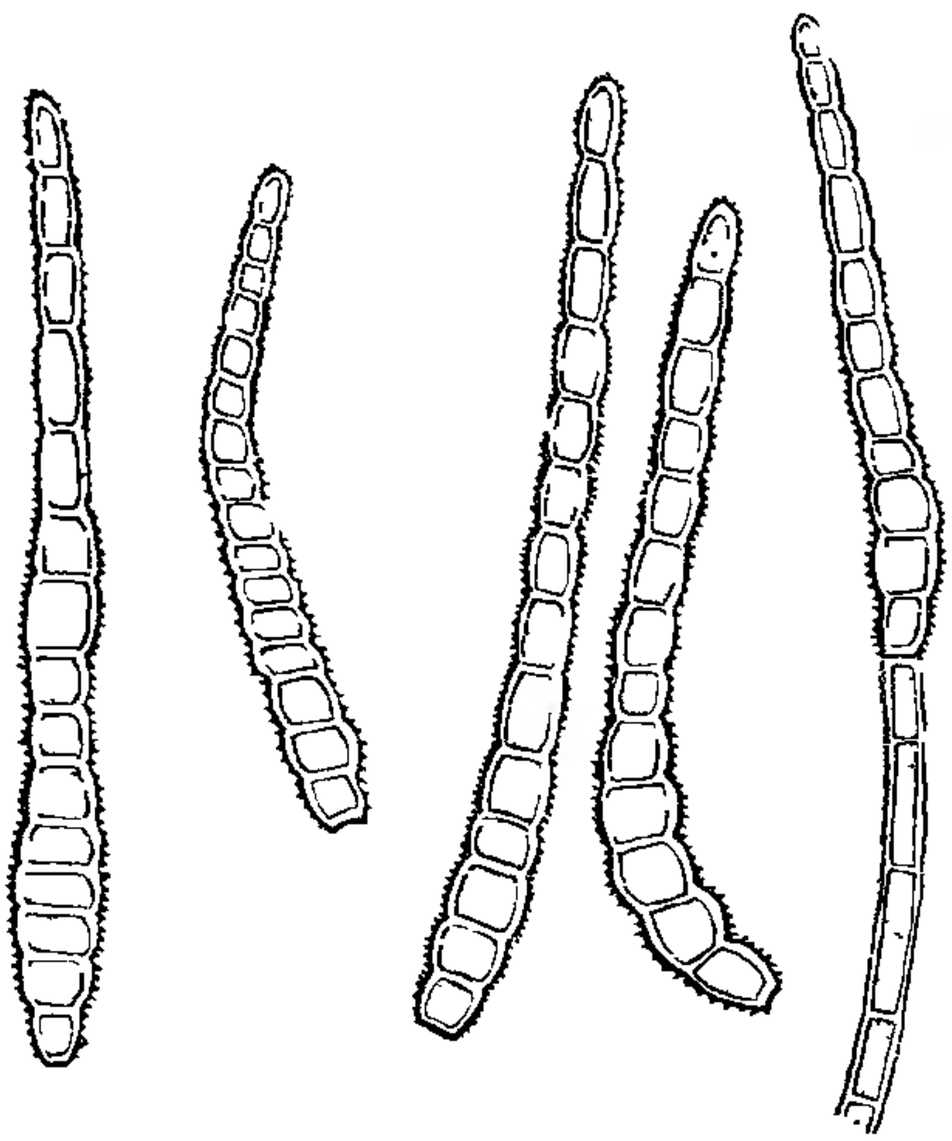

FIG. 1 (*b*) Conidia.

On drying leaf bases of Phoenix sylvestris, Mt. Abu, August, 1973. Specimen deposited with C.M.I., Kew, Herb. IMI 180041 type. Coll. No. J.U.M.L. 321.

We are grateful to Dr. M. B. Ellis, for the identification of the fungus. Thanks are due to Prof. H. C. Arya, for providing laboratory facilities and to Rev. Father William Barracos, for the Latin translation.

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COLLETOTRICHUM ACUTATUM—A NEW SEED BORNE PATHOGEN OF *ZINNIA*

DURING seed health testing of seeds of *Zinnia elegans* and *Z. haageans* an unidentified species of *Colletotrichum* was encountered by Neergaard, 1966 at the Plant Protection Service, Denmark. In 1972 a seed sample of *Zinnia* recieved from Italy, when tested on blotter method for their seed borne fungi, was found 5% infected by *Colletotrichum* species. On comparison with other known species of *Colletotrichum* this isolate was identified as *Colletotrichum acutatum* Simmonds.

On seeds the fungus forms acervuli, mostly single, rarely in groups, with numerous setae. Setae are brownish black, minute, smaller than spore mass. Spore mass bright orange. Mycelium rare or absent (Fig. 1 A).

FIG. 1. *Colletotrichum zinniae* sp. nov. on *Zinnia elegans*. (A) acervuli on seeds, × 175; (B) structure of acervulus showing conidia, conidiophores, and setae × 500; (C) Healthy seedling; (D) infected seedling; (E) Shrivelled, deformed and distorted leaves.

On agar medium colonies slow growing, restricted, effused, 15 mm in diameter within a week, pink orange to buff orange, margine smooth. Reverse pink orange. Acervuli formed in zones, minute, lyso-orange. Setae trichiformis, blackish-brown.

Conidia hyaline, one celled, cylindrical, fusoid, straight, pointed at both ends, 6·0–12·0 × 1·5–2·5 μ. Setae numerous, trichiform, brownish black 1–4 septate, 30·0–90·0 × 3·0–6·0 μ (Fig. 1 B).

In order to test the pathogenicity two to three weeks old seedlings of *Z. elegans* were inoculated by spraying with spore suspension of *C. acutatum* under glass house condition. The seedlings started showing symptoms within four days. The leaves became shrivelled, deformed, severe necrosis developed on the stem and seedlings were killed within a week (Fig. 1 D–E).

This fungus has been reported for the first time on this host. A number of other hosts of this pathogen has been reported by Simmonds (1965) after isolating it from *Carica papaya*. Since this pathogen is seed borne, it may easily be introduced into new areas.

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OPHIOGLOSSUM VULGATUM LINN.—A NEW HOST OF *CURVULARIA LUNATA* (WAL.) BOED

GORAKHPUR District being fairly moist exhibits a luxuriant growth and display of ferns and fernallies[1]. This situation offers possibilities of incidence of interesting fungal parasites of these plants. But parasitic fungal flora of Pteridophytes of this region has not yet been explored, barring a few reports[2]. During routine survey of fungi causing plant diseases in this locality, authors came across a large number of plants of *Ophioglossum vulgatum* showing leaf blight symptoms in December, 1974.

The early infections manifested in the form of small water-soaked circular spots particularly in the middle of the fronds. Later on the spots coaliced forming large pale yellow green patches due to the death of the infected tissues. Examination of the field specimen of the infected fronds showed the presence of *Curvularia* species. Repeated isolations made on Czapek's solution agar also yielded this fungal species. The fungus was characterized by spreading, subfloccose, dark olive-gray colonies; stout, septate, brownish, thick walled, unbranched, 72·0–100 × 2·7–4·5 μ conidiophores; alternately arranged, three septate, curved, brown, 25·2–34·2 × 9·0–11·4 μ conidia (Fig. 1).

The features mentioned above agree pretty well with *Curvularia lunata* in its essential characters except that the conidiophores are slightly smaller and conidia are larger in their measurements. The herbarium specimen is maintained as GPU Herb. No. 112, S. Singh. It is also being sent to the Indian type culture collection, I.A.R.I., New Delhi and Commonwealth Mycological Institute, Kew, England. This appears to be a new host record for *Curvularia lunata* (Walk.) Boed. from India.

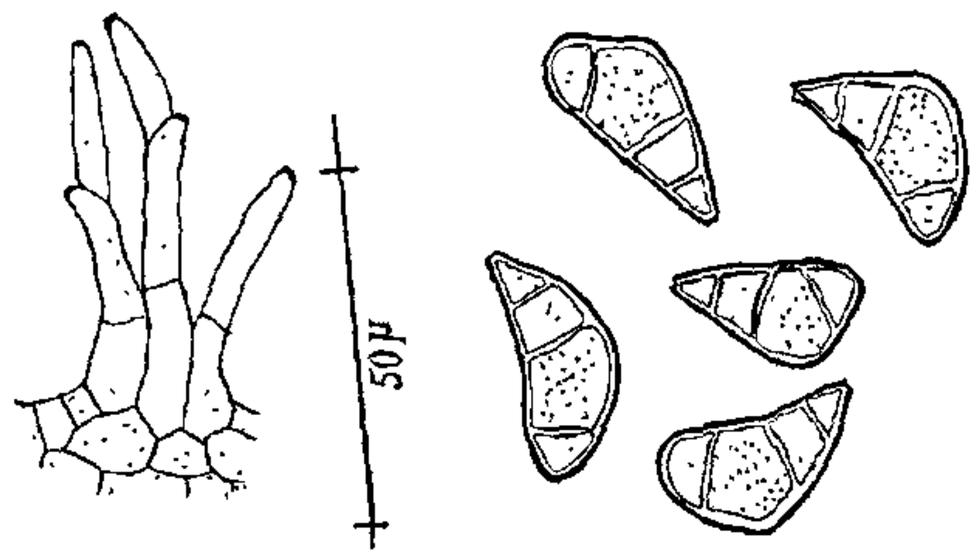

FIG. 1

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ON THE OCCURRENCE OF STOMATA ON THE INNER OVARY WALL OF *BELAMCANDA CHINENSIS* DC.

REMARKABLY little is known about the inner ovary wall (epidermis) despite frequent studies[1,2], in recent years on stomatal ontogeny and organography and there is no work in which the entire stomatiferous area of a plant species has been examined. In this note the occurrence of stomata on the inner ovary wall of *Belamcanda chinensis* DC (Iridaceae) and their ontogeny is described which are not recorded in the literature.

Epidermal peels from the inner and outer walls of young and old flowers and mature leaves of *B. chinensis* were stained in aceto-carmine, washed and mounted in 50% glycerine for observations.

In Fig. 1, longisection of inferior ovary of *B. chinensis* and the area on which stomata have been seen are shown. The family Iridaceae is known to have Allium type of stomata[3] which are devoid of subsidiary cells but have neighbouring cells without derivatives[4]. Mature stomata are evenly distributed all along the inner and outer walls in linear rows parallel to the axis of the plant body. The stomata of the inner ovary wall are in the level of the epidermal cells while those of