



Figure 1. Maize seedlings showing brown to black lesions on the tip of the coleoptile.

rous glistening yellow colonies, typical of *Xanthomonas*, after 72 hr. On staining, the bacterium proved gram negative, aerobic with single polar flagellum. The seed-borne nature of the pathogen was thus confirmed.

The bacterium has been identified as *Xanthomonas maydis* and the characteristics agree with the description reported by Rangaswamy *et al.*¹. Pure culture of the pathogen has been deposited in the Department of Plant Pathology, Agricultural College, Bangalore.

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A NEW POWDERY MILDEW DISEASE FROM INDIA

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DURING the survey of fungi of Madhya Pradesh (India), an interesting powdery mildew was noticed on

the leaves of *Cissus quadrangularis* Linn. (= *Vitis quadrangularis* Wall), an ornamental plant belonging to the family Vitaceae grown in the University botanical gardens. The disease appeared in the form of small irregular patches on the upper surface of the leaf which later advanced to both surfaces of the leaves. Microscopic examination of the mildew revealed the following characters:

Mycelium branched, septate, superficial, attached to the leaves by means of appresoria, hyaline and 3–5 μm thick. Conidiophores erect, simple, septate and bearing a chain of conidia. Conidia hyaline, smooth-walled, oval to elliptical, 0-septate, having numerous vacuoles and measuring 20–24 \times 14–16 μm . Fibrosin bodies not observed. Cleistothecia were found on both the surfaces of the leaves, dark, spherical to subspherical, superficially placed on mycelial matrix, measuring 90–98 μm and bearing numerous dark mycelioid appendages which were septate and 2–5 μm wide. Asci one per cleistothecium, globose to subglobose, double walled, walls were 2–5 μm thick, measuring 60–72 \times 53–68 μm . Ascospores eight per ascus, 0-septate, oblong, hyaline, smooth-walled and measuring 16–20 \times 14–16 μm .

On the basis of these characteristics, the mildew was identified as *Sphaerotheca fuliginea* (Schlecht.) Pall. A review of the literature^{1,2} reveals that *S. fuliginea* is hitherto not reported on any member of Vitaceae.

The specimen of *S. fuliginea* has been deposited at CMI, Kew, England as IMI No. 266353.

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