

400 × 2-3 μm). This species is peculiar in having larger and densely septate conidia which are mostly hyaline as against the conidia of other species of the genus which are either aseptate or having few septa.

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SIMULTANEOUS OCCURRENCE OF POWDERY MILDEWS ON CUCURBITA MAXIMA DUSH AND ABELMOSCHUS ESCULENTUS (L.) MOENCH FROM KARNATAKA, INDIA

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POWDERY mildew infected leaf samples from experimental fields infecting *Cucurbita maxima* Dush var. Arka Suryamukhi and *Abelmoschus esculentus* (L.) Moench var. Pusa Sawani were periodically collected for the presence of perfect stage, nature of imperfect state, and occurrence of hyperparasite. Some of the powdery mildew infected leaf samples of *A. esculentus* collected during the months of October 1978 and April 1980 and *Cucurbita maxima* collected during the month of January 1979 and March 1980 showed the presence of powdery mildew caused by *Leveillula taurica* in addition to *Oodinium* sp.

In pumkin variety, powdery mildew due to *Sphaerotheca fuliginea* usually covers both the leaf surfaces, and more commonly occurs in this region on all the cucurbits (Ullasa *et al.*¹). *Leveillula taurica* infection was restricted to lower leaf surface as small specks or angular spots restricted by veinlets. Due to its restricted colony growth and also due to its sporadic nature mostly it goes unnoticed. Careful microscopic examination of such small colonies on the lower surface revealed the presence of *Leveillula taurica* producing its conidial pores through stomata either singly or in small clusters bearing conidia at their apex singly (Fig. 1).



FIG. 1. Conidia of *L. taurica* on *Cucurbita maxima* × 200 Approx.

While the okra powdery mildew due to *E. cichoracearum* could be easily identified due to its ectophytic growth habit, it became somewhat difficult to distinguish infection due to *Leveillula taurica* because of its suppression due to the severe infection of *E. cichoracearum*. However, in the early stage scattered yellowish patches were observed on the upper leaf surface which corresponded to infection due to *Leveillula taurica* on the lower surface. As symptoms get diffused and overlap each other the symptoms due to *Leveillula taurica* goes unnoticed in latter stage. Whenever localized yellowish patches are seen on the leaves, infection due to *Leveillula taurica* can be suspected. Simultaneous occurrence of *L. taurica* with oidial powdery mildew is not uncommon. Ullasa and Sohi² have reported occurrence of *L. taurica* along with *O. caricae* on papaya and Mahrishi *et al.*³ reported the same thing on egg plants.

Apart from their simultaneous occurrence *L. taurica* is reported for the first time on these hosts from India.

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