

## SHORT COMMUNICATIONS

### SOME ADDITIONAL HOSTS OF *LEVEILLULA TAURICA* (LÉV) ARNAUD FROM PAKISTAN

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A large number of plants have been reported susceptible to *Leveillula taurica* from different parts of the world. Vasudeva in the revised 1954 edition of *The Fungi of India* has listed this mildew on 34 host plants for India.

From the campus of the Agricultural Research Institute, Tandojam, and neighbouring areas in West Pakistan, this fungus has been found to be a common parasite upon a large number of cultivated and wild plants, and has been collected on 30 different host plants in the last four years. Ten of the hosts not so far reported and which were collected in 1960-61, are given below:

*Sonchus oleraceus* L, *Alysicarpus longifolius* W & A., *Hibiscus sabdariffa* L, *Euphorbia hirta* L, *Medicago sativa* L, *Rhynchosia minima* DC, *Coriandrum sativum* L, *Calotropis procera* Br, *Gaillardia pulchella* var. *sunshine*, and *Cicer arietinum* L.

*Sonchus oleraceus* and *Alysicarpus longifolius*, as far as known to the authors, are new hosts for this fungus, and the rest are a new record for Pakistan. Specimens of *Sonchus oleraceus* and *Alysicarpus longifolius* have been deposited in the Herbarium, C.M.I. Kew (under accession Nos. 86534 and 86533 respectively) and all are available in the Herbarium of the Plant Pathological Section of this Institute.

As for the symptoms produced by this endophytic powdery mildew on these two new hosts, white powdery patches appear on the abaxial side of the leaves with yellowish discoloration on the upper surface. In the beginning the lesions are not clearly visible unless the leaves are examined against light, but these gradually turn brown and become conspicuous. Ultimately the leaf dries and falls off.

The conidiophores of the parasite are septate, hyaline, simple or more often branched, and

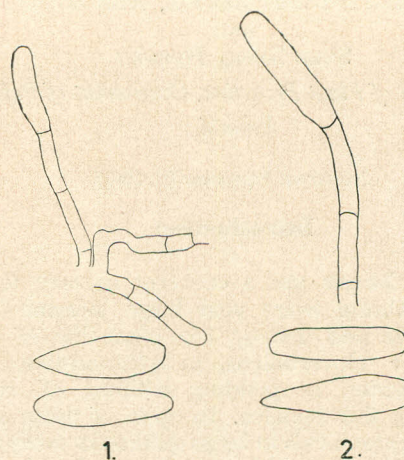


Fig. 1.—Conidiophores and conidia from  
1. *Sonchus oleraceus* and 2. *Alysicarpus*  
*longifolius* × 70.

emerge singly or in fascicles through the stomatal apertures. The conidiophores are variable in length and bear a single conidium on their ends. The conidia are sub-cylindric, often more or less sub-acuminate towards the apex, hyaline, single-celled and measure  $49.47 \times 14.81\mu$  ( $24.90 - 66.40 \times 8.30 - 21.58$ ) in the case of *Sonchus oleraceus*, and  $57.54 \times 14.51\mu$  ( $31.54 - 78.02 \times 9.96 - 18.26$ ) in *Alysicarpus longifolius*. (mean of 50, spore measurements).

Perithecial stage of the mildew has not been observed on any of the host plants so far reported from Tandojam.

Although *Leveillula taurica* is world-wide in distribution, and is known to cause a severe damage when conditions favourable to the parasite are present, no work has so far been done on this parasite in Pakistan. In view of the severe damage this mildew is causing to some important crops like chillies, cluster bean (Guar), castor, lucerne (Blue alfalfa), Trigonella (Methi) etc. at Tandojam where it results in complete defoliation or destruction of the foliage, a detailed study of this pathogen seems to be very necessary in this part of the country.

Thanks are due to the Director, C.M.I Kew for kindly confirming the identification of this parasite.