

THE CYCLAMEN MITE, STENEOTARSONEMUS PALLIDUS (BANKS)

(ACARINA: TARSONEMIDAE), ON AFRICAN VIOLETS¹

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INTRODUCTION: The cyclamen mite was described by Banks (1901:294) as Tarsonemus pallidus from leaves of greenhouse chrysanthemums at Jamaica, New York. It was first noticed in New York in 1898 and in Canada in 1908. Ewing (1939:41) considered Tarsonemus fragariae Zimmerman and T. destructor Reuter to be synonyms of T. pallidus Banks. Beer (1954:1267) placed it in the genus Steneotarsonemus.

HOSTS: Cyclamen is the plant most often infested. This mite also is recorded as a pest of African violet, snapdragon, geranium, chrysanthemum, larkspur, begonia, fuchsia, and petunia grown in greenhouses. Field-grown strawberries sometimes are infested.

ECONOMIC IMPORTANCE: Unless African violets are examined carefully periodically, the cyclamen mite can be overlooked easily and cause damage by sucking out plant juices, causing cells to collapse and providing an entry for plant diseases, resulting in damage such as leaf curling (fig. 1) and leaf dying (fig. 2), before the mites are observed. They are transferred from plant to plant in the routine cultural practices, by drafts of air, by close proximity of plants, or on clothes or hands. Care should be taken when introducing new plants into the greenhouse or other areas where African violets are already located. Since cyclamen mites are parthenogenetic, one will soon produce a mite colony large enough to cause damage and spread to surrounding plants (Garman, 1917:503).

DESCRIPTION: (fig. 3) This is one of the smaller mites that attacks ornamental plants. The male is about 0.75mm long and the female is about 1mm long. The immature stage is almost transparent. Adult females vary from milky-white to brown and are elliptical in shape. The mouthparts consist of stout, paired palpi of indistinct segmentation inserted on the apical portion of the capitulum. It also includes the slender, styliform, paired chelicerae which are inserted into plant cells. The layman may confuse the cyclamen mite with the broad mite, Polyphagotarsonemus latus (Banks), but the former is larger, and moves much slower.

CONTROL: The Department of Entomology and Nematology, University of Florida, recommends 3 applications at 10-day intervals of one of the following materials:
Kelthane, 18.8% EC at 1-2 pts/100 gal or 1-2 tsp/gal
Kelthane, 35% WP at 1 lb/100 gal or 1 Tbsp/gal
Thiodan, 3 EC at 2/3 qt/100 gal or 1-1/3 tsp/gal

LITERATURE CITED:

- Banks, Nathan. 1901. Tarsonemus in America. Proc. Ent. Soc. Washington 4:294-296.
Beer, Robert E. 1954. A revision of the Tarsonemidae of the western hemisphere (Order, Acarina). Univ. Kansas Sci. Bull. 36, Pt. 2(16):1091-1387.
Ewing, H. E. 1939. A revision of the mites of the subfamily Tarsoneminae of North America, the West Indies, and the Hawaiian Islands. United States Dept. Agric. Tech. Bull. 653. 64p.
Garman, Philip. 1917. Notes on Tarsonemus pallidus Banks (Acarina). J. Econ. Ent. 10(5):503.

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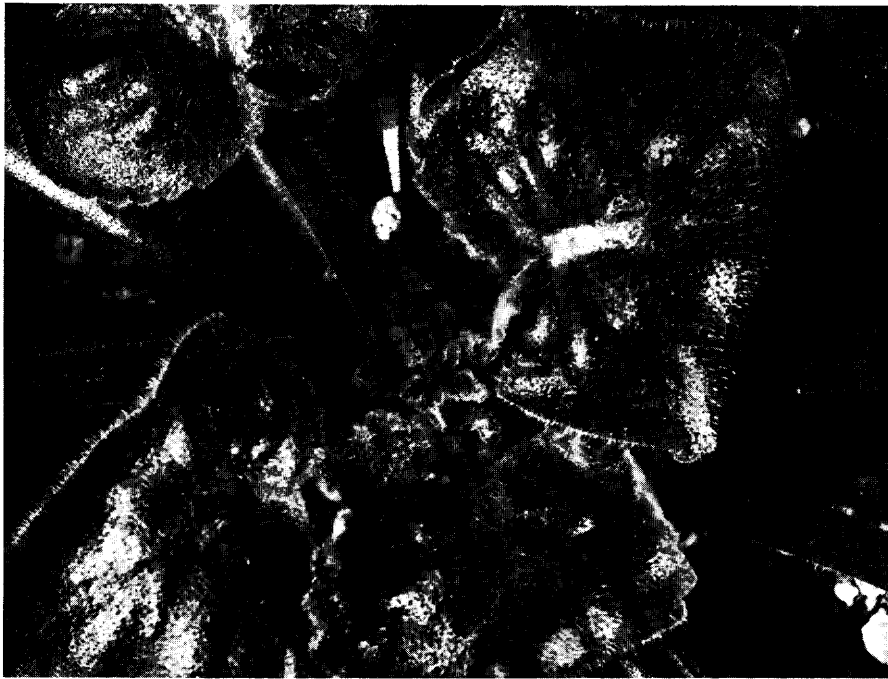


Fig. 1. Cyclamen mite damage to young African violet leaves.



Fig. 2. Extensive damage to African violet leaves by cyclamen mite.

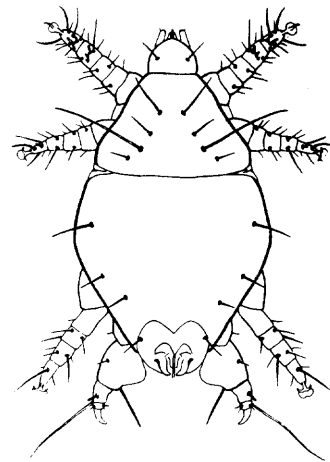


Fig. 3. Cyclamen mite, Steneotarsonemus pallidus (Banks) (after Beer).