

## THE CYCLAMEN MITE<sup>1</sup>

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**INTRODUCTION:**-- THE CYCLAMEN MITE, STENEOTARSONEMUS PALLIDUS (BANKS), WHICH BELONGS TO THE FAMILY TARSONEMIDAE, WAS FIRST NOTICED IN NEW YORK IN 1898 AND IN CANADA IN 1908. IT WAS DESCRIBED BY BANKS (1901) FROM LEAVES OF CHRYSANTHEMUM IN A GREENHOUSE AT JAMAICA, NEW YORK. TODAY IT IS GENERALLY DISTRIBUTED THROUGHOUT THE COUNTRY. AFTER COMPLETING STUDIES OF EUROPEAN SPECIMENS, BEER (1954) CONCLUDED THAT TARSONEMUS FRAGARIAE ZIMMERMAN IS A SYNONYM OF STENEOTARSONEMUS PALLIDUS (BANKS). THE MITES ARE OFTEN FOUND ON THE CORNS OF CYCLAMENS IN STORAGE AND ARE THUS TRANSPORTED BY TRADE.

**HOSTS:**--THE CYCLAMEN IS THE PLANT MOST OFTEN FOUND INFESTED WITH THIS MITE. THIS MITE IS ALSO RECORDED AS A PEST OF AFRICAN VIOLET, SNAPDRAGON, GERANIUM, CHRYSANTHEMUM, LARKSPUR, BEGONIA, FUCHSIA, AND PETUNIA, GROWN IN GREENHOUSES. FIELD GROWN STRAWBERRIES ARE SOMETIMES INFESTED.

**ECONOMIC IMPORTANCE:**--THE INFESTED PLANTS OFTEN PRESENT A STREAKED AND BLOTCHED APPEARANCE WHEN THEY HAVE DISTORTED LEAVES WITH EITHER UNOPENED BUDS OR SMALL DISTORTED FLOWERS. ALL PARTS OF THE PLANT ARE SUBJECT TO ATTACK, ESPECIALLY THE YOUNG PARTS WHICH WHEN INFESTED DO NOT USUALLY FORM NORMAL BUDS. INFESTED FOLIAGE OFTEN SHOWS PURPLISH AREAS. GREAT CARE SHOULD BE TAKEN TO AVOID INTRODUCING THIS PEST INTO GREENHOUSES ON PLANTS, HANDS, OR CLOTHES. INFESTED PLANTS MAY BE TREATED BY IMMERSING THEM IN WATER TO 110° F. FOR 15 MINUTES OR BY FUMIGATING THEM WITH 2 POUNDS OF METHYL BROMIDE TO 1000 CUBIC FEET AT ABOUT 70° F. SPRAYING THE PLANTS WITH KELTHANE OR ENDRIN AT 0.4 POUND, OR THIODAN AT 0.5 POUND TO 100 GALLONS OF SPRAY GIVES EFFECTIVE CONTROL, ESPECIALLY AFTER PRUNING BACK THE INFESTED GROWTH. THREE APPLICATIONS SHOULD BE MADE AT 2- TO 3-WEEK INTERVALS. A WETTING AGENT SUCH AS TRITON X-100 AT THE RATE OF 4 OUNCES PER 100 GALLONS OF SPRAY INCREASES THE EFFECTIVENESS OF THE SPRAY. SODIUM SELENATE IS AVAILABLE IN CAPSULES UNDER THE TRADE NAMES KAPSULATE AND SEL-KAPS FOR DIRECT APPLICATION TO SOIL AS A SYSTEMIC. DEMETON AND SCHRADAN MAY ALSO BE APPLIED AS A SOIL DRENCH. FOR BEST RESULTS, MAKE TWO APPLICATIONS AT 10- TO 14-DAY INTERVALS.

**DESCRIPTION:**--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. THE ADULT FEMALES VARY FROM MILKY-WHITE TO BROWN AND ARE ELLIPTICAL IN SHAPE. THE CYCLAMEN MITE (FIG.1) MAY BE CONFUSED WITH THE BROAD MITE (FIG. 2), BUT THE BROAD MITE IS BROADER, SMALLER, AND MOVES MUCH FASTER.

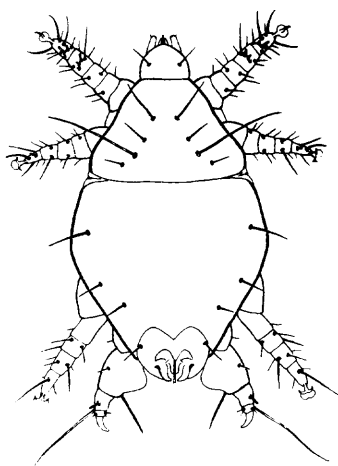


FIG. 1. CYCLAMEN MITE, STENEOTARSONEMUS PALLIDUS (BANKS) (AFTER BEER).

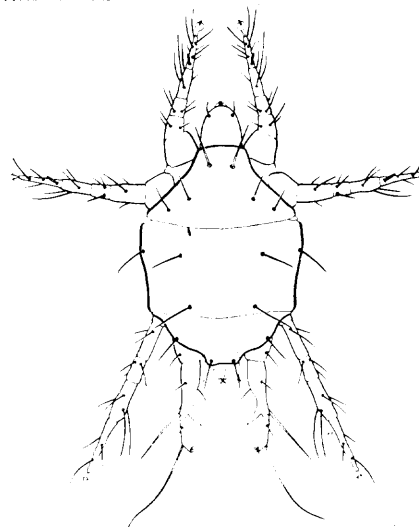


FIG. 2. BROAD MITE, HEMITARSONEMUS LATUS (BANKS)(AFTER BEER).

### LITERATURE CITED

- BANKS, NATHAN. 1901. TARSONEMUS IN AMERICA. PROC. ENT. SOC. WASH. IV. P. 294.  
BEER, ROBERT EDWARD. 1954. A REVISION OF THE TARSONEMIDAE OF THE WESTERN HEMISPHERE (ORDER, ACARINA). UNIV. KAN. SCI. BUL. XXXVI, PT. II(16):1091-1387.