

A FALSE SPIDER MITE, BREVIPALPUS PHOENICIS (GEIJSKES), DAMAGE TO APHELANDRA¹

(ACARINA: TENUIPALPIDAE)

H. A. DENMARK²

SYNONYM: TENUIPALPUS PHOENICIS GEIJSKES, 1939:23.

TYPE: FEMALE FROM HAAG, HOLLAND, ON PHOENIX SP., IN THE LABORATORIUM VON ENTOMOLOGIE, LANDBOUWHOOGESCHOOL, WAGENINGEN, NETHERLANDS.

INTRODUCTION: BREVIPALPUS PHOENICIS (GEIJSKES) WAS DESCRIBED BY GEIJSKES FROM SPECIMENS COLLECTED IN A GREENHOUSE IN HAAG, HOLLAND. THIS IS A TROPICAL-SUBTROPICAL SPECIES THAT HAS BEEN ACCIDENTLY TRANSPORTED BY MAN TO MANY AREAS OF NORTH AMERICA. IT SURVIVES UNDER GREENHOUSE CONDITIONS BEYOND ITS NATURAL RANGE. THIS MITE HAS AN EXTENSIVE HOST RANGE AND MAY CAUSE ECONOMIC DAMAGE, DEPENDING ON THE HOST.

DISTRIBUTION: B. PHOENICIS HAS BEEN RECORDED FROM ARGENTINA, BRITISH GUYANA, CUBA, EGYPT, HAWAII, HOLLAND, INDIA, JAMAICA, KENYA, MALAYA, MAURITIUS, MEXICO, SPAIN, TAIWAN, AND THE UNITED STATES. IT IS RECORDED ON THE MAINLAND OF THE UNITED STATES FROM CALIFORNIA, DISTRICT OF COLUMBIA, AND FLORIDA.

HOSTS: THERE ARE OVER 65 HOSTS LISTED BY PRITCHARD AND BAKER (1958). ONLY A FEW MAJOR HOSTS FROM FLORIDA ARE GIVEN HERE: APHELANDRA, GARDENIA, GRAPEFRUIT, HIBISCUS, HOLLY, LIGUSTRUM, LEMON, LIME, ORANGE, PECAN, AND VIBURNUM.

ECONOMIC IMPORTANCE: FEEDING BY THIS MITE DEVITALIZES THE PLANT AND CAUSES MESOPHYLL COLLAPSE. OLD DAMAGE IS CHARACTERIZED BY BROWNING OF THE DAMAGED AREA. IN ADDITION, SOME HOSTS EXHIBIT DEFORMED LEAVES (FIG. 1).

DESCRIPTION: THE FEMALE IS ABOUT 275 μ LONG, INCLUDING THE ROSTRUM (FIG. 2). THE BODY IS FLAT, LIGHT TO DARK GREEN, WITH 2 PAIRS OF LEGS EXTENDING FORWARD AND 2 PAIRS EXTENDING BEHIND. THE 2 SENSORY RODS ON TARSUS II SEPARATE IT FROM THE PRIVET MITE, B. OBOVATUS DONN., WHICH IS OFTEN FOUND WITH IT ON THE SAME PLANT.

CONTROLS: LITTLE INFORMATION IS KNOWN ABOUT THE CONTROL OF FALSE SPIDER MITES IN GENERAL. IT IS RECOMMENDED THAT DIMETHOATE, KELTHANE, OR MALATHION BE USED UNTIL DEFINITE CONTROLS CAN BE RECOMMENDED. FOLLOW THE INSTRUCTIONS ON THE LABEL AS DIMETHOATE AND MALATHION MAY CAUSE PLANT INJURY IN SOME CASES.

LITERATURE CITED:

GEIJSKES, D. C. 1939. BEITRAGE ZUR KENNNTNIS DER EUROPAISCHEN SPINNMILBEN (ACARI: TETRANYCHIDAE) MIT BESONDERER BERIICHTSICHTIGUNG DER NIEDERLANDISCHENS ARTEN. MEDED. LANDBOUWHOOGESCHOOL. WAGENINGEN. 42(4):1-68.

PRITCHARD, A. E., AND E. W. BAKER. 1958. THE FALSE SPIDER MITES (ACARINA: TENUIPALPIDAE). UNIV. CALIF. PUBL. ENT. 14(3):175-274, 51 FIG.

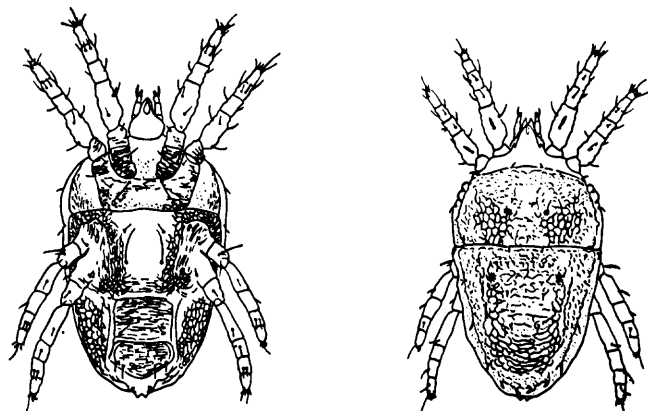
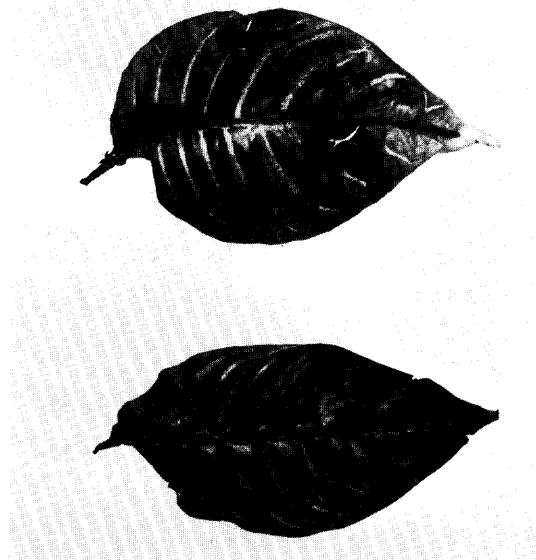


FIG. 1. INFESTED APHELANDRA LEAVES.

FIG. 2. VENTRAL AND DORSAL VIEWS OF ADULT FEMALE.

¹CONTRIBUTION No. 323, BUREAU OF ENTOMOLOGY

²CHIEF OF ENTOMOLOGY, DIV. PLANT IND., P. O. Box 1269, GAINESVILLE, FL 32602