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[1]

BOXWOOD BUD MITE, PHYTOPTUS CANESTRINII NALEPA, IN FLORIDA (ACARINA: ERIOPHYIDAE)

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SYNONYM: ERIOPHYES CANESTRINI (NALEPA), 1898.

INTRODUCTION: THE BOXWOOD BUD MITE, PHYTOPTUS CANESTRINI NALEPA, WAS ORIGINALLY DESCRIBED BY NALEPA (1890) FROM AUSTRIA ON BOXWOOD, BUXUS SEMPERVIRENS L. THE MITES LIVE UNDER THE BUD SCALES AND MAY CAUSE LEAF DEFORMATION AND FLOWER BLASTING (KEIFER, 1952).

DISTRIBUTION: EUROPE AND USA (CALIFORNIA, FLORIDA, AND NORTH CAROLINA).

HOSTS: BUXUS SEMPERVIRENS L., BUXUS MACROPHYLLA SIEB. AND ZUCC., AND BUXUS SP.

LIFE HISTORY AND HABITS: THERE IS LITTLE KNOWN ABOUT THIS MITE UNDER FLORIDA CONDITIONS. THE ALACHUA COUNTY INFESTATION APPARENTLY CAME FROM PLANTS BROUGHT IN FROM NORTH CAROLINA. MITES IN NORTH CAROLINA AND FLORIDA OVERWINTER UNDER THE OLD BUD SCALES AND MOVE TO NEWLY DEVELOPING BUDS IN THE SPRING. IT HAS BEEN MY EXPERIENCE THAT LIMITED NEW GROWTH OCCURS ON HEAVILY INFESTED PLANTS AND THE BUDS NEVER COMPLETE THEIR DEVELOPMENT.

DESCRIPTION: THE FEMALE IS ABOUT 170μ LONG. THE DORSAL SHIELD (FIG. 1) LACKS THE CENTRAL LINES; THE FEATHERCLAWS ARE 6-RAYED (FIG. 2); THE MICROTUBERCLES ARE BEADLIKE ON THE RING MARGINS, AND ARE ROUNDED OFF (FIG. 3); THE FEMALE GENITAL COVERFLAP HAS 12 TO 14 LONGITUDINAL RIBS (FIG. 4).

CONTROLS: VERY LITTLE IS KNOWN ABOUT CONTROL OF THIS MITE IN FLORIDA. ONE APPLICATION OF DIMETHOATE 2.67 EC, AT THE RATE OF ONE PINT PER 100 GALLONS OF WATER, CONTROLLED THE MITES SUFFICIENTLY TO ALLOW A FLUSH OF NEW GROWTH (FIG. 5).

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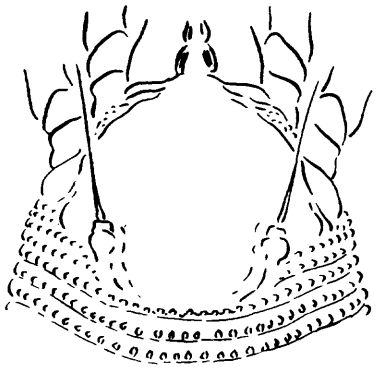

FIG. 1. DORSAL SHIELD (AFTER KEIFER).

FIG. 2. FEATHERCLAW (AFTER KEIFER).

FIG. 3. SKIN STRUCTURE (AFTER KEIFER).

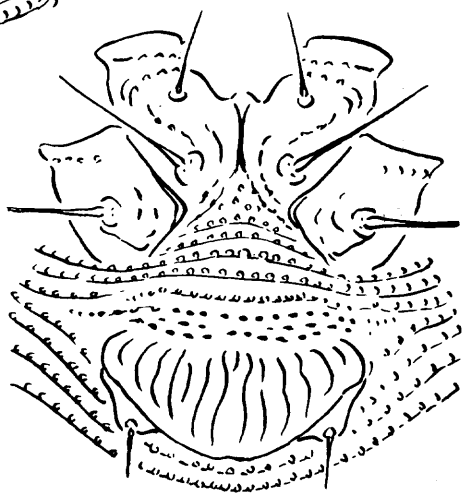

FIG. 4. FEMALE GENITALIA AND COXAE FROM BELOW (AFTER KEIFER).

FIG. 5. PHYTOPTUS CANESTRINII NALEPA DAMAGE TO BUXUS MICROPHYLLA.

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