

ERIOPHYES PARULMI (KEIFER) IN FLORIDA<sup>1</sup>  
(ERIOPHYIDAE: ACARINA)  
H. A. DENMARK

INTRODUCTION: KEIFER (1965) DESCRIBED A MITE, ACERIA PARULMI FROM AMERICAN ELM, ULMUS AMERICANA AND DESIGNATED THE TYPE LOCALITY AS BELOIT, WISCONSIN. NEWKIRK AND KEIFER REVISED THE TYPES OF ERIOPHYES AND PHYTOPTUS AND PLACED THE GENUS ACERIA UNDER ERIOPHYES (1971). ACCORDING TO KEIFER E. PARULMI AND E. RICHENSI K., CLOSELY RELATED SPECIES, CAN BE SEPARATED IN THAT RICHENSI LACKS A SHIELD PATTERN, THE MICROTUBERCLES ARE WEAKER AND SUBQUADRATE (FIG. 1). E. PARULMI HAS A SHIELD PATTERN (FIG. 2) AND MAKES FINGER-LIKE GALLS (FIG. 3) ON ELM IN NORTH AMERICA, WHILE RICHENSI MAKES TINY BEAD GALLS AND HAS BEEN FOUND ONLY IN GUATEMALA.

DISTRIBUTION: THE ONLY RECORDED LOCALITIES FOR E. PARULMI ARE BELOIT, WISCONSIN, TAMPA AND WINTER PARK, FLORIDA. IT IS PROBABLY FOUND WHEREVER ULMUS SPP. GROWS IN NORTH AMERICA.

HOSTS: THE REPORTED HOSTS ARE ULMUS AMERICANA, ULMUS PARVIFOLIA, AND ULMUS SP. WITH MORE CAREFUL COLLECTING, IT PROBABLY CAN BE FOUND ON OTHER SPECIES OF ULMUS.

DESCRIPTION: THE FEMALE IS 190-220 $\mu$  LONG, ELONGATE, WORMLIKE, AND IS A DULL CREAM-WHITE. SIDES OF SHIELD HEAVILY GRANULAR, SOME HALF RINGS BELOW DORSAL TUBERCLES WHICH ARE 18 $\mu$  APART (FIG. 4). FEATHERCLAW IS 5-RAYED (FIG. 5). ABDOMEN WITH 60-65 RINGS. ALL MICROTUBERCLES ROUNDED OFF EXCEPT FOR THOSE SLIGHTLY ACUMINATE AT REAR. FEMALE GENITALIA 12 $\mu$  LONG AND COVERFLAP 19 $\mu$  WIDE WITH 6-8 IRREGULAR, RATHER BROAD LONGITUDINAL RIBS.

CONTROL: ALTHOUGH NO CONTROL TESTS HAVE BEEN CONDUCTED IN FLORIDA, CHLOROBENZILATE OR KELTHANE WILL PROBABLY GIVE ADEQUATE CONTROL WHERE NEEDED AS THIS IS A BROAD SPECTRUM ACARICIDE.

LITERATURE CITED:

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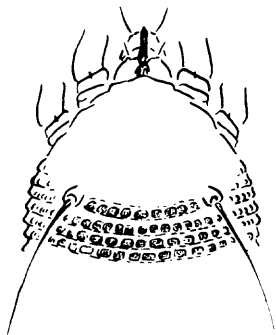


FIG. 1. ERIOPHYES RICHENSI (K.)  
DORSAL SHIELD (AFTER KEIFER).

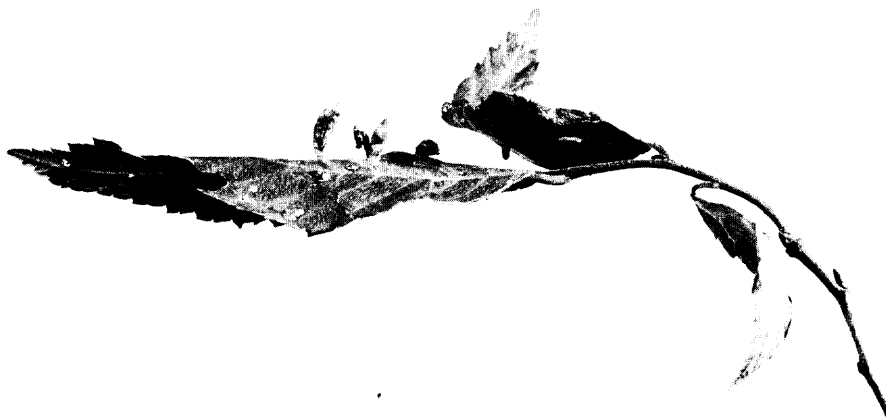


FIG. 3. ULMUS AMERICANA WITH FINGER-LIKE GALL.

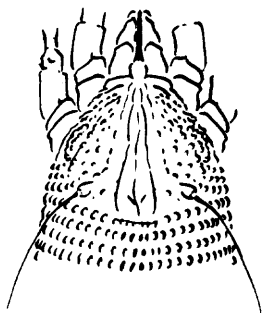


FIG. 2. ERIOPHYES PARULMI (K.)  
DORSAL SHIELD (AFTER KEIFER).

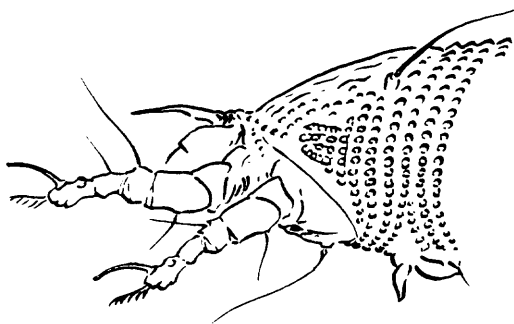


FIG. 4. HALF RINGS BELOW  
DORSAL TUBERCLES (AFTER  
KEIFER).



FIG. 5. FEATHERCLAW  
(AFTER KEIFER).

<sup>1</sup>CONTRIBUTION No. 247, BUREAU OF ENTOMOLOGY.