

ERIOPHYES LANTANAE COOK (ACARINA: ERIOPHYIDAE) IN FLORIDA¹

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INTRODUCTION: COOK (1909) DESCRIBED THIS MITE ON THE BASIS OF THE HOST AND INJURY FROM A CUBAN PLANT SPECIMEN OF LANTANA CAMARA L. THE MITE CAUSES LARGE GALLS (FIG. 1) WHICH CONSIST OF A MASS OF VERY SMALL GREEN LEAVES, AND DISTORTED FLOWER BUDS AND FLOWERS. IT IS USED AS A BIOLOGICAL CONTROL AGENT WHERE LANTANA SPP. IS CONSIDERED A PEST RATHER THAN AN ORNAMENTAL PLANT.

DISTRIBUTION: ORIGINALLY DESCRIBED FROM CUBA, THIS FLOWER GALL MITE IS NATIVE THROUGHOUT THE CARIBBEAN AREA, IS WIDESPREAD IN CENTRAL AND SOUTH AMERICA, AND IN FLORIDA AS FAR NORTH AS GAINESVILLE, ALACHUA COUNTY.

DIAGNOSIS: ERIOPHYES LANTANAE IS CHARACTERIZED BY THE 4-RAYED FEATHERCLAW, LACK OF A DISCERNIBLE DESIGN ON THE SHIELD, AND RATHER LARGE AND WELL-SPACED RING MICROTUBERCLES ON THE ABDOMEN. A SEARCH OF A NUMBER OF ERIOPHYES SPP. THAT HAVE 4-RAYED FEATHERCLAWS FAILED TO REVEAL ANY OTHER CLOSELY RELATED SPECIES.

DESCRIPTION: FEMALE ROBUST-WORMLIKE, LIGHT YELLOWISH-WHITE IN LIFE. FEMALE LENGTH 150 μ -175 μ , THICKNESS ABOUT 48 μ -52 μ . ROSTRUM ABOUT 30 μ LONG, DOWNCURVED (FIG. 2); ANTAPICAL SETA 5 μ LONG (FIG. 2). SHIELD WITH SHORT ANTERIOR EXTENSION OVER CHELICERA BASE (FIG. 2); SHIELD DESIGN OBSOLETE (FIG. 2); SOME GRANULES ABOVE COXAE IN LATERAL SHIELD AREAS AND ABOUT 4 PARTIAL RINGS BELOW DORSAL TUBERCLE (FIG. 2). DORSAL TUBERCLES 22 μ APART (FIG. 3); DORSAL SETAE 40 μ LONG, PROJECTING DIVERGENTLY TO REAR (FIG. 3). FIRST LEG FROM TROCHANTER BASE 31 μ LONG (FIG. 4); TIBIA 7 μ LONG, WITH 8 SETAE FROM ABOUT 1/4; TARSUS 7 μ LONG; CLAW 7.5 μ LONG (FIG. 4); FEATHERCLAW 4-RAYED (FIG. 5). HINDLEG 25 μ LONG, TIBIA 4 μ LONG, TARSUS 7 μ LONG; CLAW 7 μ LONG. COXAE WITH SOME FAIRLY LARGE GRANULES; FORECOXAE PARTIALLY SEPARATE CENTRALLY AND WITH WEAK STERNAL LINE. FIRST SETIFEROUS COXAL TUBERCLES WELL AHEAD OF ANTERIOR COXAL APPROXIMATION AND AHEAD OF SECOND TUBERCLES. SECOND COXAL SETIFEROUS TUBERCLES WELL AHEAD OF LEVEL OF THIRD TUBERCLES.

ABDOMINAL THANOSOME WITH ABOUT 39 RINGS WHICH SHOW DORSAL REDUCTION IN RING NUMBER. ABDOMINAL MICROTUBERCLES ROUNDED OFF (FIG. 6); VENTRALLY THE MICROTUBERCLES POINTED (FIG. 6) LATERAL SETA 20 μ LONG, ON RING 7 BEHIND SHIELD (FIG. 2); FIRST VENTRAL SETA 38 μ LONG, ON RING 23.

ABDOMINAL TELOSOME WITH 5 RINGS, THE MICROTUBERCLES REPRESENTED AS POINTS ON RING MARGINS AND WITH FAINT ANTERIOR PROJECTIONS (FIG. 7); VENTRALLY THE MICROTUBERCLES MORE ELONGATE. TELOSOMAL SETA 20 μ LONG (FIG. 7). ACCESSORY SETA 5 μ LONG.

FEMALE GENITALIA 13 μ LONG BY 17 μ WIDE (FIG. 8); FEMALE GENITAL COVERFLAP WITH ABOUT 10 TO 12 LONGITUDINAL RIBS (FIG. 9). GENITAL SETA 12 μ LONG (FIG. 9). MALE 150 μ -155 μ LONG, 48 μ THICK.

THE ABOVE DATA WERE OBTAINED FROM MITES COLLECTED AT GAINESVILLE, FLORIDA, SEPTEMBER 19, 1972, N. R. SPENCER, FROM FLOWER GALLS ON LANTANA CAMARA L.

CONTROLS: SINCE THIS MITE APPEARS TO BE ASSOCIATED ONLY ON LANTANA SPP., WHICH ARE CONSIDERED PESTS IN MOST INSTANCES, NO CONTROLS HAVE BEEN RECOMMENDED. IF THE PLANT IS BEING USED AS AN ORNAMENTAL, KELTHANE PROBABLY WILL GIVE ADEQUATE CONTROL.



FIG. 1. NORMAL LEAVES AND FLOWER GALLS OF LANTANA CAMARA L. INFESTED BY ERIOPHYES LANTANAE.

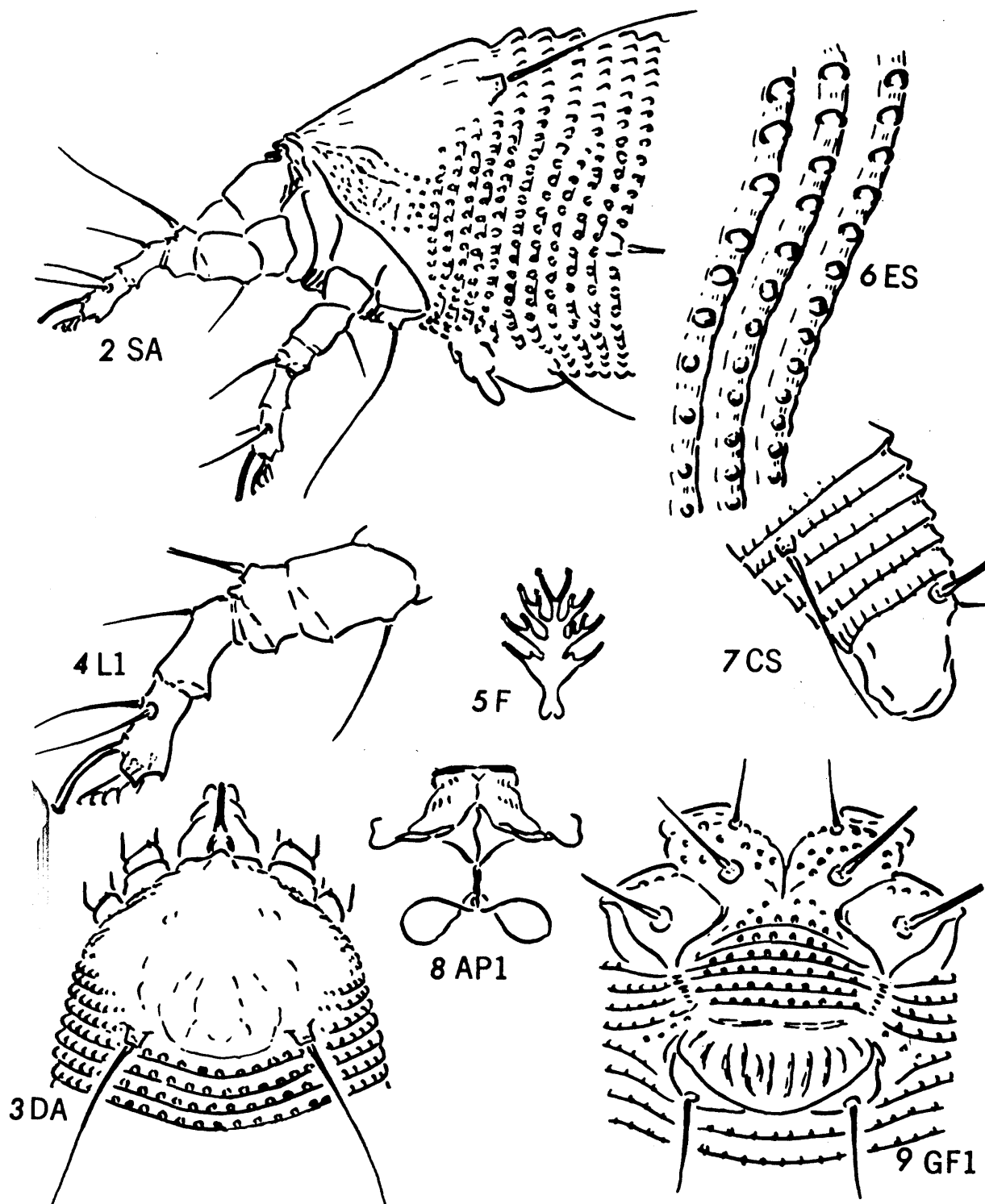
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FIGS. 2-9. ERIOPHYES LANTANAE COOK, ADULT FEMALE. FIG. 2SA. SIDE OF ANTERIOR SECTION. FIG. 3DA. DELINEATION OF CEPHALOTHORACIC SHIELD. FIG. 4L1. LEFT FORELEG. FIG. 5F. FEATHER-CLAW. FIG. 6ES. LATERAL RINGS AND MICROTUBERCLES ON THANOSOME. FIG. 7CS. SIDE VIEW OF CAUDAL SECTION OF MITE. FIG. 8AP1. INTERNAL FEMALE GENITAL STRUCTURES. FIG. 9GF1. FEMALE GENITAL STRUCTURES AND COXAE.