Aceria lantanae (Cook) In Florida (Acari: Eriophyidae)¹

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INTRODUCTION: Cook (1909) originally described *Eriophyes lantanae* soley 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, distorted flower buds and flowers. It is used as a biological control agent where *Lantana* spp. are considered pests rather than ornamental plants.

DISTRIBUTION: This flower gall mite is native throughout the Caribbean area, is widespread in Central and South America, and in Florida as far north as Alachua County.

DIAGNOSIS: Aceria lantanae is characterized by the 4-rayed featherclaw, lack of a discernable design on the shield, and rather large and well-spaced ring microtubercles on the abdomen. A search of a number of Aceria spp. that have 4-rayed featherclaws failed to reveal any other closely related species.

DESCRIPTION: Female robust-wormlike, light yellowish white in life. All measurements are in microns. Female length 150-175, thickness about 48-52. Rostrum about 30 long, downcurved (Fig. 2); antapical seta 5 long (Fig. 3). 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 apart (Fig. 3); dorsal setae 40 long, projecting divergently to rear (Fig. 3). First leg from trochanter base 31 long (Fig. 4); tibia 7 long, with 8 setae from about 1/4; tarsus 7 long; claw 7.5 long (Fig. 4); featherclaw 4-rayed (Fig. 5). Hind leg 25 long, tibia 4 long, tarsus 7 long; claw 7 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 setae 20 long, on ring 7 behind shield (Fig. 2); first ventral seta 38 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 long (Fig. 7). Accessory seta 5 long.

Female genitalia 13 long by 17 wide (Fig. 8); female genital coverflap with about 10 to 12 longitudinal ribs (Fig. 9). Genital seta 12 long (Fig. 9). Male overall length of 150-155 long, 48 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.

SURVEY AND DETECTION: Look for galls and distorted flower buds.

CONTROLS: Since this mite appears to be associated only with *Lantana* spp., which are considered pests in most instances, no controls have been recommended. If this plant is used as an ornamental, the Department of Entomology and Nematology, University of Florida recommends dimethoate, chlorpyrifos (Dursban), malathion, acephate (Orthene), or mexacarbate (Zectran). FOLLOW LABEL DIRECTIONS.

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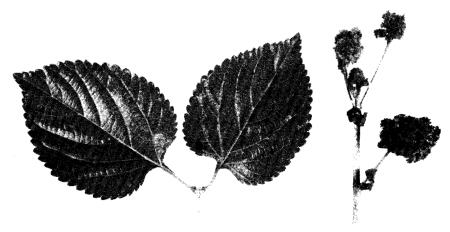
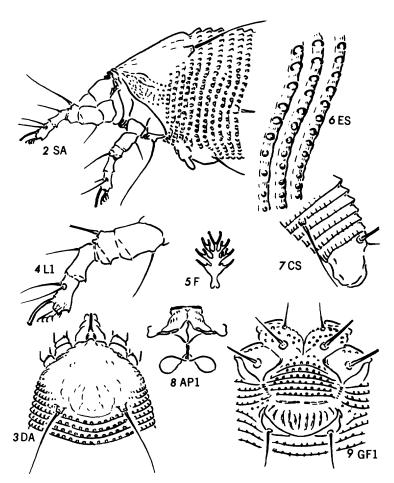


Fig. 1 Normal leaves and flower galls of Lantana camara L. infested by Aceria lantanae (Cook)



Figs. 2-9 Aceria lantanae (Cook), Adult female.

Fig. 2SA Side of anterior section. Fig. 3DA Delineation of cephalothoracic shield. Fig. 4L1 Left foreleg. Fig. 5F Featherclaw. 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. (After Keifer).