

ERIOPHYID STUDIES B-7

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California Department of Agriculture

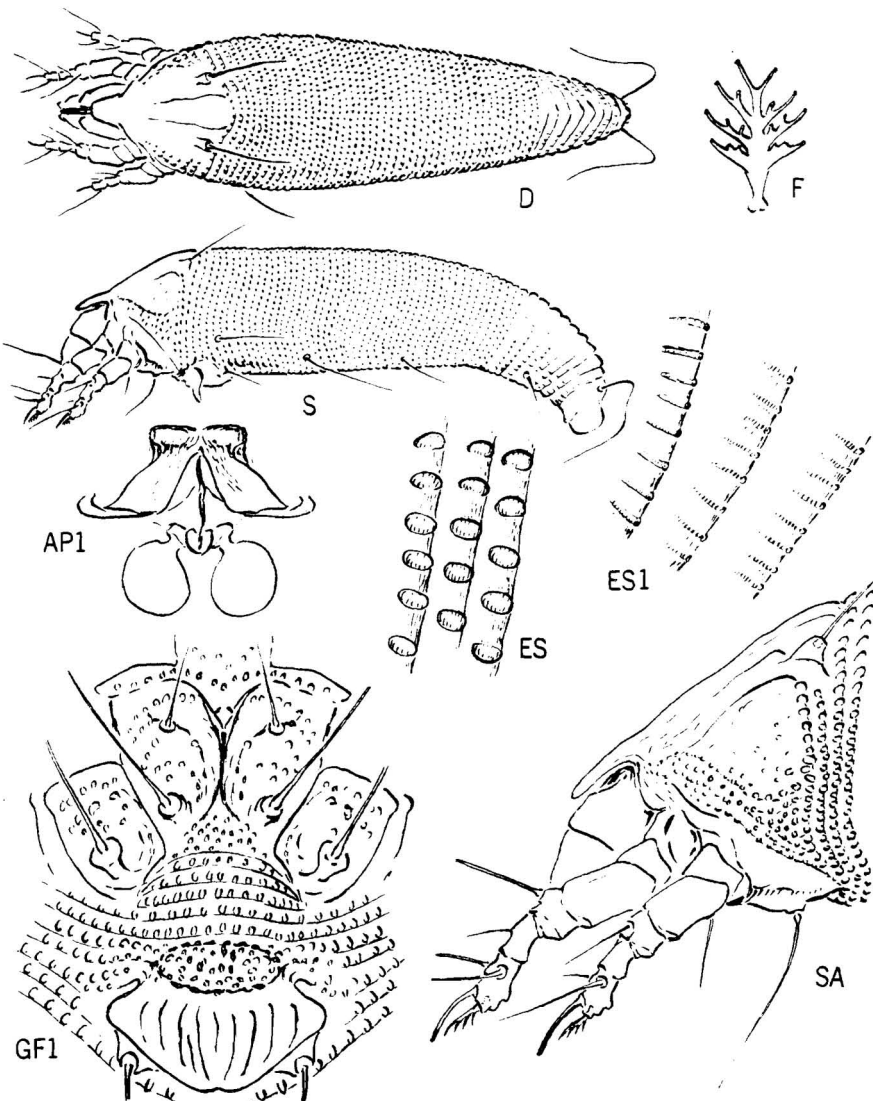


Plate 1 - *Aculus antonimus*, new species

Aculus antonimus, new species

Plate 1

As a budmite, this species is an exceedingly doubtful associate of typical rust mites in the genus Aculus. It has a conspicuous anterior shield lobe over the rostrum, but behind that, and to the third ventral seta area of the abdomen, it is a typical Aceria. The rear abdominal rings associated with the third ventral seta, and beyond, are a little wider, have suppressed microtubercles, and form a middorsal longitudinal ridge.

This ambiguous mite, and I have looked at it for a number of years, is another example of the intergrading between species placed in such genera as the Eriophyes-Aceria complex, and the Phyllocoptes-Aculus system. It argues against the concept of dividing these four-legged mites into the Phyllocoptidae, as one family, and the Eriophyidae as the other.

The name, antonimus, is a slight misspelling of antonimia.

Female 135 μ -150 μ long, 33 μ thick; wormlike in shape, color slightly reddish. Rostrum 23 μ long, curved down; antapical seta 5 μ long. Shield 36 μ long, 29 μ wide, somewhat elongate and subtriangular in general shape. Prominent, rather narrow anterior shield lobe over rostrum, about 14 μ long, blunt apically, thin dorsoventrally, no anterior spines. Shield design suppressed, the admedian lines present on rear 2/3, diverging to rear margin and slightly converging there. Shield laterally granular. Dorsal tubercles 16 μ apart, hardly on rear margin; dorsal setae 13 μ long, diverging a little to rear. Forelegs 25 μ long; tibia 4.5 μ long, with seta 4.5 μ long, from about 1/2; tarsus 6.5 μ long; claw 8 μ long, curved down; featherclaw 4-rayed. Hindlegs 23 μ long, tibia 4.5 μ long, tarsus 5 μ long, claw 7 μ long. Coxae with numerous granules; anterior coxae moderately connate centrally; first setiferous coxal tubercles ahead of second tubercles and a little behind anterior coxal approximation; second tubercles well ahead of transverse line through third tubercles. Abdomen with about 55 rings, completely set with elliptical microtubercles which touch rear ring margins, except for last 8 or nine rings; these last rings with suppressed, elongate microtubercles, weak or absent dorsally, these rings longitudinally ridged middorsally. Lateral seta 14 μ long, on about ring 7; first ventral seta 35 μ long, on about ring 19; second ventral 11 μ long, on about ring 32; third ventral seta 19 μ long, on about ring 5 from rear. Accessory seta minute. Female genitalia 16 μ wide, 12 μ long; coverflap basally with an elliptical granular area, and with about 10 longitudinal ribs; seta 10 μ long.

Type locality: Sacramento, California

Collected: October 14, 1958, by the writer

Host: Acer negundo californicum (T. & G.) box elder

Relation to host: the mites occur in the hair masses within the expanded petiole bases around the buds

Type material: a type slide
5 paratype slides

Aculus rhoicecis, new species

Plate 2

Two or more varieties of females appear in preparations made from leaf galls on squaw bush, Rhus trilobata Nutt. The one similar to the male has body rings almost identical above and below, which are strongly microtuberculate. This one has been selected for the description.

The most distinct deutogyne type has very definite tergites and sternites, with slight or no microtubercles above, and suppressed microtubercles below. Other females which are probably deutogynes have somewhat intermediate characters.

The new species is similar to Toxicophagus Ewing, on poison oak, but differs in lacking side branches from the admedian shield lines, among other items.

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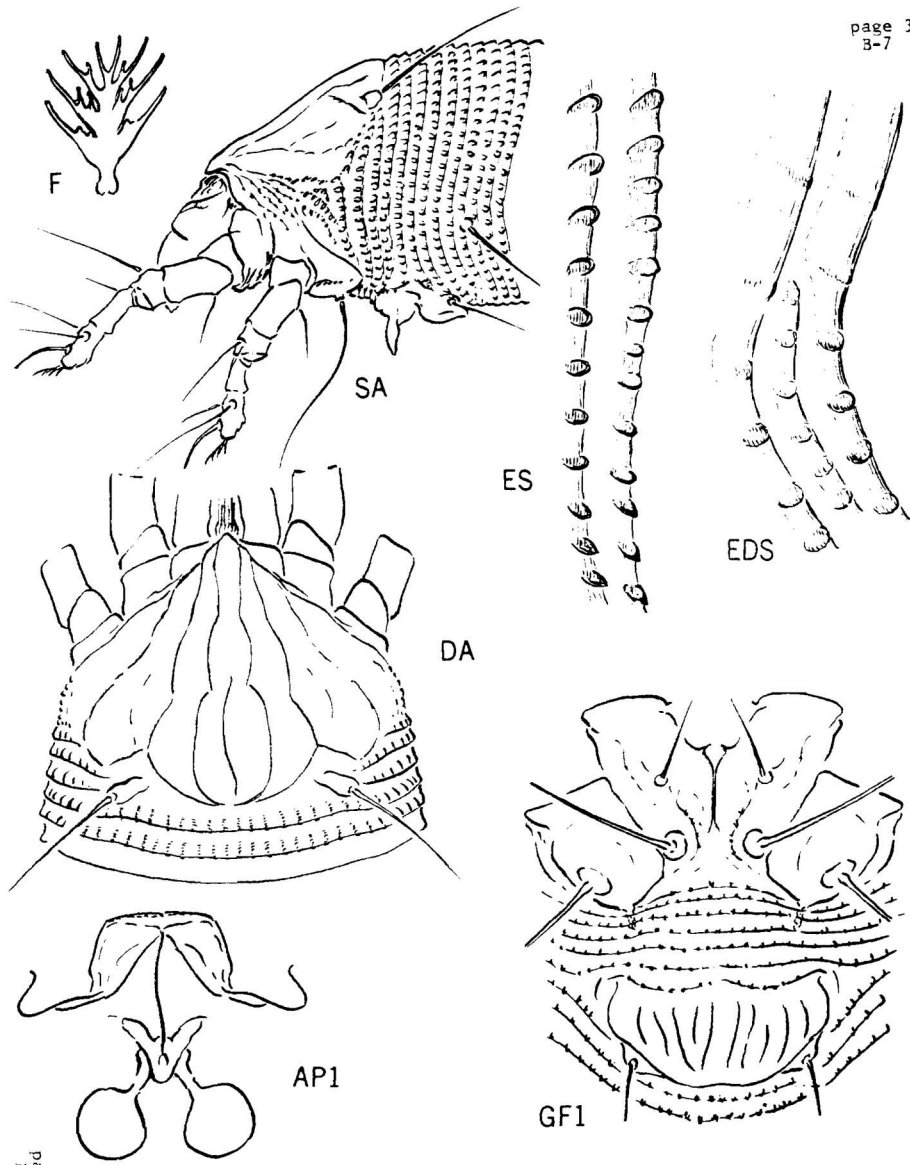


Plate 2 - *Aculus rhoicecis*, new species

This is another one of the rust mites (Phyllocoptinae) that has taken the gall making habit and as a result has had the body structures of its primary forms become similar to gallmakers in the Eriophyinae.

Female 200 μ -220 μ long, 45 μ thick; elongate-fusiform; color light yellowish. Rostrum 26 μ long, projecting diagonally down; antapical seta 2 μ long. Shield 33 μ long, 40 μ wide; anterior lobe over rostrum short, acute; median shield line present on rear half; admedian lines complete from anterior lobe, sinuate, farther apart opposite median line where they curve out at anterior end of line and recurve at rear margin; admedian lines from sides of anterior lobe, running directly toward dorsal tubercles, somewhat sinuate, forking in front of tubercles; a submedian line above lateral shield margin complete from base of rostrum to first microtubercles below dorsal tubercles. Lateral shield margin somewhat granular and granules in lines between this and coxae. Dorsal tubercles 30 μ apart; dorsal setae 36 μ long, strongly diverging. Forelegs 34 μ -38 μ long; tibia 7 μ -10 μ long, with 6 μ seta from 1/4; tarsus 7.5 μ long; claw 10 μ long, tapering; featherclaw 4-rayed. Hindlegs 33 μ long, tibia 6 μ long, tarsus 7.5 μ long, claw 9.5 μ long. Coxae with some ornamentation, a curve of granules inside second tubercles; first setiferous coxal tubercles farther apart than second, somewhat behind anterior coxal approximation; second setiferous tubercles a little ahead of transverse line through third tubercles. Abdomen with approximately 60 rings, some posterior dorsal reduction in ring number; rings completely microtuberculate, the microtubercles a little elongate, touching rear margins, usually apically rounded, more pointed ventrally. Lateral seta 17 μ long, on about ring 7; first ventral seta 40 μ long, on about ring 18; second ventral 16 μ long, on ring 32; third ventral 26 μ long, on ring 6 from rear. Accessory seta 4 μ long. Female genitalia 23 μ wide, 15 μ long; coverflap with about 10 longitudinal ribs; seta 12 μ long.

Deutozyne about 160 μ long, 48 μ thick; shield design suppressed; about 35 tergites and 45-50 sternites; microtuberculation suppressed, especially dorsally; featherclaw as on protozyne.

Type locality: Rocky Camp, Hat Creek, Shasta County, Cal.

Collected: August 9, 1948, by the wirtter

Host: Rhus trilobata Nutt. (Anacardiaceae) squaw bush

Relation to host: the mites make leaf bead galls, openings underneath

Type material: a type slide

7 paratype slides

dry leaves with galls from which the slides were made

This mite is widespread on its host in California

Anthocoptes gutierreziae, new species

Plate 3

Gutierreziae comes closest to ericameriella K. but differs in having a 4-rayed featherclaw and diagonal ribs on the female coverflap.

Female 155 μ -180 μ long, 55 μ -60 μ wide, 40 μ thick; fusiform; dull yellowish-white in color. Rostrum 23 μ long, projecting down; antapical seta 6 μ long. Shield 44 μ long, 56 μ wide; subtriangular in general shape with bulging sides, the anterior lobe over rostrum moderately prominent and acute. Shield design obscure; indications of admedian lines from sides of anterior lobe, running back to near rear margin, with cross line at 1/4, and emitting faint diagonal lateral line at about 1/3; longitudinal lines below lateral shield lobes. Dorsal tubercles 30 μ apart; dorsal setae 8 μ long, diverging to rear. Forelegs 30 μ long; tibia 6.5 μ long, with 4.5 μ seta from 1/3; tarsus 6.5 μ long; claw 6 μ long, knobbed; featherclaw 4-rayed. Hindlegs 27 μ long, tibia 5 μ long, tarsus 6 μ long, claw 6 μ long. Coxae ornamented with lines; anterior coxae moderately connate centrally; first setiferous tubercles ahead of second, slightly behind anterior coxal junction; second tubercles somewhat ahead of transverse line through 3rd

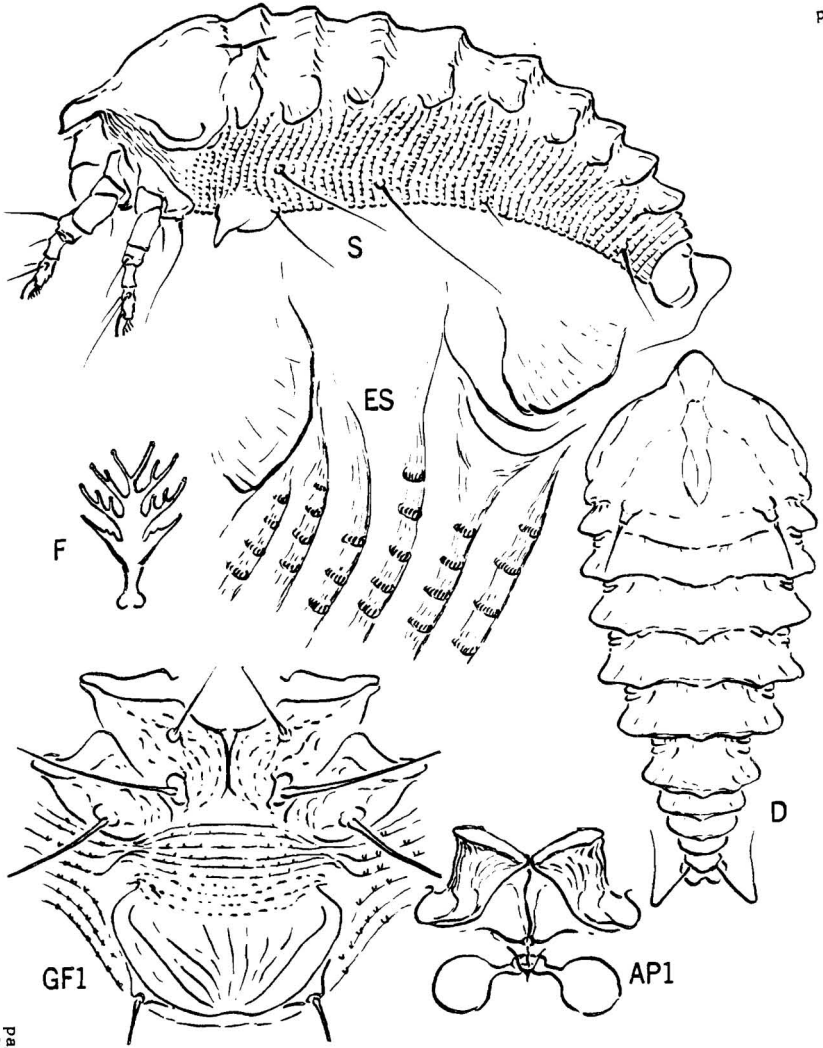


Plate 3 - *Anthocoptes gutierreziae*, new species

setiferous tubercles. Abdomen with 9 broad tergites with lateral angles projecting laterally, the first two coming down on body side farther than last seven; these tergites followed by about 5 rings on cauda. About 43 sternites ahead of rear rings, completely microtuberculate, the microtubercles slightly elongate and touching rear sternite margins. Lateral seta 19 μ long, on about sternite 7; first ventral seta 33 μ long, on about sternite 18; second ventral 10 μ long, on sternite 29; third ventral 17 μ long, on sternite 4 from rear. Accessory seta very small. Female genitalia 23 μ wide, 20 μ long; coverflap with about 8 irregular ribs all running to central rear; seta 30 μ long.

Male 120 μ long.

Type locality: Lake Henshaw, San Diego County, Cal.

Collected: January 31, 1960 by J. P. Keifer and the writer

Host: Gutierrezia californica (DC.) (Astereae-Compositae) matchweed

Relation to host: the mites are vagrants on the narrow leaves

Type material: dry plant parts with dry mites
a type slide
4 paratype slides

Anthocoptes helianthellae, new species

Plate 4

Helianthellae is very close to gutierreziae and differs mainly in characters of degree. Helianthellae is shorter than gutierreziae, has a more attenuate anterior shield lobe, and the genital seta is shorter.

Female 130 μ -150 μ long, 60 μ wide, 45 μ thick; robust-fusiform in shape; color light yellowish. Rostrum 23 μ long, projecting down; antapical seta 7 μ long. Shield 43 μ long, 50 μ wide, subtriangular; anterior lobe acute, usually pointed and sometimes with a pair of points; shield design absent. Dorsal tubercles 36 μ apart, somewhat elongate, diverging from rear margin; dorsal setae 10 μ long, strongly diverging. Forelegs 31 μ long; tibia 7 μ long, with seta from 1/3; tarsus 7 μ long; claw 7 μ long, knobbed; featherclaw 4-rayed. Hindlegs 29 μ long, tibia 5 μ long, tarsus 7 μ long, claw 6.5 μ long. Coxae with some lines curving around second tubercles; anterior coxae rather narrowly connate centrally; first setiferous coxal tubercles slightly farther apart than second, opposite anterior coxal approximation; second tubercles but little ahead of transverse line through third tubercles. Abdomen with nine broad tergites from rear of shield to line above third ventral seta, no visible marks on tergites, the rear edges uneven. Abdominal sternites from line below rear shield margin to third ventral seta about 52 in number, strongly microtuberculate, the microtubercles on rear ring margin and projecting a little beyond it, often somewhat pointed. Lateral seta 26 μ long, on about sternite 8; first ventral seta 50 μ long, arising from about sternite 22; second ventral seta 7 μ long, from sternite 38; third ventral seta 17 μ long, on ring 5 from rear. Accessory seta 4.5 μ long. Female genitalia 23 μ wide, 15 μ long; coverflap with about 8 ribs, each side somewhat converging to rear; seta 15 μ long.

Type locality: Flagstaff, Arizona

Collected: August 28, 1961, by D. M. Tuttle

Host: Helianthella quinquenervis (Hook.) Gray (Compositae-Heliantheae)

Relation to host: the mites are undersurface leaf vagrants

Type material: a type slide
5 paratype slides
mites in liquid

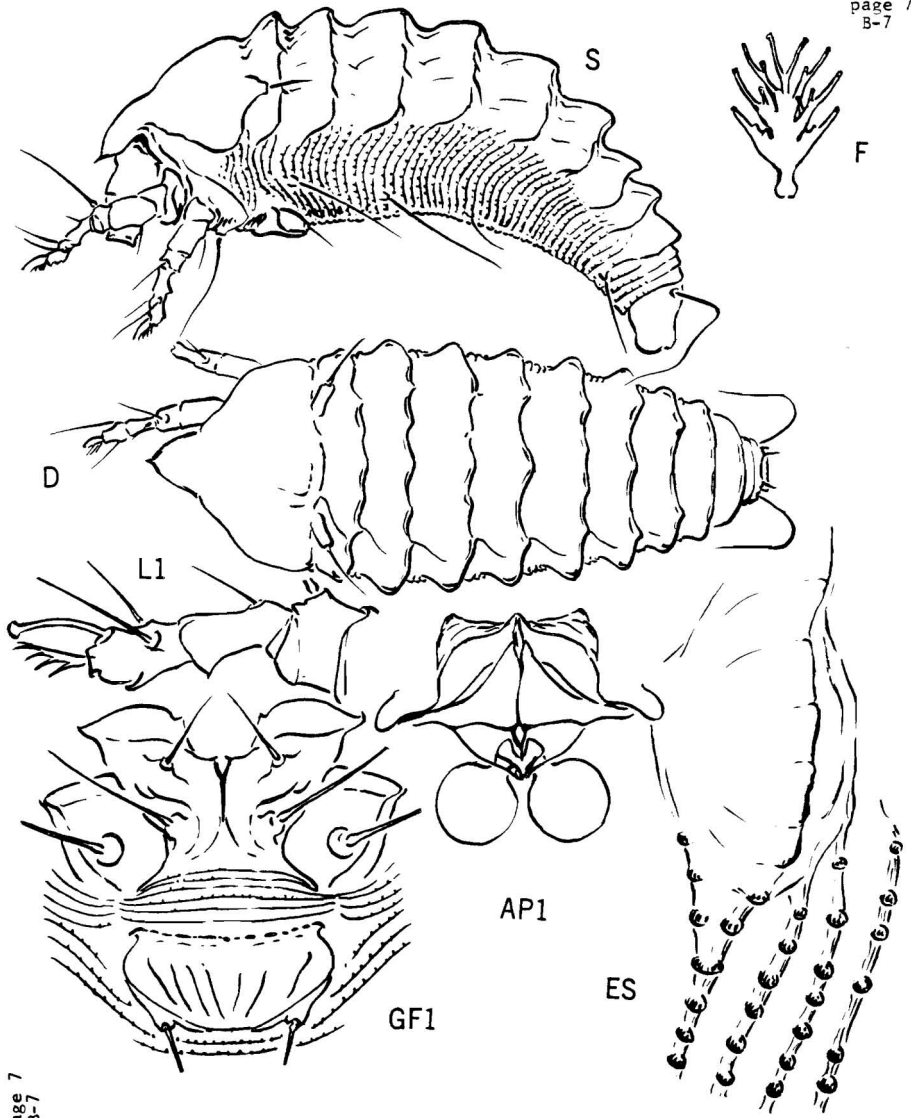


Plate 4 - *Anthocoptes helianthellae*, new species

Cecidophyes buxtoni, new species

Plate 5

Buxtoni is near the genotype, galii Karpelles, but has weaker lines in the lateral granules on the shield. The habits and hosts of these two species are quite different, the genotype being a gall former on Galium.

Female 155 μ -170 μ long, 45 μ -50 μ thick; robust, fusiform with body circular in cross section; color light purple. Rostrum 23 μ long. Shield 38 μ long, 43-46 μ wide; a moderate projection over rostrum, somewhat acute; design lines centrally solid, more granular laterally; median line substantially complete; admedian lines complete, subparallel, sinuate, joined to median by part of central transverse line at 1/2, and with diagonal branches to median forming a dart-shaped mark at about 3/4; a few granules within rear margin inside admedian ends; first submedian line short, from sides of anterior lobe to a transverse row of granules at about 1/3; second submedian from lateral base of anterior lobe, curving out to lateral granules, then recurving and continuing to rear margin subparallel to admedian; lateral shield generally granular, some lines indicated by weak connections through granules. Forelegs 29 μ long; tibia 6.5 μ long, with 10 μ seta at 1/2; tarsus 8.5 μ long; claw 7 μ long, downcurved; featherclaw 5-rayed. Hindlegs 28 μ long, tibia 6 μ long, tarsus 8.5 μ long, claw 7 μ long. Coxae with raised, strongly outlined areas around setiferous tubercles; anterior coxae well separated, touching centrally by a lobe extended from each side; first setiferous coxal tubercles at about 1/3 on anterior coxae, ahead of and slightly closer together than second tubercles; second tubercles well ahead of transverse line through third setiferous coxal tubercles. Abdomen with approximately 70 rings; little difference dorsoventrally except for slight reduction in number dorsally; all rings well granulated, the granules resting on ring margins and slightly elongated dorsally, not pointed. Lateral seta 20 μ long, on ring 5; first ventral seta 53 μ long, about on ring 19; second ventral 10 μ long, on ring 34; third ventral 25 μ long, on ring 7 from rear. Accessory seta absent. Female genitalia 23 μ wide, 17 μ long; coverflap with 15 or 16 longitudinal ribs, irregularly arranged in two ranks, the anterior rank diagonal; seta 12 μ long.

Type locality: Uncle Tom's Cabin area, El Dorado County, Cal.

Collected: October 3, 1961, by G. M. Buxton of the Insect Taxonomy Laboratory, for whom the species is named.

Host: Ceanothus cordulatus Kell. (Rhamnaceae) snow bush

Relation to host: the mites are upper surface leaf vagrants

Type material: Mites and plant parts in liquid
a type slide
3 paratype slides

Another host for this mite is Ceanothus integerrimus H.&A., deer brush, collected by the writer at Camino, El Dorado County Cal., Dec. 14, 1958.

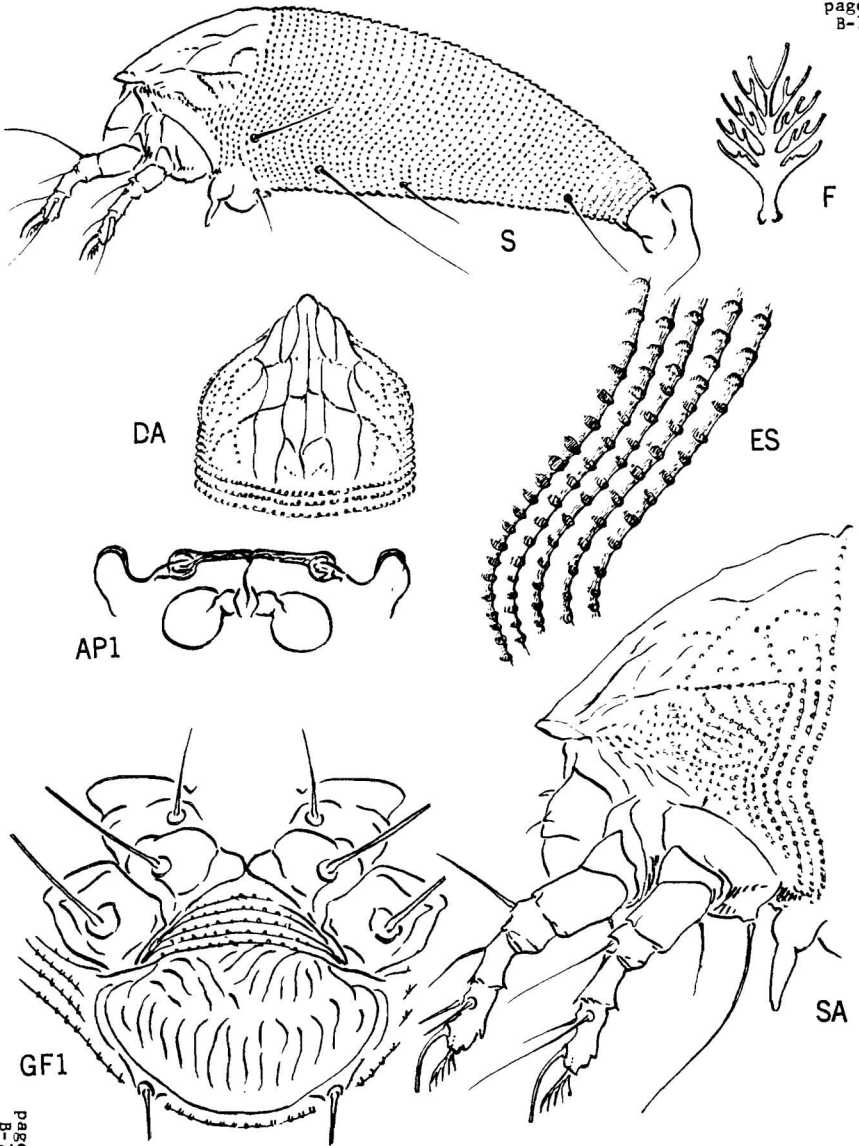


Plate 5 - *Cecidophyes buxtoni*, new species

Aceria arbutifloris, new species

Plate 6

Arbutifloris is an infestor of the blossoms of an Ericaceous plant, namely madrone. It has certain resemblances to *Aceria calibaccharis* K., but the second submedian shield line does not recurve back to the first as on *calibaccharis*.

Female 180 μ -220 μ long, 55 μ thick; color light yellowish-white; body wormlike in shape. Rostrum 37 μ long, curved down; antapical seta 6 μ long. Shield 33 μ long, 4 μ wide; median line short, present only on rear 1/2; admedian lines complete, sinuate, subparallel, gradually diverging; short lines at rear margin inside dorsal tubercles; first submedian line from above chelicera base, running back toward dorsal tubercle, broken at about 2/3, the rear section slanting laterally past tubercle base; second submedian from near anterior end of first, forming upper border of lateral granular area and with some granules; shield above coxae generally granular with a longitudinal line or two in granules. Dorsal tubercles 30 μ apart; dorsal setae 43 μ long, diverging. Forelegs 37 μ long; tibia 9 μ long, with 8 μ seta at about 1/4; tarsus 9 μ long; claw 7 μ long, tapering; featherclaw 5-rayed. Hindleg 33 μ long, tibia 6.5 μ long, tarsus 8 μ long, claw 10 μ long. Anterior coxae broadly joined centrally, some granules between second setiferous tubercles; first setiferous tubercles farther apart than second, behind anterior coxal junction; second tubercles a little ahead of transverse line through third tubercles. Abdomen with about 70 ings, entirely granular, each granule produced into short point, especially dorsally and posteriorly. Lateral seta 25 μ long, on about ring 9; first ventral seta 47 μ long, on about ring 22; second ventral 26 μ long, on about ring 38; third ventral 23 μ long, on about ring 6 from rear. Accessory seta 5 μ long. Female genitalia 24 μ wide, 20 μ long; coverflap with about 12-14 longitudinal ribs; seta 21 μ long.

Type locality: Placerville, district, El Dorado County, California

Collected: May 16, 1959 by the writer

Host: *Arbutus menziesii* Pursh. (Ericaceae) madrone

Relation to host: the mites become very numerous in the blossom heads on their host, living mainly in the bracts at the bases of the flower stalks and causing browning of the tissue.

Type material: dry flower heads with dry mites
a type slide
5 paratype slides

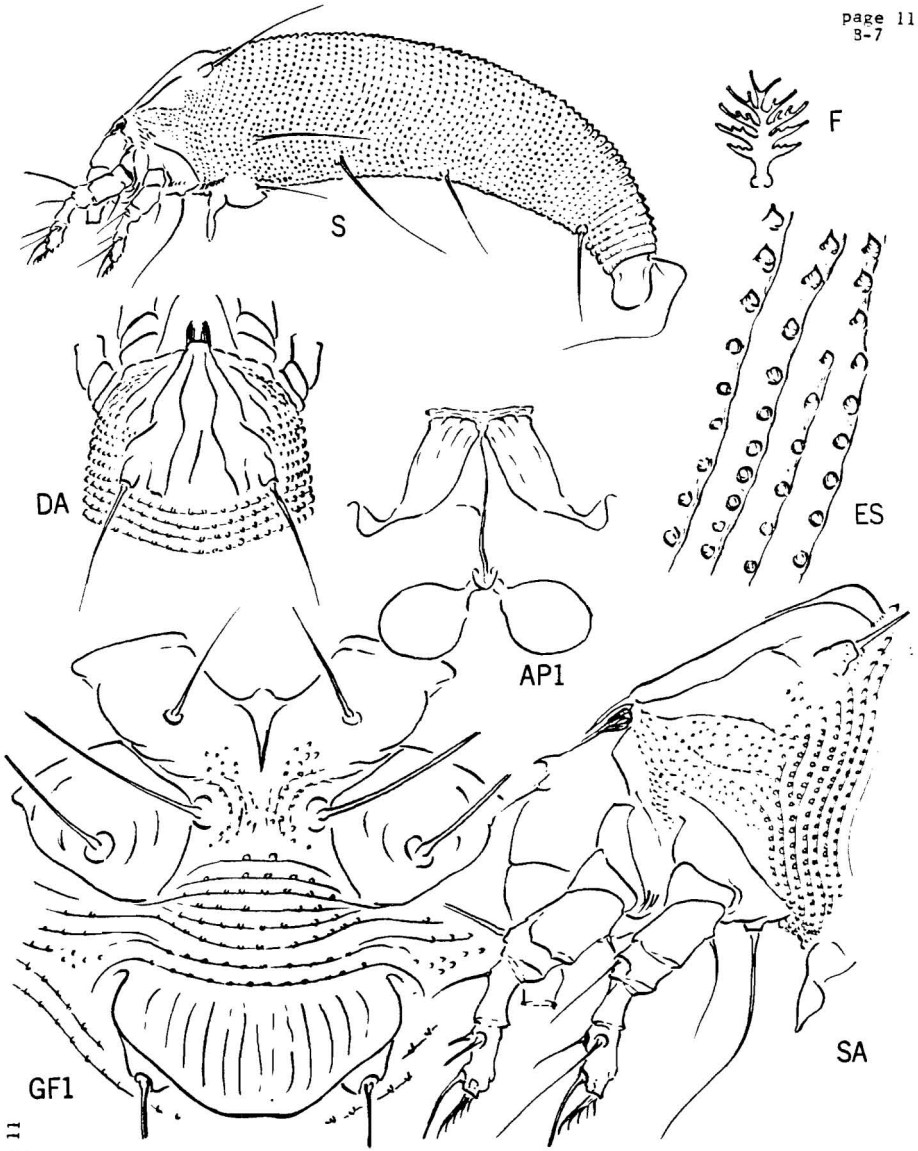


Plate 6 - *Aceria arbutifloris*, new species

Aceria catalinae, new species

Plate 7

Large, rather quadrate ring granules (microtubercles), plus genitalia situated farther behind coxae than usual, distinguish this mite.

Female 165 μ -180 μ long, 26 μ thick; slender, wormlike; color light yellowish-white. Rostrum 17 μ long, curved down; antapical seta 2.5 μ long. Shield 18 μ long, 21 μ wide; coming to an obtuse point at chelicera base; design absent; laterally with large granules. Dorsal tubercles 14 μ apart; dorsal setae 27 μ long. Forelegs 22 μ long; tibia 4 μ long, with seta 2 μ long at about 1/3; tarsus 6 μ long; claw 6.5 μ long, curved down; feather-claw 4-rayed. Hindlegs 20 μ long, tibia 3 μ long, tarsus 6.5 μ long, claw 6.5 μ long. Coxae with a few granules; anterior coxae broadly connate, with strong central sternal line; first setiferous coxal tubercles well ahead of and farther apart than second tubercles, a little ahead of anterior coxal junction; second coxal setiferous tubercles well ahead of transverse line through third tubercles. Abdomen with 45-50 rings, set with comparatively large quadrate granules, or microtubercles, except suppressed on last seven or eight rings. Lateral seta 2.5 μ long, on about ring 5; first ventral seta 33 μ long, on about ring 14; second ventral 2.5 μ long, on about ring 24; third ventral 14 μ long, on ring 6 from rear. Accessory seta minute. Female genitalia well separated from coxae by 4 or 5 wide rings; 13 μ wide, 8 μ long; coverflap without markings; seta 2.5 μ long, on large tubercles.

Type locality: Avalon, Catalina Island, Cal.

Collected: September 17, 1955 by the writer

Host: Eriogonum giganteum Wats. (Polygonaceae) St. Catherine's lace

Relation to host: the mites live in the tomentum on the leaves and around the buds

Type material: dry plant parts from which the slides were made
a type slide
four paratype slides

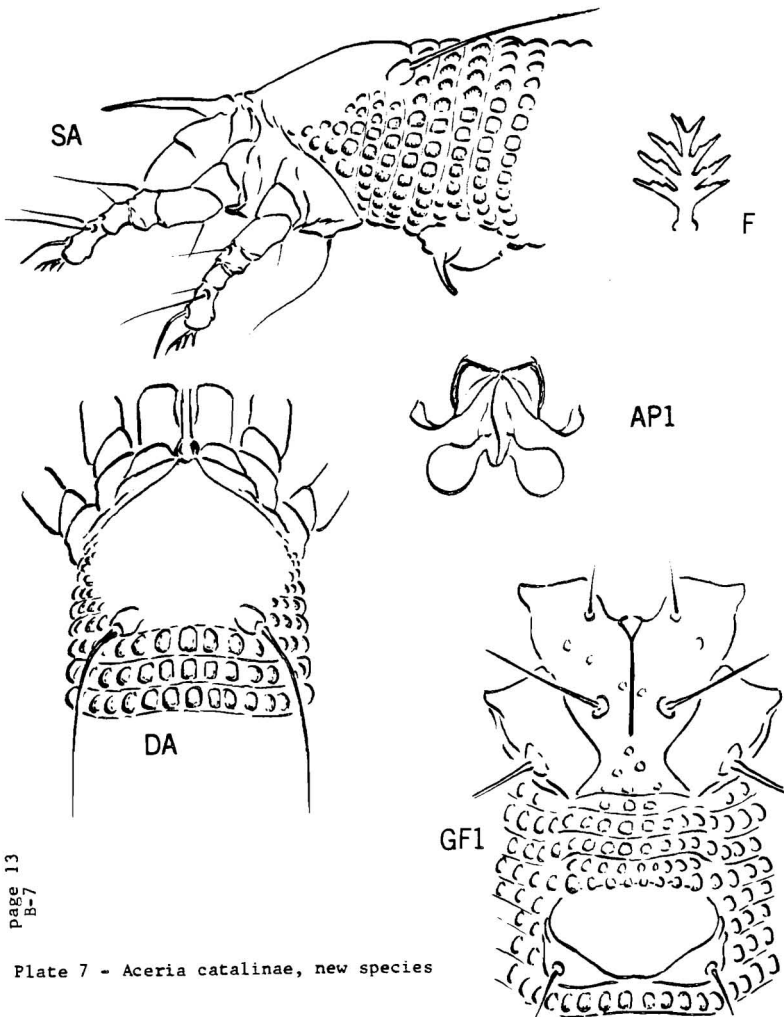


Plate 7 - *Aceria catalinae*, new species

Aceria paracatalinae, new species

Plate 8

Paracatalinae occurs with catalinae in the tomentum on leaf and bud on St. Catherine's lace. These two species show considerable parallelism but the great difference in featherclaws does not suggest close relationship. Paracatalinae differs in having a 3-rayed featherclaw (catalinae has a 4-rayed structure of different shape), distinct admedian lines between dorsal tubercles, and smaller microtubercles. Paracatalinae is further distinguished by being a little thicker through the body.

Female 172 μ -192 μ long, 30 μ thick; wormlike; color light yellowish-white. Rostrum 16 μ long, curved down; antapical seta 3 μ long. Shield 30 μ long, 26 μ wide; design absent except for admedian lines, subparallel, and present between orsal tubercles; median line faintly suggested at center rear margin; laterally the shield with large granules, diminishing anteriorly. Dorsal tubercles 16 μ apart; dorsal setae 27 μ long, diverging. Forelegs 25 μ long; tibia 4.5 μ long, with 2 μ seta at 1/3; tarsus 7 μ long; claw 9 μ long, slender, curved; featherclaw palmate, 3-rayed. Hindlegs 21 μ long, tibia 4 μ long, tarsus 6 μ long, claw 9 μ long. Coxae with a few large granulations; anterior coxae broadly connate, the center line stronger to rear; first setiferous coxal tubercles well ahead of and as far apart as second tubercles, opposite anterior coxal junction; second tubercles well ahead of transverse line through third setiferous coxal tubercles. Abdomen with about 50 rings, completely microtuberculate, the microtubercles moderately large and flattened, set ahead of rear ring margins. Lateral abdominal seta 4.5 μ long, on about ring 8; first ventral seta 27 μ long, on about ring 17; second ventral 3 μ long, on about ring 28; third ventral 14 μ long, on about ring 5 from rear. Accessory seta exceedingly minute or absent. Female genitalia 20 μ wide, 11 μ long; situated well behind coxae; coverflap with obscure markings; seta on moderate-sized tubercles, 2.5 μ long.

Type locality: Avalon, Catalina Island, California

Collected: September 17, 1955 by the writer

Relation to host: the mites live in tomentum on leaf and bud

Host: Eriogonum giganteum Wats. (Polugonaceae) St. Catherine's lace

Type material: dry plant parts with dry mites
a type slide
3 paratype slides

Note: it has not been possible to separate catalinae and paracatalinae before slide mounting. As a result both kinds occur on all slides made from this host material.

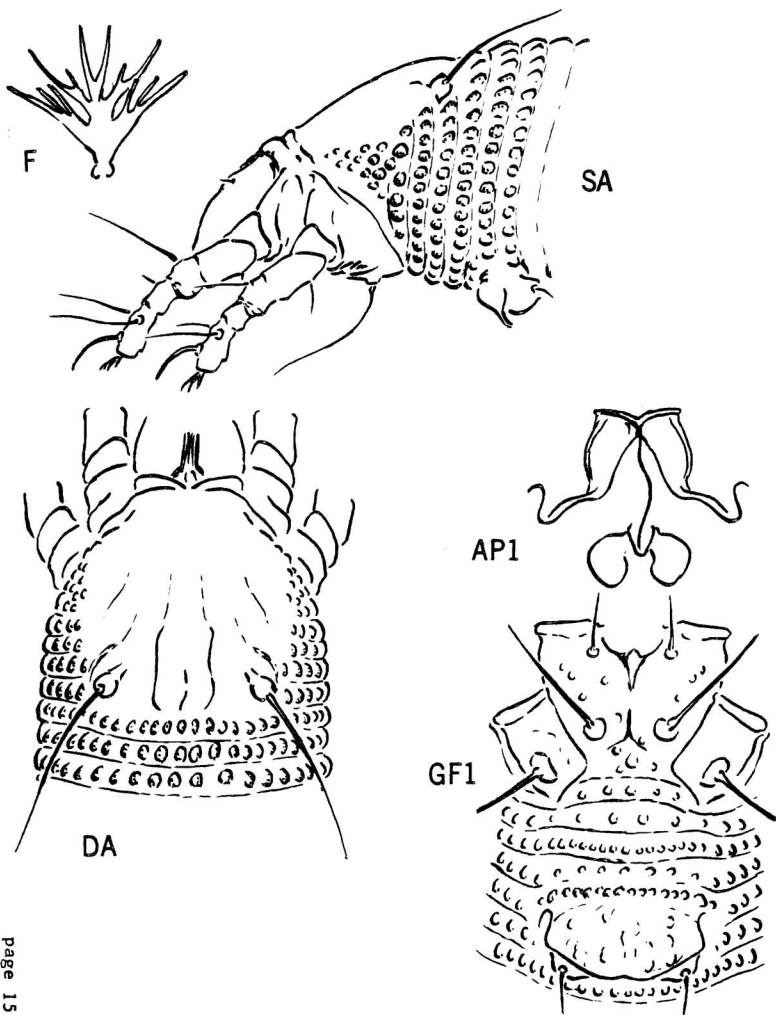


Plate 8 - *Aceria paracatalinae*, new species

Acathrix, new genus

The genotype of Acathrix is allied to such species as Phytoptus avelanae Nal., but differs by having a median pit at the rear of the cephalothoracic shield, and by the reduction of the dorsal setae to minute points. The microtubercles on the rings are narrow and elongate, and the featherclaw is unusually long and narrow. The name in this case means "short seta".

Body elongate, wormlike. Rostrum moderately elongate, projecting forward and curved down; apical portion of oral stylet short. Shield wider than long; no anterior lobe over rostrum; anterior lateral setae present; dorsal setae present as minute points on anterior ends of dorsal tubercles at rear margin; a central pit on rear shield margin. Legs short and stout; forelegs with all usual setae, plus lateral tibial spur; claw long; featherclaw (empodium) unusually long and narrow. Pair of subdorsal abdominal setae present near anterior end of abdomen; lateral, and three ventral setae present; abdominal rings similar dorso-ventrally, microtuberculate except for rear rings, the microtubercles elongate. Coxae with all usual setae. Female genitalia with smooth coverflap and with moderately produced anterior apodeme; glands or spermathecae appended to ducts that first extend forward and then recurve.

Genotype - Acathrix trymatus, new species

Acathrix trymatus, new species

Plate 9

Female 192 μ -204 μ long, 43 μ thick; wormlike; color whitish. Rostrum 27 μ long, somewhat curved down; antapical seta 8.5 μ long. Shield 20 μ long, 36 μ wide; design on central part of a series of somewhat curved, mainly longitudinal subparallel lines; laterally with rows of microtubercles. Anterior shield setae 26 μ apart, 8.5 μ long; dorsal tubercles 16 μ apart, the setae minute points. Legs stout. Forelegs 36 μ long; tibia 6.5 μ long, with 8.5 μ seta from about 1/2, and lateral spur on outside apical edge 7 μ long; tarsus 6.5 μ long; claw 13 μ long, somewhat curved, tapering; featherclaw with 11 or 12 rays, narrow, elongate. Hindlegs 27 μ long, tibia 4.5 μ long, tarsus 6.5 μ long, claw 18 μ long. Coxae with few marks; anterior coxae narrowly touching centrally; first setiferous tubercles farther apart than second tubercles and ahead of anterior coxal approximation; second tubercles but slightly ahead of a transverse line through third setiferous coxal tubercles. Abdomen with about 90 rings, completely microtuberculate except for dorsal part of rings to rear of third ventral seta; microtubercles narrow and elongate. Subdorsal seta 13 μ long, on ring 10; lateral seta 36 μ long, on ring 9; first ventral seta 25 μ long, on ring 25; second ventral 26 μ long, on ring 54; third ventral seta 26 μ long, on ring 8 from rear. Accessory seta 13 μ long. Female genitalia 20 μ wide, 14 μ long; coverflap smooth; seta 6.5 μ long.

Type locality: Guinobatan Experiment Station,
Albay Province, Philippines

Collected: March 19, 1962 by Magdalena L. Briones,
and sent me by Dr. F. O. Holmes.

Host: Cocos nucifera L. (Palmae) coconut

Relation to host: the mites occur in the folds of newly
emerging leaves

Type material: a type slide
three paratype slides
dry leaf sections from which the mites on the
slides were taken

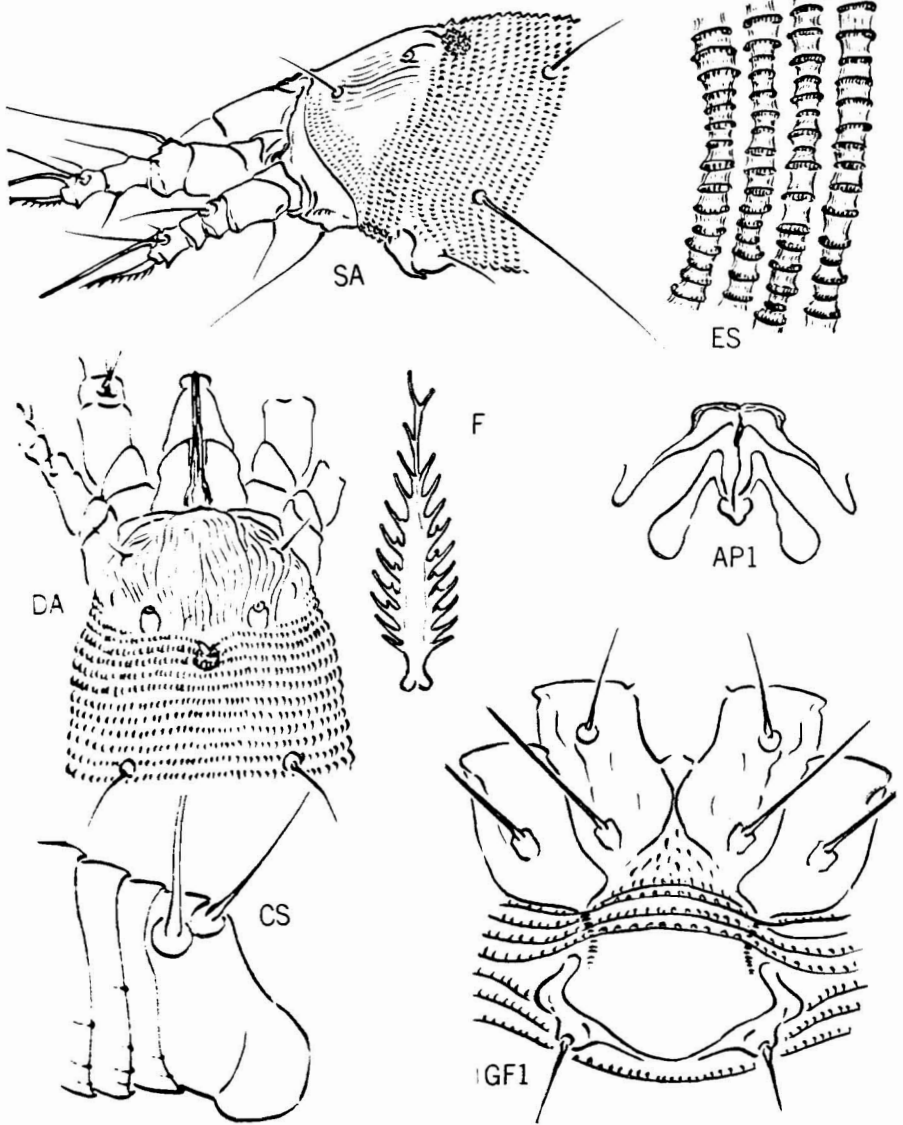


Plate 9 - *Acaethrix trymatus*, new species

B-7

Sectipes, new genus

This new genus differs from Diptilomopus Nal. by having a longitudinal middorsal ridge, and a lateral ridge, on the abdomen. Like Diptilomopus, the new genus lacks dorsal setae, the patella, the first coxal setae, and the lateral abdominal seta. The generic name means "divided foot."

Genotype - Sectipes holmesi, new species

Sectipes holmesi, new species

Plate 10

Female 160 μ -240 μ long, 60 μ -70 μ thick; elongate-fusiform; color light yellowish. Rostrum 52 μ long; sensillum on terminal rear. Shield 33 μ long, 50 μ wide; central anterior lobe but little produced; design a network of cells; median line present between anterior pair of cells, faint or absent in next cell to rear, and continuing on rear 1/2 of shield, joined to admedians by strong cross lines at about 1/4, 1/2, and 3/4; a row of cells extending along lower lateral shield margin, and two or three cells lying above them. Dorsal tubercles present as small knobs 23 μ apart, lying behind transverse line which bounds rear row of shield cells; dorsal setae absent. Forelegs 36 μ long; tibia 7 μ long, without seta; tarsus 10 μ long, with two strong setae; claw 7 μ long, straight, knobbed; featherclaw with about 6 rays on each side, the sides widely divergent. Hindlegs 33 μ long, tibia 4.5 μ long, tarsus 10 μ long, and with one strong seta; claw 7 μ long. Coxae ornamented with fine radial lines; anterior coxae broadly touching centrally; second coxal tubercles ahead of transverse line drawn through third tubercles. Abdomen with about 53 dorsal half-rings to third ventral seta, and 69 ventral half-rings to this same seta; rings completely microtuberculate, the microtubercles less prominent dorsally. First ventral seta 24 μ long, on about ring 25; second ventral 17 μ long, on ring 48; third ventral 35 μ long, on ring 10 from rear. Accessory seta present, minute. Female genitalia 26 μ wide, 16 μ long; coverflap smooth except for area with fine granules in radial lines on about basal third; seta 6.5 μ long.

Type locality: Barrio Banao, Guinobatan, Albay Province, Philippines

Collected: March 17, 1962, by Dr. F. O. Holmes, for whom it is my pleasure to name the species.

Host: Elephantopus mollis (HBK) (Compositae)

Relation to host: the mites are sparse undersurface leaf vagrants

Type material: a type slide
three paratype slides
dry leaves from which the mites were taken

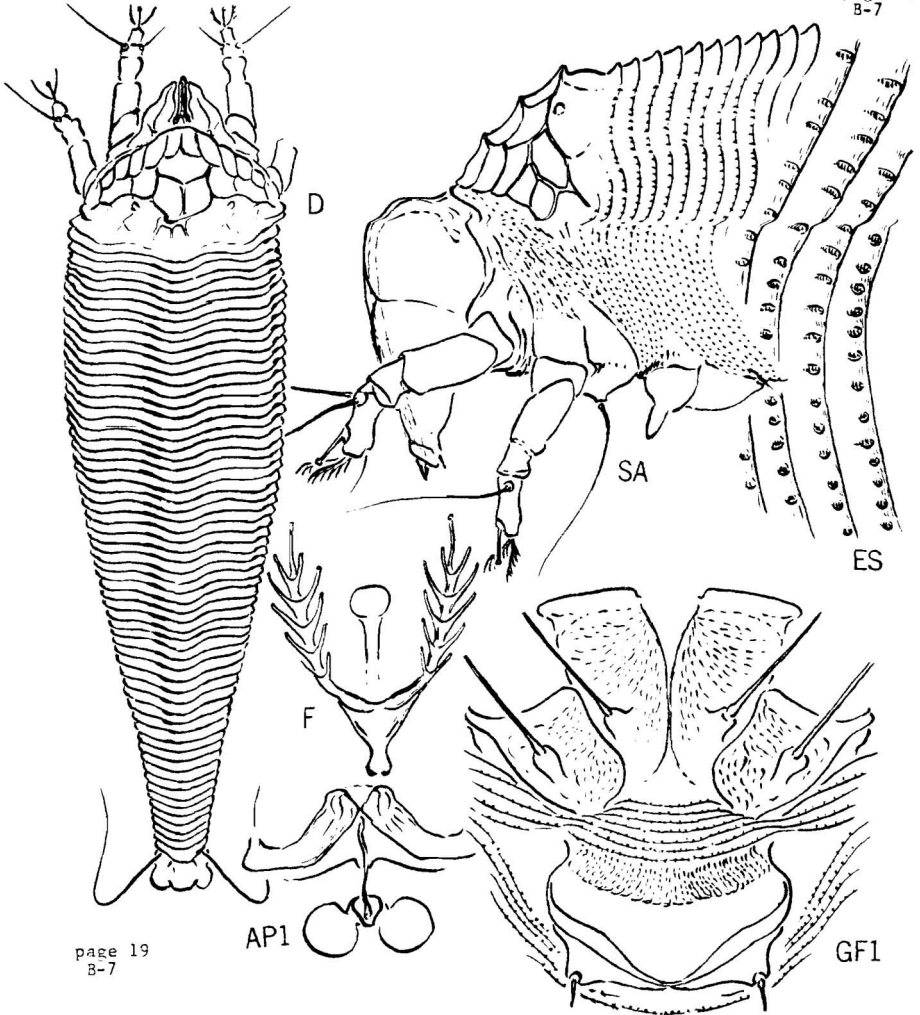


Plate 10 - *Sectipes holmesi*, new species

Symbols on plates -

AF1 - interior female genitalia
CS - caudal setae
D - dorsal view of mite
DA - dorsal view of anterior section of mite
EDS - side view of deutogyne skin
ES - side skin structures of protogyne
ES1 - side view of caudal skin structures
F - featherclaw (empodium)
GF1 - female genitalia and coxae
S - side view of mite
SA - side view of anterior section of mite

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