A NEW SPECIES OF ERIOPHYID MITE ON PROSOPIS

(Acarina: Eriophydae)

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RESUMEN

Una nueva especie de Eriófido agallícola, Aceria tamarugae n. sp., en hojas de "tamarugo" (Prosopis tamarugo Philippi), procedentes del desierto chileno (Tarapacá) se describe e ilustra en este trabajo.

Preserved foliage of Prosopis tamarugo Philippi was received from Dr. Roberto H. González of the University of Chile who stated that this plant, valuable as a forage plant in Chile, was being severely damaged by an eriophyid mite.

In the material that I examined, leaflets were twisted and distorted; the blades, instead of showing normal development, were rolled inward toward the midrib and thickened (Fig. 6), the resulting enclosed area containing many hundreds of a single species of eriophyid presumably responsible for the damage.

C. Houarde (1933) includes under the heading 'Eriophyide' a description by J. Tavares (1915) of galls on Prosopis sp. in Argentina. The description is of the plant deformation only and no description or name is given the gall former. This description could conceivably apply to the galls on Prosopis tamarugo mentioned in the present paper; however, there are several species of Prosopis in South America and a number of instances are known in which different species of eriophyids produce nearly identical galls.

I am considering the mites from Chile to be a new species and a description and name is here presented.

Aceria tamarugae sp. n.

Female 180-220 µ long, 48 µ thick, 43-46 µ wide; wormlike; color in preserved specimens white. Rostrum 24 µ long, curved evenly down; antapical seta 5 µ long. Shield 31-33 µ long, 38 µ wide. Shield with no design except a pair of lines on the posterior quarter of the shield. Each of these lines curves in a centrad direction to meet the posterior shield margin just mediad to the dorsal tubercle thereby framing an area between the two dorsal tubercles. This area has the appearance of a median lobe (Fig. 7). No median shield line is present. There is a demarcation of the shield laterally and anteriorly by a pair of distinct lines which arise at about the lateral midpoint of the shield and run anteriorly and centrad to the shield apex.

Dorsal tubercles 20 µ apart; dorsal setae 17-19 µ long directed backward. Foreleg 32 µ long; tibia 4.5 µ long with setae 6 µ in length; tarsus 6 µ long; claw 9 µ long slightly knobbed; featherclaw 4.5-5 µ long and 5 rayed. Hind leg 29 μ long; tibia 4.5 μ long, tarsus 6 μ long, claw 8.5 µ long, featherclaw 5 rayed. Forecoxae smooth or occasionally with one or two gra-

EXPLANATION OF FIGURES (PHOTOMICROGRAPHS)

Figs. 1-3. Dorsal, ventral, and lateral views of female at same magnification.

Figs. 4-5. Dorsal and ventral outlines of integument at region of lateral setae.

Fig. 6. Leaflets of Prosopis tamarugo Phil. showing mite damage.

Figs. 7-8. Enlarged dorsal and ventral views of anterior portion of female showing dorsal shield, tubercles and ventral female genitalia and coxal region.

Fig. 9. Enlarged view of featherclaw.

Fig. 10. Lateral view of anterior portion of mite.

Fig. 11. Dorso-lateral view of anterior portion of fe-

PLATE SYMBOLS

d. Dorsal tubercle.

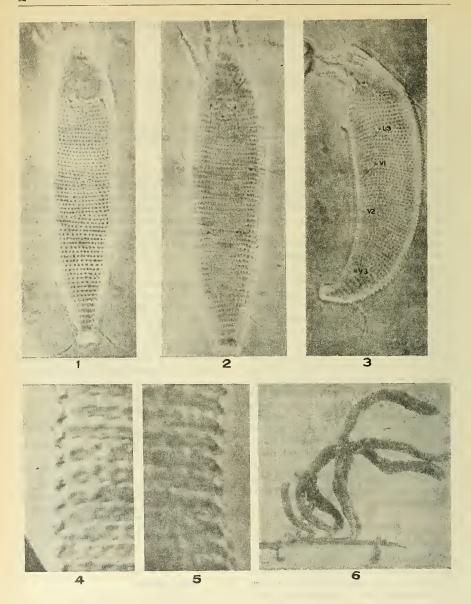
g. Genital plate.

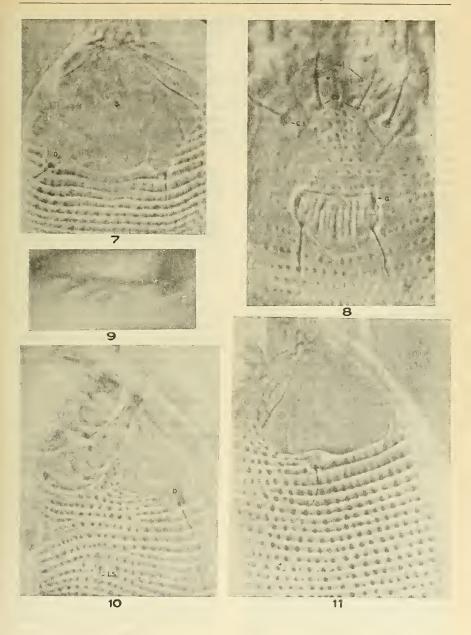
C1-3. 1st, 2nd, and 3rd coxal tubercles.

S.

Shield. VI-3. 1st, 2nd, and 3rd ventral setae.

LS. Lateral seta.





nules; hind coxae smooth. First setiferous coxal tubercles slightly farther apart than second and situated near the anterior end of the forecoxae. Second coxal tubercles completely centrad to an imaginary line between the first and third tubercles. Abdomen completely microtuberculate, the number of ring segments ventrally varying from 43 to 56 and dorsally from 55 to 64, the ventro-dorso ratio consistently 1 to 1.3. Microtubercles round to oval at base and bluntly acuminate at their tip; situated near or on the posterior ring margin. Lateral setae 22 u long on about ring 8 behind shield; first ventral setae 25-30 µ long on ring 18; second ventral setae 10-11 μ long on ring 31; third ventral setae 40-50 µ long on ring 5 from rear. Accessory setae 5 µ long. Female genitalia 18-20 µ wide and 10-11 µ long; coverflap with 11-12 longitudinal ribs; genital setae 14-16 μ long.

Type locality: Bosque Junoy, Pampa del Tamarugal, Province of Tarapacá, Chile.

Collected: Dec. 11, 1966 by Roberto H. González and L. E. Campos.

Host: Prosopis tamarugo Philippi, the mites forming galls as previously described and causing severe deformation and stunting of young plants.

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