A NEW SPECIES OF SCHIZOTETRANYCHUS (ACARINA: TETRANYCHIDAE) FROM QUEENSLAND

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Abstract

Schizotetranychus gahniae sp. n., from Gahnia aspera (R.Br.) Sprengel, is described and figured.

Schizotetranychus gahniae sp. n. (Figs. 1-12)

Types.—QUEENSLAND: Holotype male, allotype female, thirty male and forty-six female paratypes, from Gahnia aspera (R.Br.) Sprengel (sword grass), Boat Mt. near Murgon, 17.x.1967 and 8.xi.1967 (J. J. Davis). Holotype (Reg. No. W3040) collected 17.x.1967, and allotype (Reg. No. W3041) collected 17.x.1967, in the Queensland Museum; paratypes in the Department of Primary Industries, Queensland.

Male

Mounted holotype, $405~\mu$ long (to tip of palpi), $180~\mu$ wide; mounted paratypes, $375~\mu$ to $420~\mu$ long, $150~\mu$ to $180~\mu$ wide; dorsal body setae slender, finely pubescent (Fig. 2); palpus with terminal sensillum slender, conical, a little over twice as long as its greatest width (Fig. 4); gnathosoma elongate, the palpi a little longer than the rostrum and reaching to the distal end of tibia I; peritreme hooked distally; legs short, leg I only about two-thirds as long as the idiosoma; empodia each consisting of a pair of short, curved, divergent claws without associated hairs; four tactile and two or three sensory setae proximal to the closely spaced two pairs of duplex setae on tarsus I, nine tactile and two or three sensory setae on tibia I (Fig. 10); eight tactile setae on tibia II (Fig. 11), seven on tibia III and on tibia IV: aedeagus nearly straight, the dorsal margin downturned sharply about two-thirds of the way along its length (Fig. 8); the aedeagus is associated with lateral structures best seen in dorsal view (Fig. 9).

Female

Mounted allotype, $520~\mu$ long (to tip of palpi), $365~\mu$ wide; mounted paratypes, $460~\mu$ to $520~\mu$ long, $320~\mu$ to $350~\mu$ wide: dorsal body setae slender, finely pubescent, evenly tapering, not set on tubercles, dorso-centrals about twice as long as longitudinal intervals between setae (Fig. 1); palpus with terminal sensillum stout, rounded, a little longer than wide (Fig. 6); gnathosoma elongate as in the male; peritreme strongly hooked distally (Fig. 5); stylophore rounded in front, nearly three times as long as wide; dorsal striae transverse on the hysterosoma, in a U-shaped longitudinal pattern on the propodosoma; cuticular lobes on the dorsal striae very small, separated, triangular or occasionally semi-circular, and with dense tips; ventral striae transverse on the genital flap and anterior to the genital flap and without lobes; empodia (Fig. 12) as described for the male; four tactile setae and a sensory seta proximal to the closely spaced two pairs of duplex setae on tarsus 1, nine tactile setae and a sensory seta on tibia I (Fig. 7); eight tactile setae on tibia II (Fig. 3); six tactile setae on tibia III, seven on tibia IV; living females yellowgreen with dark lateral spots; eggs globular to slightly oval, about 150 μ in diameter, fixed to the leaf surface, often in rows.

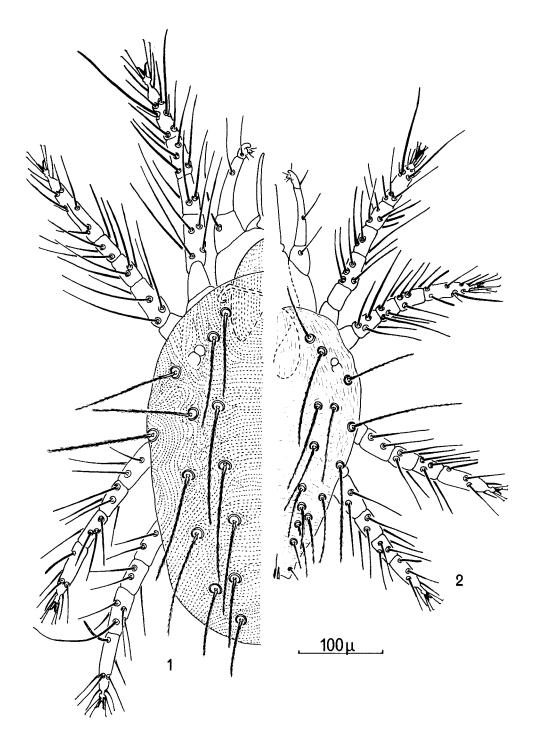
Comments

Schizotetranychus gahniae is a distinctive species. It may be related to S. cynodonis McGregor and S. parasemus Pritchard and Baker, but is easily distinguished from both of these species, as they are described in Pritchard and Baker (1955), by the empodia lacking proximoventral chetae, the peritreme being hooked distally rather than straight, and by differences in the number of tibial and tarsal setae. S. gahniae further differs from S. cynodonis in the shape of the aedeagus, in having proportionately longer dorsal setae, and in the tarsal setae not being conspicuously pubescent.

The mites are found on the undersurface of the leaves, in small colonies each protected by a fine closely woven silken cover.

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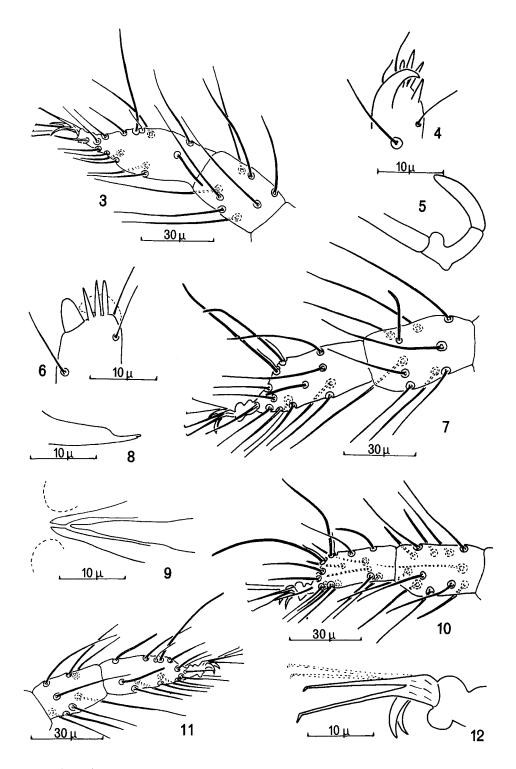
J. J. DAVIS



Figs. 1-2.—Schizotetranychus gahniae sp. n.: (1) female, dorsal: (2) male, dorsal.

REFERENCE

PRITCHARD, E. A. and BAKER, E. W. (1955).—A revision of the spider mite family Tetranychidae. Mem. Pacif. Cst ent. Soc. 2: 1-472.



Figs. 3-12.—Schizotetranychus gahniae sp. n.: (3) female, tibia and tarsus II; (4) male, distal segment of palpus; (5) female, distal end of peritreme; (6) female, distal segment of palpus; (7) female, tibia and tarsus I; (8) male, aedeagus, lateral; (9) male, aedeagus and associated structures, dorsal; (10) male, tibia and tarsus I; (11) male, tibia and tarsus II; (12) female, distal appendages of tarsus I.