# QUEENSLAND DEPARTMENT OF PRIMARY INDUSTRIES DIVISION OF PLANT INDUSTRY BULLETIN No. 427

# STUDIES OF QUEENSLAND TETRANYCHIDAE. 4. EOTETRANYCHUS LOMANDRAE SP. N., A SPIDER MITE FOUND ON MAT-RUSHES

By J. J. Davis, B.Sc.

#### **SUMMARY**

Eotetranychus lomandrae sp. n., a spider mite found on two species of mat-rushes at Palmwoods, is described and figured. It is distinguished from related species on the shape of the aedeagus and the setation of the legs.

## Eotetranychus lomandrae sp. n.

Holotype: male; Allotype: female; and Paratypes:

QUEENSLAND: Palmwoods—on Lomandra longifolia Labill., 13.v.1966 (D. A. Ironside).

Holotype male and allotype female on separate slides in Hoyer's medium are in Queensland Museum registered numbers W2533 and W2534 respectively, together with a paratype female No. W2535 in Heinze P.V.A. medium showing integumentary lobes. Other paratypes, four females on slides in Hoyer's and Heinze P.V.A. media, and specimens of females and nymphs preserved in Oudeman's fluid, are in the collection of the Queensland Department of Primary Industries.

Male.—Dimensions of mounted holotype  $345\mu$  (to tip of palpi) x  $165\mu$ ; palpus with terminal sensillum well developed about two-and-one-half times as long as wide (Figure 1A); peritreme not hooked, expanded to form a simple bulb (Figure 1B); empodium I a pair of obscurely trifid claws (Figure 1C); tarsus I with four tactile setae and two sensory setae proximal to the two adjacent pairs of duplex setae, tibia I with eight or nine tactile and three or four sensory setae (Figure 1D); empodium II with three pairs of proximoventral hairs, tibia II with five tactile setae and two sensory setae (Figure 1E); five tactile setae and one sensory seta on tibia III, six tactile setae and one sensory seta on tibia IV; aedeagus bent dorsad, the dorsally directed part much longer than the main shaft, finely tapered and needle-like (Figure 1F).

<sup>&</sup>quot;Oueensland Journal of Agricultural and Animal Sciences", Vol. 25, 1968

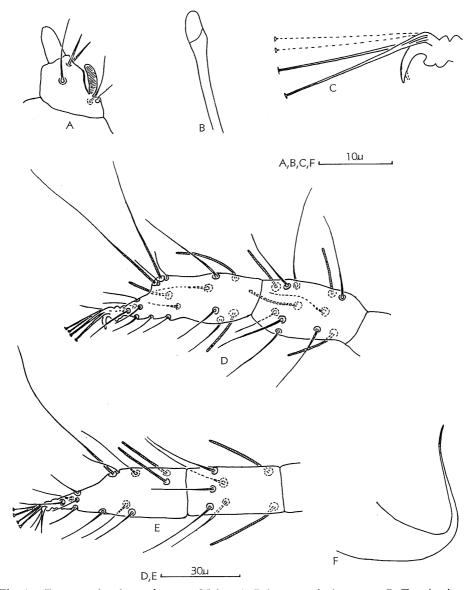


Fig. 1.—Eotetranychus lomandrae sp.n Male. A. Palpus, terminal segment. B. Termination of peritreme. C. Empodium I. D. Tibia and Tarsus I. E. Tibia and Tarsus II. F. Aedeagus.

Female.—Dimensions of mounted allotype  $456\mu$  (to tip of palpi) x  $270\mu$ ; mounted paratypes  $(456\mu - 570\mu)$  x  $(270\mu - 330\mu)$ , dorsal setae evenly tapering and finely pubescent, dorso-centrals at least one-and-one-half times as long as intervals between adjacent setae; stylophore rounded in front, one and one-third times as long as wide; peritreme not hooked, expanded distally into a simple bulb; dorsal striae transverse between third pair of dorso-central setae and between the

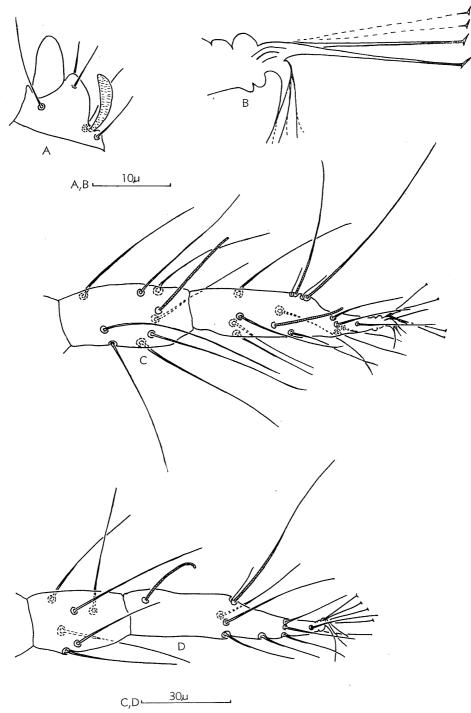


Fig. 2.—Eotetranychus lomandrae sp.n. Female. A. Palpus, terminal segment. B. Empodium I. C. Tibia and Tarsus I. D. Tibia and Tarsus II.

inner sacral setae; cuticular lobes on dorsal striae small, separated with dense tips, and mostly narrow and sub-triangular with some more broadly rounded; ventral striae not lobed; ventral striae transverse in the region immediately forward of the genital flap; terminal sensillum of palpus stout, almost twice as long as wide (Figure 2A); empodia with three pairs of proximoventral hairs, the proximal pair much the strongest (Figure 2B); tarsus I with the two pairs of duplex setae closely approximated, and four tactile setae well proximal to the duplex setae, tibia I with eight or nine tactile setae, and one sensory seta (Figure 2C); tibia II with six tactile setae (Figure 2D); tibia III and tibia IV each with five or six tactile setae.

Living adult females are pale greenish-yellow with several dark spots along each side.

Other records: QUEENSLAND: Woombye, on Lomandra laxa (R.Br.) A. Lee, 22.vi.1966 (D. A. Ironside).

Diagnosis.—E. lomandrae is close to E. hudsoni Miller but differs principally in having a very much longer, needle-like aedeagus, and in some details of leg setation. E. hudsoni was described from Xerotes (Lomandra) longifolia from Tasmania (Miller 1966) and is known to occur on this plant in Queensland. These two species of Eotetranychus are the only ones described in this genus in Australia.

E. lomandrae is also close to E. steganus Pritchard and Baker described from specimens collected on palmetto in Florida. It resembles this species in the shape of the aedeagus, but differs in various details of leg setation, especially in the number of setae on tarsi I and II as described by Pritchard and Baker (1955).

### REFERENCES

MILLER, L. W. (1966).—The Tetranychid mites of Tasmania. Pap. Proc. R. Soc. Tasm. 100:62.

PRITCHARD, A. E., and BAKER, E. W. (1955).—A revision of the spider mite family Tetranychidae. *Mem. Pacif. Cst Ent. Soc.* Ser. 2:167.

(Received for publication February 3, 1967)

The author is an officer of the Entomology Section, Division of Plant Industry, Department of Primary Industries, and is stationed at Nambour.