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Macfarlaniella, a New Genus of
False Spider Mites
(Acarina: Tenuipalpidae)

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In 1942 Womersley described *Raoiella queenslandica* from material collected from *Eucalyptus micrantha*, Redland Bay, Queensland, September 3, 1941, by A. R. Brimblecombe. Through the courtesy of Donald MacFarlane, of the Commonwealth Institute of Entomology, British Museum (Natural History), we have been able to examine four additional females of this mite, also collected by Brimblecombe, from *Eucalyptus grandis*, Tamborine Mountains, Queensland, September 8, 1941 (slide CIE 16873).

Pritchard and Baker (1958), in their revision of the family Tenuipalpidae, state: "From Womersley's drawings of *R. queenslandica* it is not clear if this species has four pairs of dorsosublaterol hysterosomals as do the other members of the genus. It is probable that it represents a new genus." Examination of the material from *Eucalyptus grandis* shows that this mite does represent a new genus, which is here described. We have been able to check females only, although Womersley figured and described both sexes. The humeral setae are omitted in his figure of the female but they are present in his figure of the male. His description states that the mite has a two-segmented palp, which is characteristic of the genus *Raoiella*. There are actually four palpal segments, the basal

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FIG. 21. *Macfarlaniella queenslandica*. A, dorsal view of female; B, detail of hysterosomal striae; C, venter of female; D, venter of rostrum; E, tarsus I.

and distal segments being minute! Womersley's figure of the tracheal system is accurate; these mites have tracheae similar to those of *Pseudoleptus*, *Pentamerismus*, *Brevipalpus*, and *Dolichotetranychus*.

Macfarlaniella, new genus

Type of the genus.—*Raoiella queenslandica* Womersley, 1942.

The number of palpal segments and dorsal sublateral setae combined with the lack of the ventral plate distinguishes this genus from the others.

Female: Gnathosoma elongate. Palpus with four segments, the distal segment with a small simple lateral seta and a long terminal rod-like seta, the penultimate segment with a single simple distal seta, the other segments bare. Propodosoma striate, with the usual two pairs of eyes and three pairs of setae. Hysterosomal striations consisting of broad rounded ridges; hysterosoma with only three pairs of dorsal sublateral setae (*dsl*, fig. 21). Venter of body as figured; without ventral plate; with four pairs of genital setae and two pairs of anal setae. Legs small; tarsi short, tarsi I and II each with a distal rod longer than the segment; claws hooked and with tenant hairs; empodia simple, with a single pair of tenant hairs.

The genus is named for Donald MacFarlane, Commonwealth Institute of Entomology, British Museum (Natural History).

REFERENCES

PRITCHARD, A. E., and BAKER, E. W.

1958. The false spider mites (Acarina: Tenuipalpidae). Univ. Calif. Publ. Ent., 14 (3), pp. 175-274.

WOMERSLEY, H.

1942. Miscellaneous additions to the acarine fauna of Australia. Trans. Roy. Soc. S. Australia, 66 (1), pp. 85-92.

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