

TWO NEW FUR-MITES (ACARI: ATOPOMELIDAE) FROM AN
AUSTRALIAN TIGER CAT (MARSUPIALIA: DASYURIDAE)

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Synopsis

Dasyurochirus (*D.*) *major*, n. sp. and *Labidopygus australiensis*, n. g., n. sp. (Atopomelidae) are described from a tiger cat, *Dasyurus maculatus* (Kerr) (Dasyuridae).

The listrophoroid mites of Australia and New Guinea have been studied by several authors, notably Gunther, Womersley, and Domrow. A recent revision of the group by Fain (1972) included 63 species in 22 genera.

In this supplementary note, we describe two new species from the same individual tiger cat, one belonging to *Dasyurochirus* Fain, the other representing a new genus. The taxonomic nomenclature is that adopted by Fain (1963).

Genus DASYUROCHIRUS Fain

Dasyurochirus Fain, 1970, *Bull. Anns Soc. r. ent. Belg.*, 106: 277. Type-species *D. biscutatus* Fain, 1970, *ibid.*

Dasyurochirus (*Dasyurochirus*) *major*, n.sp.

(Figs 1-3)

Diagnosis.—This species, known only from the male, differs from *D. (D.) leprosus* Fain, 1971, in the following points:

1. The body is larger.
2. The postscapular shields comprise transverse bands 4-6 μ long and 60-65 μ wide, in front of which the postscapular region is not punctate, but in part scaly.
3. The small, clear adanal discs are distinctly larger.
4. The penis is smaller.
5. The sclerotized fork fused to epimera III in front of the genitalia is distinctly longer.
6. The two subapical ventral setae on tibiotarsi III are modified and unequal.

Types.—Holotype male (only known specimen) found attached to fine hair skirting stem of scrotum of tiger cat, *Dasyurus maculatus* (Kerr) (Marsupialia: Dasyuridae), Eccleston, N.S.W., 20.vii.1971, M. D. Murray. In Australian National Insect Collection, C.S.I.R.O., Canberra.

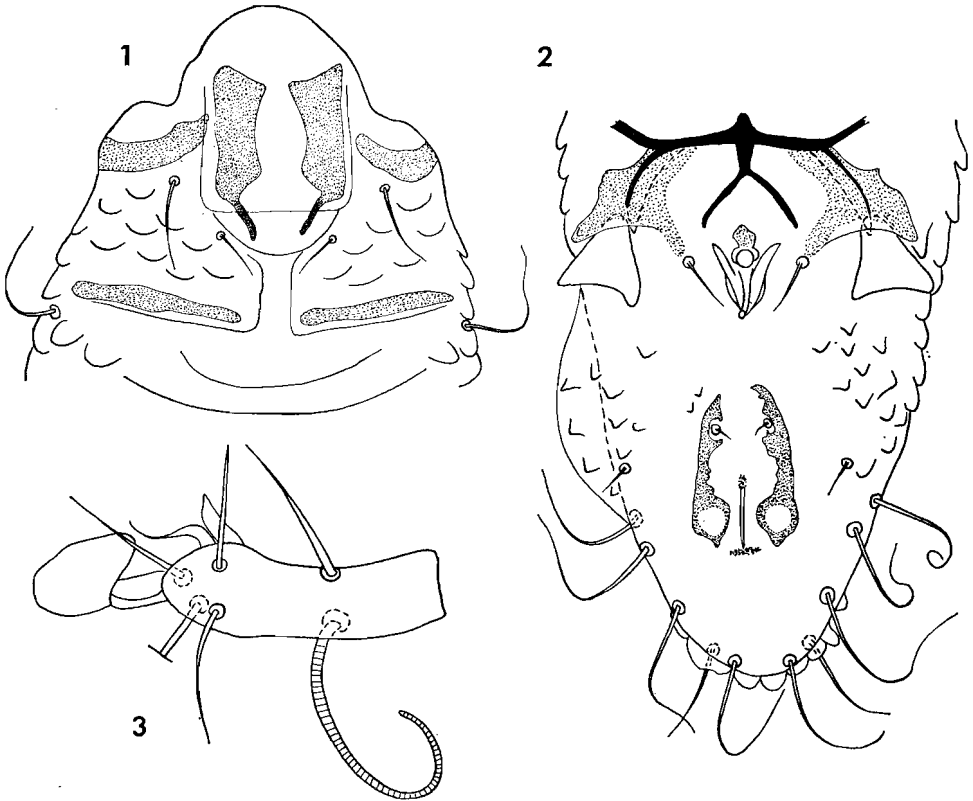
Male.—Idiosoma (including gnathosoma) 435 μ long, 164 μ wide (maximum). Similar to *D. leprosus*, except as noted above.

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Genus *LABIDOPYGUS*, n. g.

Diagnosis.—This genus is known only from the male and immatures. In the male, the cuticle is largely striate, except for the anterior and posterior regions of the dorsum occupied by punctate shields, and in the central portion of the venter. The prescapular shield is single and oval, and not accompanied by postscapular shield(s). All legs terminate in a sucker, except I, which carry only a short stump, a mere remnant of the ambulacra. Adanal suckers two,



Figs 1-3. *Dasyurochirus major* male. 1, Anterior portion of dorsum. 2, Posterior portion of venter. 3, Tibiotarsus III.

small, but well developed. On each side, external to adanal suckers, is a strongly sclerotized, cyliandroconical process, directly anteriorly and carrying fine, transverse ridges. These organs serve to clasp the nymph during copulation. Legs IV slightly stronger than III. Tibiotarsi III-IV with two and one strong ventral spine(s), respectively; solenidia set in basal third of segment.

Labidopygus is separable from all other known Australian atopomelid genera by the presence (in the male) of two small, but normally formed, adanal suckers, and two copulatory processes. In the males of other known genera of the region, the adanal suckers are either completely lacking, or modified and (apparently) non-functional (Fain, 1972).

Type-species *L. australiensis* Fain and Domrow.

Labidopygus australiensis, n. sp.
(Figs 4-5)

Types.—Holotype male, five paratype males, and several immatures with same collection data as *D. major*. Holotype and two paratype males in A.N.I.C.; one paratype in P.L.I.T.M.; two paratypes in Queensland Museum.

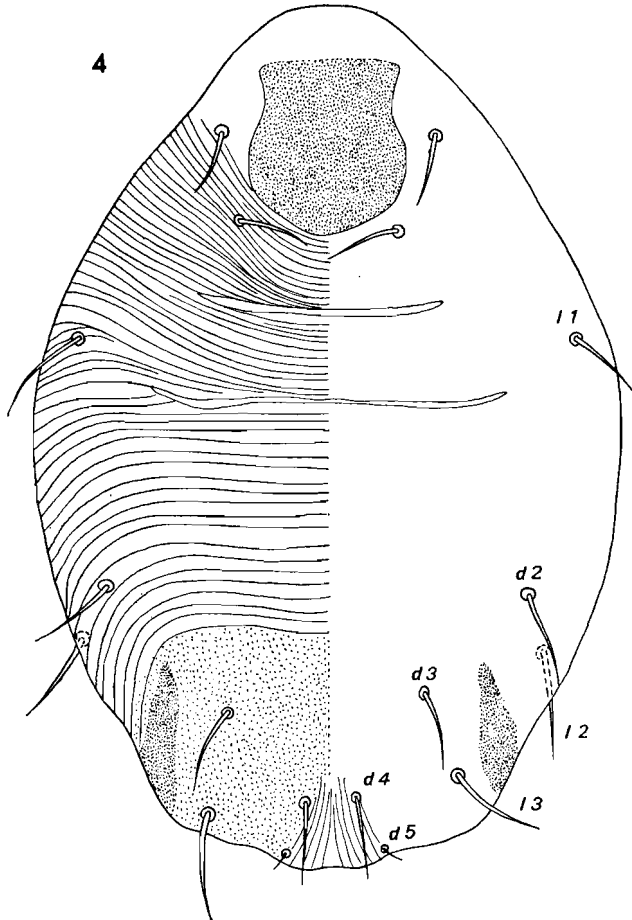


Fig. 4. *Labidopygus australiensis* male. Dorsum.

Male.—Idiosoma (including gnathosoma) 255μ long, 153μ wide (maximum) in holotype; ovoid. Prescapular shield ovate, more or less in form of shield with rounded sides. Hysterosomal shield wider than long, reinforced laterally by more strongly sclerotized areas. Remainder of dorsum transversely striate. Striate grooves of coxae I-II narrow; coxae II with strong triangular process posterolaterally. Epimera III and IV fused medially to form two strong, independent arcs. Penis small, situated at level of coxae IV. Anus ventral, flanked by adanal suckers and copulatory processes detailed above. Dorsal setae moderately long and strong ($20-30\mu$); d_2 set far to side; l_5 120μ long; a_6 and a_3 lacking.

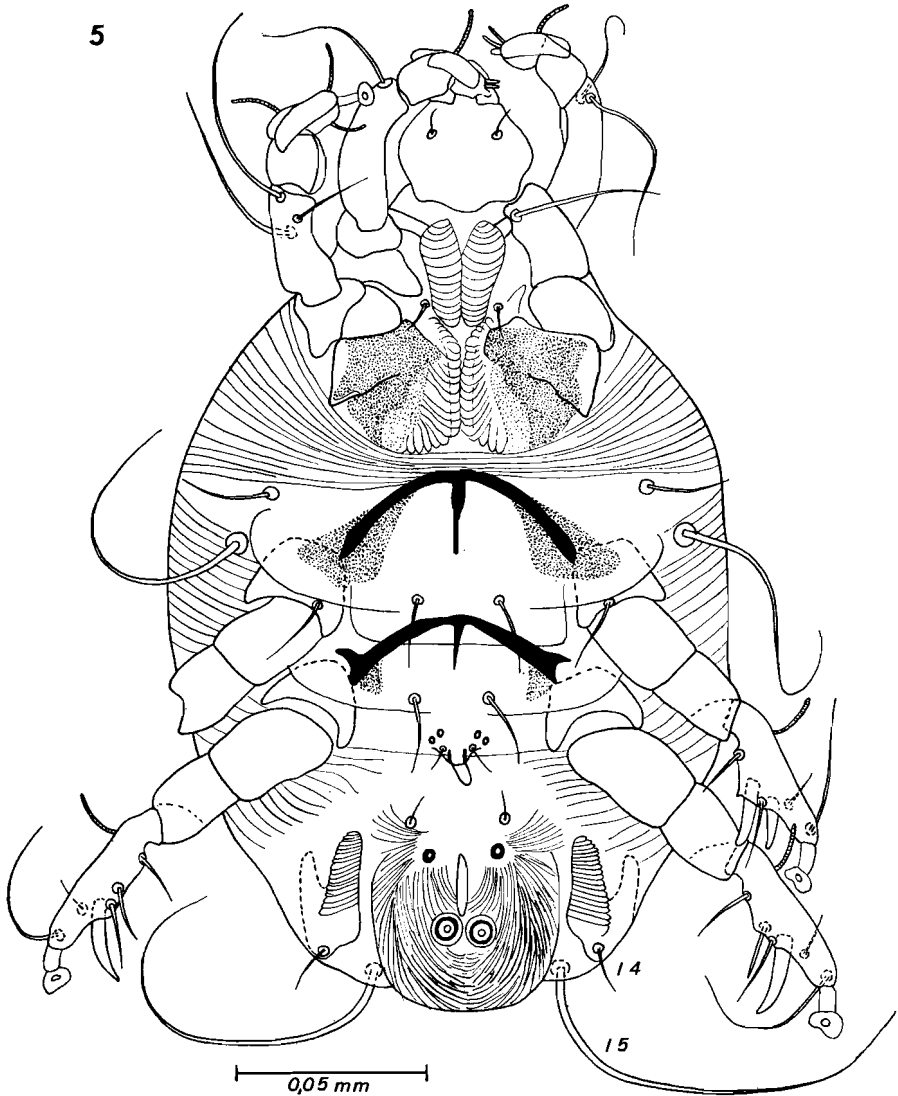


Fig. 5. *Labidopygus australiensis* male. Venter.

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