

A NEW ASTERNOLAEELAPS FROM AUSTRALIA (ACARINA, ICHTHYOSTOMATOGASTERIDAE)

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Fig. 1

SYNOPSIS

The mite family Ichthyostomatogasteridae Sellnick is recorded from Australia for the first time. It now includes two species, *Asternolaelaps fecundus* Berlese from Europe, and *A. australis*, sp. nov. from a bat cave in South Australia.

INTRODUCTION

In 1953 Sellnick erected a new cohort Ichthyostomatogasterina and family Ichthyostomatogasteridae, which were based on his new genus and species *Ichthyostomatogaster nyhleni* from the nest of the velvet skater duck, *Melanitta fusca* (L.), from the island of Stora Karlsö, off Göttnland, Sweden. His syntypes (two nymphs, four females, one male) are in the Entomology Department of the Stockholm Museum.

Berlese had earlier (1923, p. 252) described without figures both sexes of *Asternolaelaps fecundus* from humus and moss from Vallombrosa, Italy. His types are in the Stazione di Entomologia Agraria in Florence. This material has since been redescribed and figured in detail by Evans (1954), and shown to be conspecific with Sellnick's species. Evans therefore synonymised *I. nyhleni* Sellnick with *A. fecundus* Berlese, but retained Sellnick's cohort and family names, apparently in accordance with Recommendation 54 (1) (a) of the Copenhagen Decisions on Zoological Nomenclature.

A single male of a second species of *Asternolaelaps* very close to Berlese's species was found on a live bat in a cave at Naracoorte, South Australia. It is, however, probably not a true parasite of bats or any other animals. Although it possibly only represents a subspecies of *A. fecundus* Berlese, because of several small morphological differences and the widely separated localities, it is here briefly

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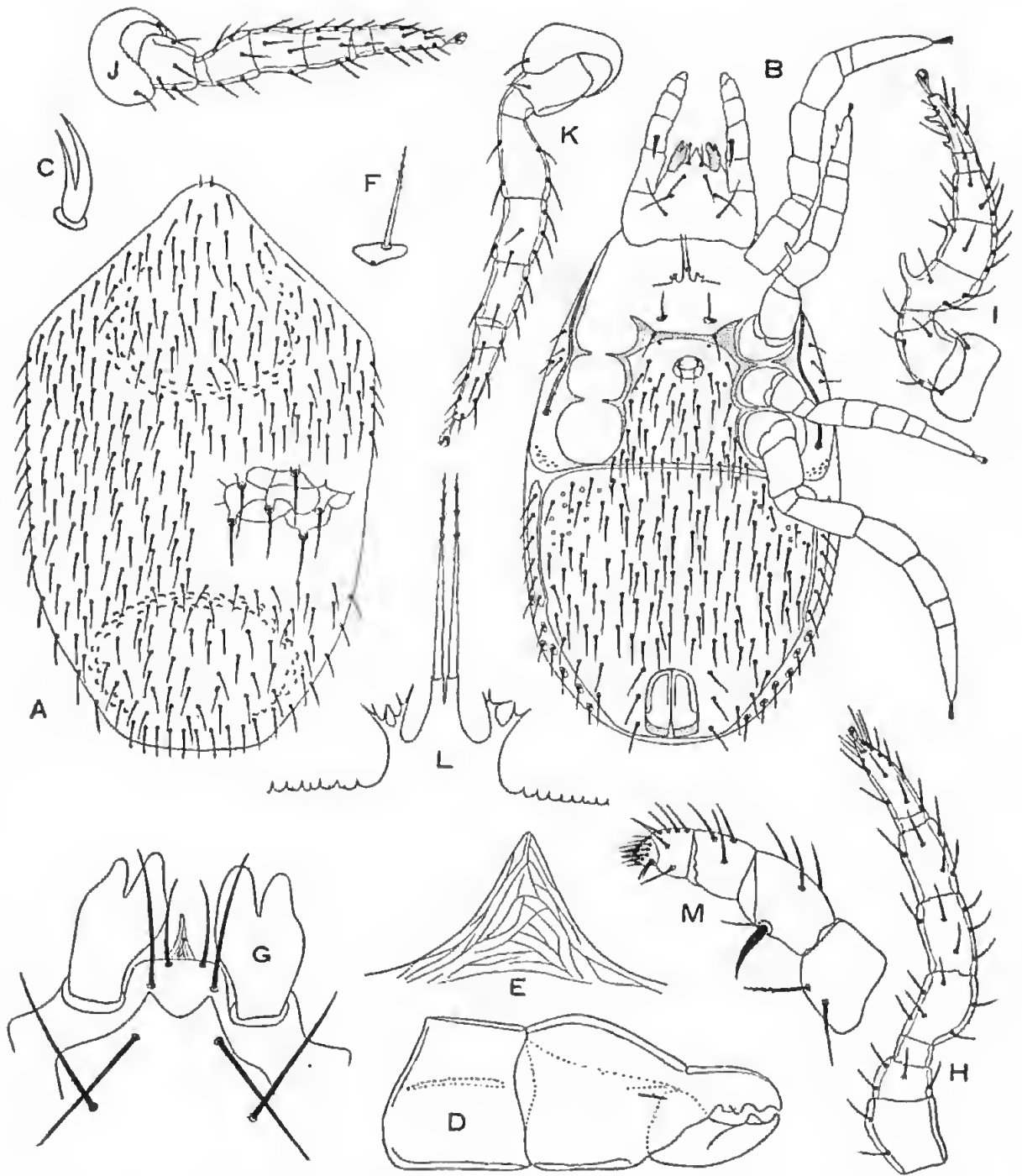


Fig. 1. *Asternolaclaps australis*, sp. nov. Male. A. Dorsal shield, with inset showing texture. B. Venter. C. Tined seta on palpal tarsus. D. Chelicera in lateral view. E. Tectum. F. Sternal platelet. G. Labial cornicles and gnathosomal setae. H. Leg I. I. Leg II. J. Leg III. K. Leg IV. L. Tritosternum. M. Ventral view of palp.

described as a new species in comparison with Berlese's, the only other species in the family. Pending publication of the London Decisions, the family name is left unchanged.

***Asternolaelaps australis*, sp. nov.**

Fig. 1, A-M

Type: Holotype male in South Australian Museum, Adelaide; associated with bats in a cave at Naracoorte, South Australia, 26. viii. to 2. ix. 1956, E. Hamilton Smith coll. The specimen is dissected, one slide containing the gnathosoma, the other the remainder of the body and the chelicerae.

Description of male: Similar to *A. fecundus* Berlese except in the following characters. Idiosoma 818μ long, 501μ wide (measurements calculated from text-figures A and B). Body setae rather uniform (to 42μ long), a few of the stronger ones being slightly ciliated. Sternal shield 176μ long medially, 146μ wide between coxae IV; anterior sternal setae slightly ciliated, 36μ long. Ventrianal shield 390μ long, 388μ wide anteriorly (the measurements of the sternal and ventrianal shields are direct from the specimen as dissected). Metapodal shields 176μ long, 26μ wide, with six setae along their length. Tectum triangular, with linear markings forming a network over its surface. Dorsodistal margin of palpal femur quite straight. Legs I 504μ , II 419μ , III 427μ , IV 523μ long. When first mounted a slight depression was seen both anteriorly and posteriorly on the dorsal shield; these are now difficult to distinguish as depressions in the dissected specimen.

NOTE: The following key will serve to recognize the new species.

KEY TO SPECIES OF *ASTERNOLOEELAPS* BERLESE

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|--|--------------------------------|
| Metapodal plates without setae; tectum tapering twice to form distinct spine anteriorly; tectal striae spinulose in part; dorsodistal margin of palpal femur with process; European | <i>A. fecundus</i> Berlese. |
| Metapodal plates with six setae along their length; tectum tapering once, evenly triangular; tectal striae without spinulae; dorsodistal margin of palpal femur quite straight; Australian | <i>A. australis</i> , sp. nov. |

REFERENCES

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