

INSECTS OF CAMPBELL ISLAND

MESOSTIGMATA: HAEMOGAMASIDAE¹

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Abstract: The family Haemogamasidae and species *Eulaelaps stabularis* (Koch) are recorded from the Australian region for the first time.

The following species of Acarina was found among a large and varied assortment of arthropods collected by Dr. J. L. Gressitt and field associates of the Bishop Museum during the summers of 1961-62 and 1962-63. Neither the species nor the family has been reported previously from the Sub-antarctic although both have a widespread distribution. In addition the opportunity is taken to list a record of this species from New Zealand, based on material in the Bishop Museum collection, in as much as it has not been reported from there.

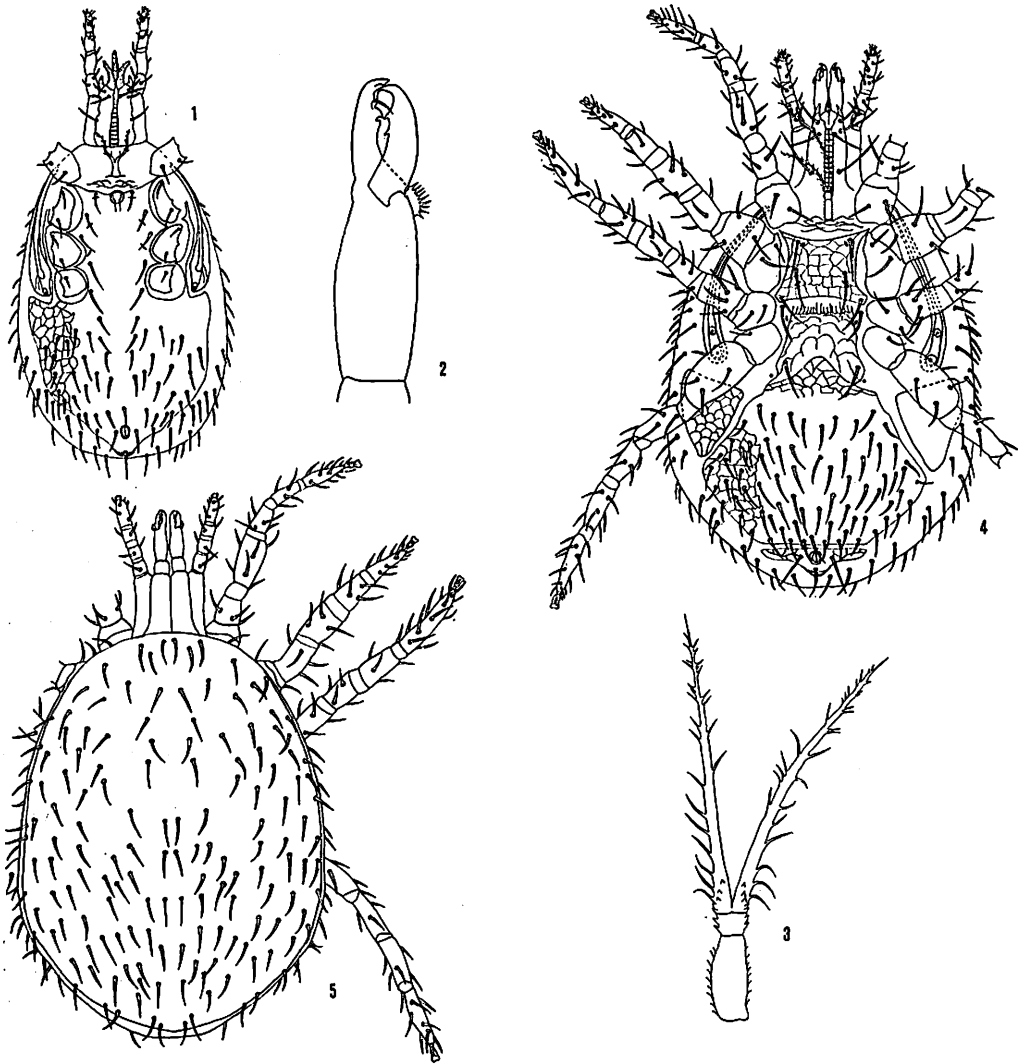
This species is considered parasitic upon vertebrates and has been recorded from a large number of mammalian hosts, most of which are rodents. There are only a few records from birds or bird nests. It is generally more common in the nest of the host than on the host itself and occasionally it has been reported as free living.

The following descriptions and figures are based on material from Campbell I. when it was available, otherwise they are taken from various sources in the literature.

Eulaelaps stabularis (Koch), 1836 Figs. 1-5.

Description: ♂—Idiosoma narrower than that of ♀ with similar dorsal chaetotaxy. Holovenral shield large, expanded posterior to coxa IV, well sclerotized and ornamented, with about 100 setae. ♀—Large, well sclerotized and setose. Dorsal shield oval, 994-1026 μ long, 734-756 μ wide, with many setae which are more numerous on the posterior and lateral parts. Tritosternum with pilose lacinae and base. Sternal shield 113-118 μ long (at mid line), 180-188 μ wide (at level of 2nd setae), well sclerotized and ornamented. Sternal setae long, 1st pair extending over 2/3 length of sternal shield, 2nd pair extending past base of metasternal setae, 3rd pair extending to coxa IV. Genitoventral shield greatly expanded posterior to coxa IV, 529-540 μ wide, ornamented, with 70-75 setae exclusive of anterior pair, posterior margin straight to slightly concave, almost touching anterior margin of anal shield. Metapodal shields very large, triangular in shape, well sclerotized and ornamented. Anal shield much wider than long, 260-265 μ wide, 80-88 μ long, ornamented, anterior margin straight to slightly convex, adanal setae 81-90 μ long,

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Figs. 1-5. *Eulaelaps stabularis* (Koch). 1, ♂ ventral view (modified after Strandmann & Wharton, 1958); 2, ♀ chelicera; 3, ♀ tritosternum; 4, ♀ ventral view; 5, ♀ dorsal view.

extending well past postanal margin of anal shield. Peritreme extends slightly beyond posterior margin of coxa I, peritrematal shield well developed. Chelicerae chelate-dentate, a small non-inflated pilus dentilis present on fixed finger and a row of small setae at base of movable finger. Eleven rows of deutosternal teeth, 3-9 teeth per row (average 6.1). Legs I and IV longer than II and III. Tarsus I, 255-260 μ long, II, 175-190, III, 195-200 and IV, 280-305.

DISTRIBUTION: Africa, Asia, Europe, North America, Campbell I., New Zealand.

CAMPBELL ISLAND: 2♀♀, chicken yard debris, Berlese funnel, Beeman Camp, 2-50 m, 6-11. XII. 1961, J. L. Gressitt.

NEW ZEALAND: 2♀♀, *Eudypitula albosignata* nest, Port Levy, Canterbury Prov., 11. X. 1961, C. J. Mitchell.

Discussion: Only 2♀♀ of this species were found in a vial containing about 500 mites extracted with a Berlese funnel from chicken yard debris collected at the base camp on Campbell Island. The chickens and some of the litter had originated from New Zealand. The history of the material in which they were found and the fact that no additional specimens were collected in over 108 samples of mites from other localities on Campbell Island would seem to indicate these specimens were introduced from New Zealand. This mite previously has not been reported from New Zealand and these records are the first for it from the Australian region.

The 2♀♀ from Campbell Island differ in the following respects from a series of ♀♀ from North America. Their overall size is larger and most measurements are greater than in the North American specimens although this may be due to a greater degree of flattening in the specimens. The genitoventral shield is more setose and not as deeply incised behind coxa IV. The first pair of sternal setae average slightly longer. There are more rows of deutosternal teeth and a greater number of teeth per row in the Campbell I. specimens. These differences are considered to be within the normal range of variation for such a widely distributed species.

LITERATURE CITED

- Strandtmann, R. W. & G. W. Wharton. 1958. A manual of mesostigmatid mites parasitic on vertebrates. Institute of Acarology. Contr. No. 4.