

A New Genus and Species of the Family Acropsopilionidae (Opiliones) from New Zealand.

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[Read before Wellington Branch, April 23, 1947; received by Editor,
April 28, 1947; issued separately, April, 1948.]

THE family Acropsopilionidae was established by Roewer in 1923 for *Acropsopilio chilensis* Silv., described from Chile by Silvestri in 1904.

This family is remarkable for the extremely large eye tubercle, which is divided into two lobes by a deep median longitudinal groove, while on the outside of each lobe is a large simple eye.

The distribution is of great interest. Of the three genera now known to occur, *Acropsopilio* Silv. is recorded from the southern portions of South America, *Cadella* Hirst from South Africa, and *Zeopsopilio* n.gen. from New Zealand. *Zeopsopilio*, while differing widely from *Cadella*, shows decided affinities with the South American *Acropsopilio*. The spines on pedipalp of the New Zealand species are very similar in appearance and disposition to those found in *Acropsopilio*, whereas in *Cadella* the pedipalp is armed with large setose papillae, which are limited to the proximal segments. Both *Zeopsopilio* and *Acropsopilio* have a transverse groove behind the eye mound, dividing the cephalothorax in two. In *Cadella* this groove is absent. *Zeopsopilio* may be easily distinguished from *Acropsopilio* by the lack of segmental grooves in the abdominal tergites of the New Zealand genus.

Order OPILIONES

Sub-order PALPATORES Thorell

Division DYSPOI Hans. and Sor.

Family ACROPSOPILIONIDAE Roewer

Genus *Zeopsopilio* n.gen.

Eye mound extremely large, projecting anteriorly, divided into two lateral lobes by deep median longitudinal groove. Eyes large, directed laterally. Cephalothorax divided into two segments by transverse groove behind eye mound. Abdominal tergites fused, transverse grooves not visible. Sternites divided by distinct intersegmental grooves. Genital operculum large, uniform, extending to coxa III.

Maxillary lobes of coxa II small, widely separated, directed back to anterior margin of genital operculum. Maxillary lobe of coxa I large, flat, immovable.

Mandibles short and smooth. Teeth on cutting edges of fingers small and of uniform size. Pedipalp longer than body, armed ventrally on all segments with sharp spines. Tarsus slightly more than half length of tibia and terminated by a distinct, smooth claw.

Legs long, slender, without spines or tubercles. Calcanus absent. Tarsal segments, 6,7,7,8.

Genotype *Zeopsopilio neozelandiae* n.sp.

***Zeopsopilio neozelandiae* n.sp.**

Colour. Ground colour of body yellowish-brown; tergites more or less clearly divided by six transverse bands of black pigment. (In some specimens the bands are broken up and not as pronounced as in Fig. 1). Eye mound yellow between the two lateral lobes. Area around eyes, black. Cephalothorax light brown at sides and medially, remainder blackish-brown. Sternites yellow, but posterior margins fringed with black. Coxae of legs light brown; remaining leg segments dark brown.

Body. Eye mound, cephalothorax, tergites and sternites as in generic description, smooth, setae and spines absent. Stink glands opening from a small mound on the lateral margin of the cephalothorax between coxae II and III. Mouth parts as in Fig. 2.

Pedipalp. Coxa below with one median distal spine. Trochanter below with line of three evenly spaced spines. Femur with median dorsal tuft of serrate setae; below with proximal outer row of two large and one small spine, a further large spine at halfway, and a small spinous tubercle at three-quarters. Patella below with two outer and three inner distal spines. Tibia below with outer line of five, median line of four, and inner line of seven spines. Tarsus with entire ventral surface closely covered with spines. Tarsus terminated by a simple, smooth, nearly straight, claw. All segments dorsally with scattered, short, black bristles.

Mandibles. Short, smooth, but with few scattered bristles dorsally. Movable finger longest, curving around immovable finger; cutting edges armed with small, regular teeth.

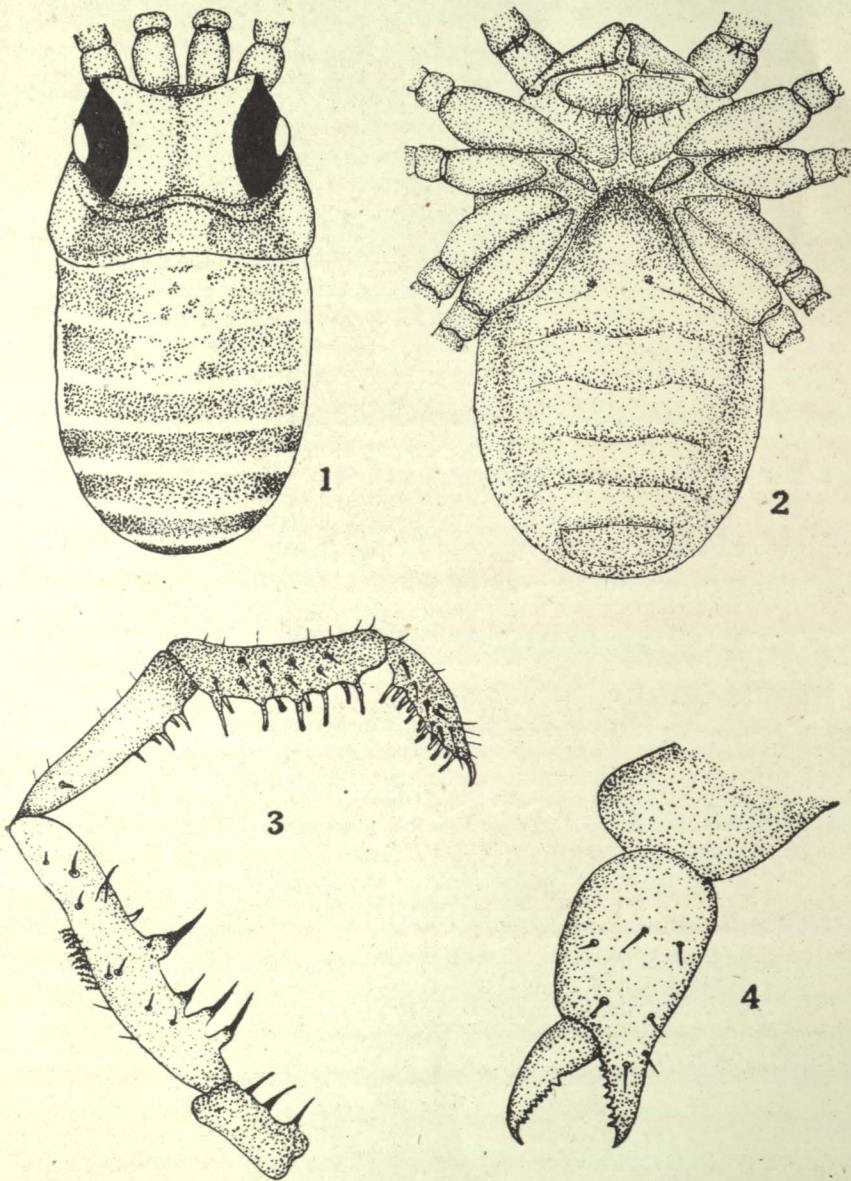
Legs. Long, slender, covered with very fine setae. Femur IV distinctly curved. Tarsal segments 6,7,7,8.

Measurements (in mm.).

							Length	Width	
	Body	..	..	..	..	..	1.3	0.7	
	Eye mound	..	..	..	..	..	0.35	0.6	
		Cox.	Troch.	Fem.	Pat.	Tib.	Metat.	Tars.	Total
Leg I	..	0.3	0.08	0.3	0.2	0.25	0.6	0.35	2.08
Leg II	..	0.2	0.08	0.45	0.2	0.35	0.75	0.5	2.53
Leg III		0.25	0.08	0.35	0.2	0.35	0.75	0.5	2.48
Leg IV	.	0.3	0.08	0.55	0.2	0.45	0.9	0.55	3.03
Pedipalp		0.1	0.2	0.45	0.35	0.35		0.2	1.65
Mandible	.	Basal segment, 0.25; second segment, 0.3; total, 0.55							

Holotype. Dominion Museum Collection, Tube 2/57.

Localities. Johnson's Park, Feilding, under logs and fallen branches. (Type Loc.) Homer Forks, under stone. Lower Hollyford Valley, in moss and lichens. Mount Algidus, Rakaia Gorge, in leaf mould. Peel Forest, in leaf mould. Titirangi, under log (Coll. R. R. F.). Henderson (Coll. H. G. King). Wellington, in leaf mould (Coll. R. R. F.).



FIGS. 1-4.—*Zeopsopilio neozelandiae* n.sp.

FIG. 1.—Dorsal view of body.

FIG. 2.—Ventral view of body and coxae.

FIG. 3.—Outer view of pedipalp.

FIG. 4.—Chelicera.

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Remarks. The above species was first discovered on the under-surface of logs and branches, lying in a very small patch of mixed indigenous and exotic forest at Feilding. They are extremely difficult to see, but their habit of occasionally making short, fast, and jerky runs brings them to the eye. Once seen, they are most easily followed, as the conspicuous white portions of the pedipalp, which is folded back to rest along the median groove of the eye mound, contrasts with the black pigment surrounding the eyes.

Although these opilionids have since been found in many localities throughout New Zealand, no variation appears meriting even sub-specific distinction. This is in marked contrast to the majority of the New Zealand species of Opiliones, which show an extremely limited specific distribution.

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