***Lactica dilatipes* sp. nov.**

Small, oblong, light straw- yellow, antennæ, except the base, most of the tibiæ and tarsi and a common triangular spot on the base of the elytra, dark piceous, hind tibia of ♂ abruptly dilated, inside, near the tip (like some species of *Colaspis*).

5 ♂ 2 ♀, Salinas Beni R. (Stuart), length $3\frac{1}{2}$ –4 mm.

Head with a broad, smooth front, with a few fine punctures, antennæ relatively stout, reaching the middle of the elytra, second joint nearly equal to the third, thorax with nearly straight sides very finely punctulate, sulci well marked, especially the lateral; elytra, smooth, shining, very minutely punctulate, basal depression slight, the dark spot does not cover the scutel, but touches the base in either side, running round under the shoulder, and a straight line across the middle; distinguished from *sellata* by the light legs and dilated ♂ tibia; the punctuation of the ♀ is stronger than the ♂.

Lactica seminigra Jac. P. Z. S. p. 176, is a preoccupied name and should be changed to *Rosenbergi*. The ♂ hind tibia is distinctly curved and has a large spur-like process on the inside middle, like *calcarata* Ill. In *thoracica* Jac. what I take to be the ♂ has a well marked dilation of the hind tibia close to the tip.

The general shape of the body and the absence or otherwise of the ocular sulcus may be hereafter an aid in the future arrangement or division of the species of this perplexing group.

ON *PARAPERIPATUS LORENTZI* HORST AND OTHER
SPECIES OF THE GENUS FROM NEW GUINEA
AND CERAM.¹

BY CHARLES T. BRUES.

Mr. Frederick Muir forwarded to me some time ago three specimens of *Peripatus* collected by Mr. A. F. Pratt in the Arfak Mountains, Dutch New Guinea.

¹ Contribution from the Entomological Laboratory of the Bussey Institution, Harvard University, No. 182.

Up to the present time, six species of Onychophora, all belonging to *Paraperipatus* have been found in New Guinea and the adjacent islands of Ceram and New Britain. In order of their discovery, they are the following:

P. novæ-britanniæ Willey. 1898. New Britain.

P. ceramensis Muir & Kershaw. 1909. Western Ceram.

P. papuensis A. Sedgwick. 1910. Arfak Mts., Dutch North New Guinea.

P. lorentzi Horst. 1910. Wichmann Mts., South Dutch New Guinea.

P. schultzei Heymou. 1912. German New Guinea.

P. stresemanni Bouvier. 1914. Ceram.

With the exception of *P. schultzei* and its variety *ferrugineus*, these have been considered by Bouvier ('14) in an admirable paper which includes a key to species based on type material of *novæ-britanniæ*, *papuensis*, *ceramensis* and *stresemanni*. *P. lorentzi* is included in his table from Horst's descriptions ('10 and '11), but *P. schultzei* is not mentioned.

An examination of the specimens send by Muir shows that they are not *P. papuensis*, the type locality of which is the Arfak Mountains, from whence the examples before me also have come. They agree rather closely with *P. lorentzi*, originally discovered in the Wichmann Mountains which lie to the south of the region occupied by the Arfak range. In spite of the several differences detailed below, I have been forced to conclude that two species, *papuensis* and *lorentzi* occur in the Arfak Mountains. Whether the two species occupy a different level, cannot be stated, as there is no indication of altitude on the label attached to the present specimens. However, *papuensis* occurs at an altitude of 3,500 feet, and *lorentzi* was originally found at 9,000 feet, so that it is very probable that the two do not overlap in their distribution.

The types of *P. lorentzi* were females with 22 pairs of legs. All three of the present species are also females, each provided with 23 pairs of legs. In the types the transverse body folds are of two types, consisting of broad folds bearing mainly large papillæ, alternating with narrow folds, which are supplied mainly with accessory

papillæ. There are five or six folds of each kind to a segment, and the narrow ones sometimes divide or may anastomose with the broad ones. In one of the present specimens such an alternation of broad and narrow folds can be seen, but in the others, and particularly in pieces of integument removed from the body and mounted in balsam under a cover-slip, it is seen that the secondary folds are frequently as broad as the primary ones and that they show much irregularity, division and anastomosis. The middle creeping pad of the legs in the types is twice as broad as the first or the third pad, and in the present examples it varies from one and one-half times the width of the first or third. The nephridial tubercle of the fourth and fifth pairs of legs divides the third creeping pad completely in the type and also in the present specimens, although in one individual these tubercles are abnormally small and do not divide the pad.

Aside from these differences, there seem to be no distinguishing features, and it would seem that two distinct forms cannot be distinguished. It is interesting to note that the specimens at hand approach *P. stresemanni* Bouvier from Ceram in having 23 pairs of legs (23-24 in *stresemanni* and 22 in the typical *lorentzi*) and that the width of the second creeping pad on the leg varies from the size given for *lorentzi* to that given for *stresemanni*.

In the case of the Papuan species, as more are being made known, it is evident that the same difficulties are to be encountered in differentiating species as have already become apparent among the American *Onychophora*.

While it is apparent that *P. lorentzi* in the Arfak Mountain region approaches the Ceramese *P. stresemanni* in the characters mentioned, it seems improbable that the two species are not distinct, although it is evident that they approach one another very closely.

As no photographs of the integument of *P. lorentzi* have been published, I have prepared some from the finely preserved specimens forwarded by Mr. Muir.

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