

VIII. — PARAPERIPATUS VANHEURNI N. SP.
BY DR. R. HORST.

During the last expedition in New Guinea (1920), Mr. van Heurn, a zealous naturalist, at a height of 2900 m. (Doormanpad) in cavities of *Hydnophytum* found some specimens of *Peripatus*, which were conspicuously colored. There are six ♀ and one ♂. The living animal has a pale blue colour and on its dorsum is provided with a double row of irregular, quadrangular spots of a violet red coloration. In one specimen also at the base of the legs a row of such spots is visible. Like as in *Paraperipatus lorentzi* ¹⁾ there is a ventral median line of longitudinal whitish spots; these spots, situated between each pair of legs, are usually divided into a smaller, roundish anterior one and a posterior one, which is somewhat sagittate. Over the middle of the dorsum there runs a fine, whitish line; the pads of the legs are ochraceous. The primary papillae have their basal part yellowish colored, whereas the tip is darker; only those lying within the circumference of the dorsal spots are yellowish over their whole surface. One specimen, 60 mm. long, found at the height of 1400 m. in rotten wood, during life was very dark violet, except the white spots in the median ventral line; the legs were somewhat paler and the underside of the feet dark ochraceous. The male specimen, measuring 24 mm. in length, is dark brown with a double row of indistinct, red spots in the median dorsal area, whereas laterally near the base of each leg there occur a couple of punctiform white spots; its ventral side has a marbled appearance by the presence of whitish, primary papillae. This ♂ specimen has 22 pairs of legs; however the last pair is somewhat rudimentary for it lacks the foot and only its basal part is present. In the ♀ the number of pairs of legs seems to vary between 25 and 27. One specimen, 47 mm. long, has 26 pairs of legs, whereas of two young, presumably recently born specimens, long 20 and 15 mm., one has 25 and the other one 27 pairs of legs. As well-known in *Paraper. papuensis* Sedgw. ²⁾ the number of legs in the ♀ is variable from 23 to 29 pairs, whereas the male has 26 pairs of them. In *Parap. lorentzi* Horst there are 22 pairs of legs in the ♀ and 21 in the ♂. Each leg has three spiniferous pads and like as in *Parap.*

1) Nova Guinea, Vol. IX, 1911, Zoologie, p. 149, Pl. V.

2) Sedgwick, Nature, 26 May 1910, p. 369.

Bouvier, Zoolog. Mededeel. R. Museum v. Natuurl. Historie Leiden, dl. III, 1917, p. 263.

lorentzi there are obvious vestiges of a fourth one, consisting of a narrow, spiniferous area. The distal and the median pad have about the same breadth, twice as broad as the proximal one. The renal papillae of the 4th and 5th pairs of legs, as in *Paraper. lorentzi* are connected with the middle of the proximal pad, that has a shallow incision. Like as in *Paraper. lorentzi* the skin between two succeeding pairs of legs shows about 7 to 8 large folds, rather regularly alternating with narrow ones; each fold is beset with primary papillae, which at the lateral sides of the body are situated quite next to each other, but in the middle of the dorsum they are separated by a large distance from each other. The mouth is surrounded by a ring of lobes, about seven on each side; they are rounded triangular and beset with denticles. The inner blade of the jaws besides the main tooth is provided with five accessory denticles. The antennae consist of about 30 rings. The male genital orifice is situated on a penis-like projection; the efferent duct of the anal glands at the dorsal side was protruded. With regard to the internal anatomy may be mentioned, that the loop of the slime-glands, before the large reservoir passes into the thin ramifications, extends to the 14th pair of legs. The ovary was attached by a string in the posterior part of the body-cavity about on the level of the third or fourth leg from the posterior end of the body. The oviducts are rather long. By the structure of their feet, by the situation of the genital orifice and by other characters the species appears to belong to the genus *Paraperipatus* Willey, like as two other species, found in New Guinea.

Paraperip. papuensis was found by Mr. Pratt in the central Arfak mountains at an elevation of 3500 feet, amongst the roots of grass, under stones etc.; *Paraperip. lorentzi* was collected amidst moss, in the Wichmann mountains at a height of 3000 m. Mr. van Heurn however believes, that especially the sponge-like *Hydrophytums* afford a cherished abode to the members of the *Peripatus*-family and they always can be found therein. On the mountains higher than 2700 m. those myrmecophilous plants grow on the bottom and are only sparingly visited by ants; usually their cavities are empty and do not contain but a quantity of rain-water.
