

**Descriptions of Two New S. African Geckos  
of the Genus *Pachydactylus*.**

By

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With Plate IV and 1 Text-figure.

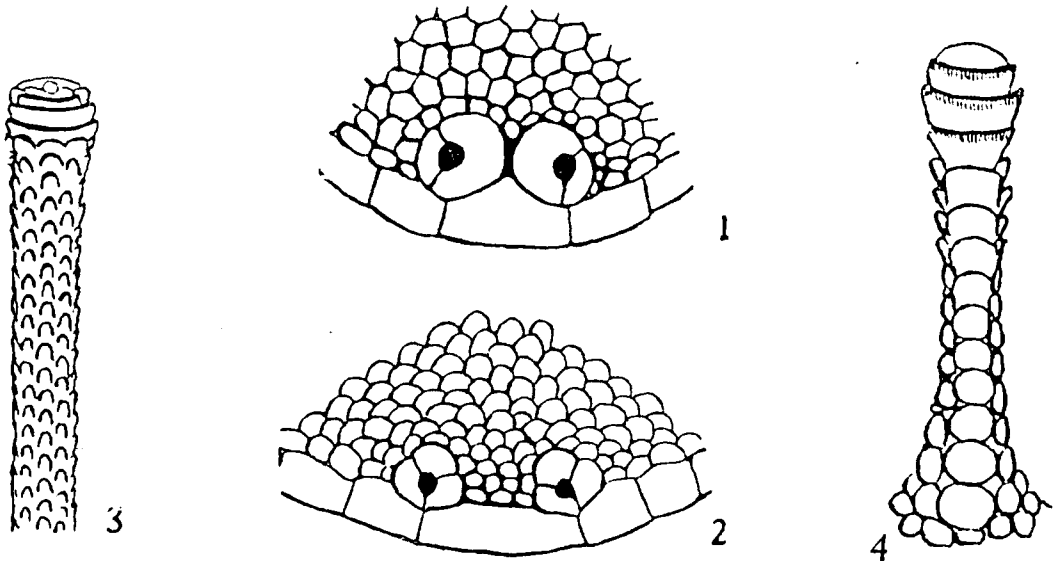
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AMONG certain lacertilian specimens recently sent to me for identification there are two apparently new species of Geckos, one (*Pachydactylus austeni*) from Port Nolloth, Cape Province, and one (*P. latirostris*) from Victoria West, Cape Province.

*Pachydactylus austeni* *sp. nov.* Pl. IV, figs. 1, 2.

Dorsal scaling homogeneous, without tubercles; scales over the snout flattened, some of them considerably larger than those over the occiput; dorsal body-scales more or less flattened, but not imbricate nor definitely subimbricate, a little larger than the ventral scales. Nostril well separated from the rostral and from the first nasal, lying between two shields, a large nasorostral and a small post-nasal (text-fig., 1). Rostral 5-sided, broad, but hardly more than  $1\frac{1}{2}$  times as broad as deep, the median angle being about  $120^\circ$ . Nasorostrals form a median suture. Nine upper labials, 7 lower labials. Symphysial narrowing posteriorly, being much narrower behind than are the adjacent labials (in *P. mariquensis* *Smith* the symphysial and first lower labial are approximately of same breadth posteriorly). Head flattened, eye large, snout acute but hardly more than  $1\frac{1}{3}$  times as long as the eye. Each digit with 3 lamellæ under the expanded apical portion (text-fig., 3); but otherwise no differentiation of the small scales covering the lower surfaces of the digits (in this

respect resembling *mariquensis*). On each side of the base of the tail is a series of 5 or 6 subconical scales which are small and inconspicuous. Upper surfaces grey brown, with more or less distinct darker markings on the body and tail; in the largest specimen there are 6 moderate-sized dark spots arranged in two rows on the back (Pl. IV, fig. 2); in another specimen there are no clearly-defined spots, but indications of longitudinal markings occur; in the third specimen there are indistinct dark spots



1. Arrangement of scales on end of snout of *Pachydaetlylus austeni* *sp. n.* 2. *Pachydaetlylus latirostris* *sp. n.* 3. Ventral surface of 4th toe of *P. austeni*. 4. *Pachydaetlylus cf. brunthaleri* *Werner* from Serowe.

and also some white spots and freckles on the back and tail, which white spots are more or less regularly arranged along three longitudinal rows, but individually are not well defined (fig. 1).

Scales along the anterior border of the eye-socket white.

Length of largest specimen from snout to vent, 45 mm.

TYPES.—Two specimens in the Natal Museum and one specimen in the Albany Museum.

HAB.—Port Nolloth, Cape Province, collected by Mr. W. Austen, June, 1922.

The species is related to *P. mariquensis* *Smith*, but is of more slender habit, with larger eye and different nasal scales;

the colour markings are also very unlike those of *mariguensis*. It is perhaps near to *P. brunnthaleri* *Werner*, the type of which came from Bulawayo, and which was since recorded by Dr. Werner from Windhuk, Grootfontein, Okahandja and Karibib. From the typical form of *brunnthaleri*, it differs in that the scales on the back and tail are not definitely imbricated as in that species, and the subdigital scales are essentially different; in *brunnthaleri* these latter are enlarged along the median line throughout the whole length of the digit, whereas in *austeni* such lamellæ occur only under the expanded apex (text-fig., 3 and 4). This subdigital scaling likewise separates it from *ocellatus*, which moreover has the scales of the dorsal surface of the body distinctly smaller than those on the ventral surface. Another ally is *maculatus*, from which it differs in having practically homogeneous dorsal scaling, and united nasorostrals.

*Pachydactylus latirostris* *sp. nov.* Pl. IV, fig. 3.

Nostril encircled by three small scales, the innermost widely separated from its neighbour on the other side of the median line by several very small scales (text-fig., 2). Rostral scale transversely elongated, more than twice as broad as deep, the upper edge truncated in the middle and not forming a median angle. Eight upper labials and 9 lower labials. The scales on the snout are not so definitely granular as in *mariguensis*, but are more or less imbricate and flattened; and on the dorsal surface of the body the scales are also more distinctly imbricate than in that species. On each side of the base of the tail there are three enlarged scales in the male. Dorsal surfaces greyish with dark markings, which, however, do not form complete cross stripes: in two of the specimens there are 5 dark patches along the middle of the back; these are more or less quadrangular but constricted anteroposteriorly, the front and hind borders being V-shaped; there is also a trace of a semi-circular stripe passing backwards from the eyes around the occiput (Pl. IV, fig. 3). In the third specimen these markings are completely broken up into irregular small spots and freckles.

From snout to vent the largest example measures 44 mm.

**TYPES.**—Two specimens in the Albany Museum, Grahamstown, and one specimen in the Natal Museum, Pietermaritzburg.

**HAB.**—Victoria West, Cape Province, collected by Mr. B. Marais.

*Pachydactylus latirostris* is closely related to *P. mariquensis* *Smith*, agreeing therewith in general form but differing in the scaling of the snout and in the colour-pattern; it is also appreciably smaller than *mariquensis*.

In the Kimberley Museum there is a specimen referable to *latirostris*, taken between Zwaart Modder and Reitfontein by Miss Lennox. This is perhaps a little more strongly imbricate in its scaling than are the Victoria West specimens, but the snout characters are identical. The colour-markings take the form of imperfect wavy cross lines, which represent the darker borders of the broad cross bands of *mariquensis*.

The three species, *mariquensis*, *austeni* and *latirostris*, together with their ally *maculatus*, are on the digital character amongst the most primitive members of the genus, as the scales on the ventral surfaces of the digits show no modification whatever except at the expanded end. In the following species there is a series of transversely elongated scales along the whole length of the digits ventrally: *purcelli*, *brunnthaleri*, *punctatus*, *ocellatus*, and probably also *serval* and *amœnus*, most of which are western in distribution.

The species with heterogeneous dorsal scaling are of the *mariquensis* type in *bibroni*, *rugosus*, *oshaughnessyi* and *capensis*, but there is a tendency in *capensis* and its allies towards an enlargement and broadening of some of the inferomedian digital scales; this is most marked in *tigrinus*, which presents conditions more or less intermediate between the two sections. Thus the character is at any rate not of generic importance.

#### RECENT LITERATURE.

METHUEN, P., AND HEWITT, J.—“Key to the Genus *Pachydactylus* in Report on Percy Sladen Memorial Expedition to Gt. Namaqualand,” *Annals Transvaal Museum*, vol. iv, pp. 133-135. 1914.

WERNER, FR.—“Reptilia und Amphibia” in ‘Beiträge zur Kenntnis der Land- und Süßwasserfauna Deutsch-Südwestafrikas,’ 1915.

## EXPLANATION OF PLATE IV,

Illustrating Mr. John Hewitt's paper, “Descriptions of Two New S. African Geckos of the Genus *Pachydactylus*.”

FIGS. 1 and 2.— $\times 1.7$ . *Pachydactylus austeni* *sp. n.* Types in the Natal Museum.

FIG. 3.— $\times 1.7$ . *P. latirostris* *sp. n.* Photograph of one of the types in the Natal Museum.

