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# A NEW SPECIES OF TYPHLOPS FROM NEW BRITAIN.

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(Figures 1-3.)

## *Typhlops keasti*, sp. nov.

Snout long, acute and vertically compressed, forming a chitinous sharp lateral edge. Rostral long, narrow, its length above being greater than its distance from the anterior level of the eyes. Nostrils large, oblique, and below the lateral margin of the snout, which is very pronounced. The nostril is nearer to the rostral than to the preocular, and its distance from the eye is equal to four times its distance from the tip of the snout. Nasal cleft joining the second upper labial, and extending beyond the nostril, but not dividing the nasal shield. There are two upper shields forming a suture with the nasal; these might be termed internasals, and they are separated from each other by the suture between the rostral and the frontonasal. The frontal joins the frontonasal and the parietal, these shields and the supraoculars being subequal in

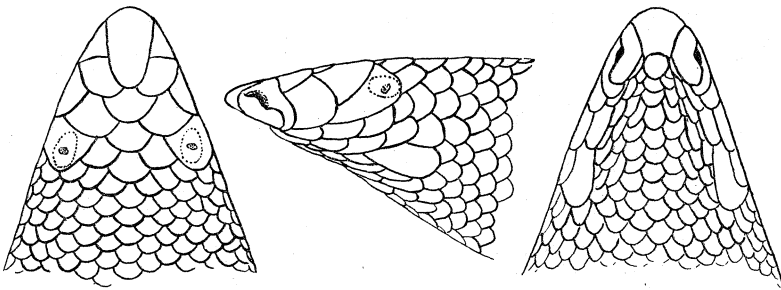


Figure 1.  
*Typhlops keasti* Kinghorn.

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size. There are seven scales bordering the parietals and the supraoculars. The preocular is the largest shield on the snout; it forms a very narrow suture with the ocular, and a wide suture with the prefrontal. The ocular is oblique, and is much broader above than at the junction with the preocular; it is separated from the upper labials by two rows of subequal scales. The scales are in 32 rows round the centre of the body. The total length is 285 mm., and the diameter of the body at the centre is 5 mm. The tail terminates in a very hard, thorn-like spine.

*Colour* (in spirits).—Greyish above, yellowish below, the tail spine being black.

*Locality*.—Jacquinot Bay, New Britain. Described from a single specimen collected in June, 1945, by Sergt. J. A. Keast, A.I.F., now a member of the Museum staff. Holotype No. R.12856, in the Australian Museum.

*Affinities*.—*T. keasti* is allied to *T. solomonis* Parker,<sup>1</sup> and in a lesser degree to *T. infralabialis* Waite,<sup>2</sup> both from the Solomon Islands, and the figures of these are given here for comparative purposes. It will be noted that whilst all three species have very pointed snouts, that of *T. keasti* is very much longer than either of the

<sup>1</sup> *T. solomonis* Parker, *Bull. Mus. d'Hist. Belg.*, Tome xv, 60, 1929, p. 4, fig.

<sup>2</sup> *T. infralabialis* Waite, *Rec. South Austr. Mus.*, i, 1, 1918, pp. 35-36, fig. 25; and Kinghorn, *Herp. Sol. Is.*, *Rec. Austr. Mus.*, xvi, 3, p. 141, fig. 15 (after Waite).

others. *T. infralabialis* has twenty-six rows of scales round the body, and the nasal cleft arises from the first upper labial, whilst in *T. solomonis* and *T. keasti* the cleft arises from the second upper labial, and in each the scales are 32 in number.

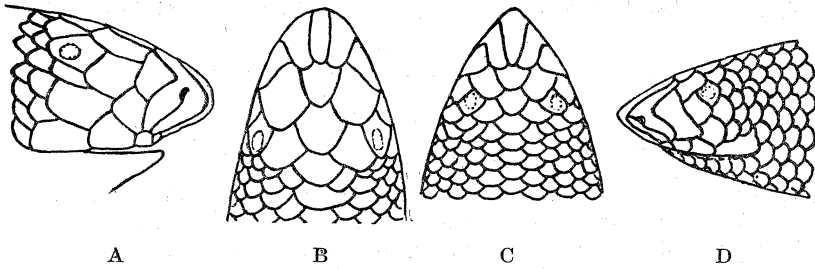


Figure 2.  
A-B. *Typhlops solomonis* Parker. C-D. *Typhlops infralabialis* Waite.

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In describing *solomonis* Parker immediately recognized the extraordinary grouping of the head shields, and he wrote: "It is impossible to homologise the numerous small head shields of the ocular region, and it is only by a figure that their disposition can be appreciated."

I agree with Parker and, in describing *keasti*, used some terms not generally associated with head shields of the genus *Typhlops*. The accompanying figures show that I refer to the upper pair of shields in front of the oculars as prefrontals, instead of supraoculars, the term preocular being restricted to the lower pair, which are by far the largest of the head shields. The complete division of the nasals, as illustrated, leaves two courses open: the posterior section may be described as either postnasals or internasals, and I have considered the latter more appropriate. The shield adjoining the rostral in *keasti* is referred to as frontonasal, then follows the frontal between the eyes, bordered by the small shields referred to as supraoculars. This leaves the parietal area with but a single shield, thereby eliminating the "interparietal" commonly referred to in other species. With only one specimen I am not in a position to examine the underlying cranial characters in association with the head shields, but I feel sure they would support the terminology I have adopted for this species. Actually the

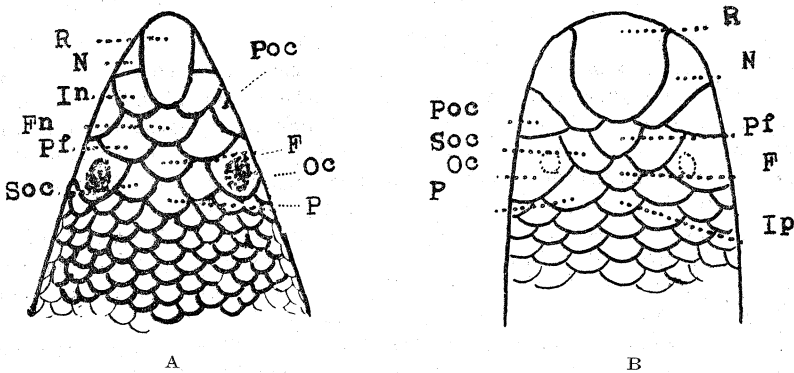


Figure 3.  
Terminology of the head shields as applied to *Typhlops keasti* (A) and a normal species of *Typhlops* (B). R., Rostral; N., Nasal; In., Internasal; F., Frontal; Fn., Frontonasal; Pf., Prefrontal; Poc., Preocular; P., Parietal; Soc., Supraocular; Ip., Interparietal; Oc., Ocular.

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terminology of the head shields of many of the species of *Typhlops* is very perplexing, and their disposition is certainly not constant, suggesting that only by figures can the essential characters of a description be appreciated.

Since going to press a new species, *T. bergi*<sup>3</sup> J. A. Peters, has been described from Sergi Point, New Georgia, Solomon Islands.

This interesting form agrees with *T. infralabialis* Waite, in having only 26 rows of scales, whilst the profile and general disposition of the head shields indicate a close relationship to *T. solomonis* and *T. keasti*.

Peters also finds that the nomenclature of certain head shields is confusing, as he refers to the single preocular being separated from the orbital area by a posterior ocular. Parker refers to two superposed preoculars separated from the orbital area by a scale of uncertain homology, but apparently derived from the ocular.

It would appear that a modification of Peters' statement might be accepted, and I suggest that the preoculars be indicated as 1 + 2 or 1 + 1 as the case may be, otherwise the anterior shields must be regarded as loreals, being situated in the loreal region.

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<sup>3</sup> *T. bergi* Peters, *Occ. Papers, Mus. Zool. Mich.*, No. 508, Feb. 16, 1948, pp. 1-3, figs. 1-2.