HERPETOLOGICAL NOTES XIV-XVI

by

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XIV. THE TYPES OF PSAMMOPHIS ANTILLENSIS SCHLEGEL, 1837

At the request of Dr K. P. Schmidt, Chicago, I recently examined the types of Psammophis antillensis Schl. This species as originally described was a composite, and it is, therefore, necessary to select a lectotype to restrict the name antillensis to one of the species involved. The difficulty is that Schlegel did not label his types as such, and that in most cases he did not mention how many specimens he actually examined. From the introduction to his Essai we know that Schlegel visited Paris, that the collections of the Museum National d'Histoire Naturelle were placed at his disposal, and that he was allowed to take the undescribed species with him to Leiden for further studies (Schlegel, 1837, I, p. XXIV). What happened in the case of Psammophis antillensis is probably this: in Paris Schlegel examined a series of snakes, which he believed to belong to an undescribed species; from this series he selected a few specimens which were taken to Leiden, and on these latter the description was based. The first point which must be settled is what specimens we are to consider as cotypes. In the present case there are two possibilities:

- only those specimens upon which the description was actually based are cotypes;
- 2. all the specimens which were examined by Schlegel at Paris, as well as those at Leiden are cotypes 2).

There is something to be said in favour of both points of view, but I believe

¹⁾ For the illustrations I am greatly indebted to Mr. M. A. Koekkoek.

²⁾ The specimens mentioned sub 1 could be named primary cotypes, the additional specimens included sub 2 then would be secondary cotypes.

that in the present case where a lectotype must be established only the specimens mentioned sub I must be taken into consideration. I do not think that there need be any doubt that the specimens which were presented to the Leiden Museum were before Schlegel when he drew up the description. As said Schlegel did not mention how many specimens he actually examined, but as he mentions the measurements of three specimens we know that there are at least three cotypes. Besides measurements Schlegel mentions that the number of scalerows varied from 17 to 19, the number of ventrals + subcaudals from 178 + 100 to 204 + 144, and he describes the coloration of specimens of different ages. The numbers of ventrals and of subcaudals would be useful to trace the types, if these numbers represented counts actually found in two specimens, but I am not sure that this is the case. A look at the descriptions by Schlegel shows that in those cases, where the variation in the number of ventrals and subcaudals is noted in the same way, the lowest counts of ventrals and subcaudals are always connected, and this applies also to the higher counts, Moreover, in the first part of his Essai, Schlegel (1837, I, p. 155) gave abstracts of the descriptions, and in these he did not mention the actual scalecounts, but the mean beween lowest and highest count. The measurements provide, therefore, the only safe clue to trace the specimens mentioned in the description, and to these three specimens preference should be given when establishing a lectotype.

The Leiden Museum possesses three snakes which are labelled *Psammo-phis antillensis*, and which are from the localities mentioned by Schlegel. In the following these specimens will be discussed with the view to ascertain to which of the species of modern authors they belong.

Reg. no. 767, labelled: Psammophis antillensis, Martinique, Plée, 174 + 100; 17; 0.49 + 0.18.

The number of ventrals given on the label is 4 less than the minimum mentioned by Schlegel; the number of subcaudals is the minimum given in the description. The measurements are those recorded by Schlegel.

Reexamination: 0^n ; sq. 17, 17, 15; v. 173; a. 1/1; sc. 101/101 + 1; supralabials: left 10 (5th—7th entering the orbit), right 9 (4th—6th entering the orbit). This specimen is a *Eudryas boddaertii* (Sentzen), and certainly was not collected in Martinique. From the stomach of this snake I took a small *Ameiva*, which I identified as *A. bifrontata* Cope; this identification is confirmed by Dr K. P. Schmidt, who writes me that the lizard appears to be *Ameiva bifrontata bifrontata*, and that it is evident that the snake must have come from Venezuela.

Reg. no. 768, labelled: Psammophis antillensis, Guadeloupe, 204 + 130; 0.18 + 0.08.

The number of ventrals mentioned on the label is the maximum recorded by Schlegel; the number of subcaudals is 14 less than the maximum given in the description. The measurements are those mentioned by Schlegel.

Reexamination: juv.; sq. 19, 19, 15; v. 202; a. 1/1; sc. 4 in a transverse row (the inner smallest) + 1/1 + 3 + 129/129 + 1; supralabials: 8 (3rd—5th entering the orbit); lower labials: right 5, left 4 in contact with the anterior chinshields; parietal separated from the lower postocular. Though the colour is somewhat faded, the colourpattern is essentially that described by Schlegel for young specimens. This specimen belongs to Alsophis leucomelas leucomelas (Dum., Bibr. & Dum.) of modern authors (figs. 1 c—d).

Reg. no. 769, labelled: Psammophis antillensis, St. Thomas, Richard. No scalecounts nor measurements are given on the label. The specimen consists of the head and the anterior part of the body, which were still connected by a very narrow strip of skin.

Reexamination: sq. on neck 17. The coloration of the anterior part of the body is not that which Stejneger (1904, p. 705, fig. 174) and Schmidt (1928, p. 142, fig. 47) describe as typical for Alsophis antillensis from St. Thomas. More or less distinct crossbands are present, and as Boulenger (1894, p. 122) mentions that crossbands are sometimes found in Dromicus sanctae-crucis (= Alsophis sancticrucis Cope), this led me to suppose that the present specimen should be referred to A. sancticrucis Cope. Dr Schmidt, to whom I sent a rough sketch of the colourpattern of the anterior part of the body, is also of the opinion that this specimen is apparently sancticrucis. The locality-record, therefore, seems to be erroneous.

From the above we see that none of the specimens in the Leiden Museum belongs to the Alsophis antillensis of modern authors. In recent literature the name antillensis is used for the species occurring on St. Thomas. Schmidt (1928, p. 139) mentions that the type-locality was restricted to St. Thomas by Günther. The only publication by Günther which Schmidt cites in the synonymy of Alsophis antillensis is the Catalogue of Colubrine Snakes in the British Museum (Günther, 1858, p. 129). In this catalogue Günther did not actually restrict the type-locality, but he mentioned St. Thomas, as the only specimen in the British Museum came from that island; Günther (1858, p. 130) also mentioned that the species occurred in the same islands as Dromicus angulifer and Philodryas dorsalis, specimens of which (Günther 1858, pp. 129, 126) are recorded from Cuba and St. Domingo respectively. In another publication Günther (1859, p. 210) compares specimens of Dromicus antillensis from St. Croix to a specimen from St. Thomas, noting the differences, but still including them in the same species. I do not think that in either of these papers the type-locality was restricted to St. Thomas.

In fact the restriction of the type-locality, which at the same time involves the restriction of the specific name to one of the components of *Psammophis antillensis* Schl., can be done on the evidence supplied by the types only. The restriction of the name *antillensis* to the St. Thomas snakes cannot be considered valid, as from the reexamination of the specimens in the Leiden Museum it becomes clear that Schlegel did not use St. Thomas specimens for his description.

Of two of the specimens in the Leiden Museum (reg. nos. 767, 768) the measurements are those recorded by Schlegel, and it may be concluded that these were used when the description was made. Of the third specimen in our collection (reg. no. 769) it is very probable that it also was before Schlegel when he drew up the description, but it cannot be proven definitely that this was the third specimen of which Schlegel mentioned the measurements. As it was possible that Schlegel had returned to Paris the specimen of which the measurements are "0.76 + 0.29", I asked Dr F. Angel of the Paris Museum for some information. Dr Angel kindly writes me that of the four specimens, which in the Paris Museum are recorded as *Dromicus* antillensis, one (Mus. Paris no. 3547) is especially designated by Schlegel, and in his opinion this specimen must be considered a cotype; it shows the following characters: sq. 19, v. 176, a. 1/1, sc. 139; supralabiala 8 (3.4.5.); 340 + 190 mm; St. Thomas, Richard. A second specimen (Mus. Paris no. 7460) probably is another cotype ("en serait un autre"). The remaining two appear to be Alsophis sancticrucis. None of these specimens shows the measurements "0.76 + 0.29", and Dr Angel is also of the opinion that the measurements were taken from the specimens in the Leiden Museum. The specimens in the Paris Museum are, therefore, considered by me to be secondary cotypes (cf. note on p. 1). It may therefore be assumed that the third specimen mentioned by Schlegel is lost, unless it is the specimen of which now only the head and part of the body are preserved at Leiden. Thus of only two specimens (Mus. Leiden reg. nos. 767, 768) it has been proven definitely that they served as a base for Schlegel's description, and, therefore, only these need be taken into consideration when establishing a lectotype. Of these two no. 767 may be eliminated, as it does not belong to the genus Alsophis of modern authors, and because its locality-record is wrong. Moreover it may be eliminated on the ground that it belongs to the species (Dromicus pleii Dum., Bibr. & Dum. = Eudryas boddaertii (Sentzen)), which was the first to be separated from the composite Psammophis antillensis. It must be borne in mind that if no. 767 is chosen as the lectotype the name antillensis would pass into the synonymy of Eudryas boddaertii (Sentzen), and the name Alsophis Fitzinger (1843,

p. 26, type: antillensis) would have to replace Eudryas Fitzinger (1843, p. 26), which appears to be preoccupied by Eudryas Boisduval, 1836 (fide Sherborn, Index Animalium, Sectio Sec., pt. 9, 1926, p. 2230).

Thus eliminating specimen no. 767, the specimen from Guadeloupe (Mus. Leiden no. 768) remains as the only one which need be considered, and this specimen I designate as the lectotype of Psammophis antillensis Schl. This involves that the name Alsophis leucomelas leucomelas (Dum., Bibr. & Dum.) must be replaced by Alsophis antillensis antillensis (Schl.). The species occurring in St. Thomas, which in modern literature was known as Alsophis antillensis must receive another name. If Schmidt (1928, pp. 139, 141) is right in referring Alsophis anegadae Barbour to the synonymy of the species occuring in St. Thomas, this name must replace the Alsophis antillensis auct. (non Schlegel). As I did not examine specimens of A. anegadae Barbour (type-locality: Anegada, Outer Virgins), I cannot form an opinion on the possible identity of this species with the St. Thomas-snakes, and, therefore I must leave it to future authors to make out whether the Alsophis species from St. Thomas must receive a new name.

XV. THE TYPE OF DIPSAS DIEPERINKII SCHLEGEL, 1837, AND THE GENUS PSEUSTES FITZINGER, 1843

Dipsas dieperinkii was described by Schlegel (1837, I, p. 163 and II, p. 282) from a single specimen, which had been sent to the Leiden Museum from Surinam by Dieperink. Subsequently Duméril, Bibron & Duméril (1854, p. 1050) referred this species to the synonymy of Spilotes poecilostoma (= Phrynonax sulphureus (Wagl.)). Amaral (1929, p. 302) when revising the genus Phrynonax mentions that dieperinkii is probably a synonym of sulphureus, but that this cannot be proven definitely, because the type of the former is lost. This is, however, not the case, for in the Leiden Museum I found a snake labelled: Coluber poecilostoma, Dipsas Dieperinkii, Dieperink, Surinam (reg. no. 383). This snake (figs 1a—b) agrees so well with the description given by Schlegel that no doubt need exist about its being the type of Dipsas dieperinkii. Its more important characters are: sq. 21, 21, 13; v. 244, a. 1; sc. 146/146 + 1; supralabials 8 (4th and 5th entering the orbit); left 6, right 5 lower labials in contact with the anterior chinshields; I preocular, 2 postoculars and I subocular; temporals 1 + 1 + 2. This specimen belongs to the *Phrynonax sulphureus* sulphureus as described in Amaral's revision (Amaral, 1929, p. 306, fig. 5).

The genus Pseustes was erected by Fitzinger (1843, p. 27) with Dipsas dieperinkii Schl. (= Phrynonax s. sulphureus (Wagl.)) as type. Nearly twenty years later Cope (1862, p. 348 note) described the genus Phrynonax

with Tropidodipsas lunulatus Cope (= Phrynonax p. poecilonotus Gthr.) as type. As these two species are considered congeneric, Phrynonax Cope, 1862, must be replaced by the older Pseustes Fitzinger, 1843. Thamnobius

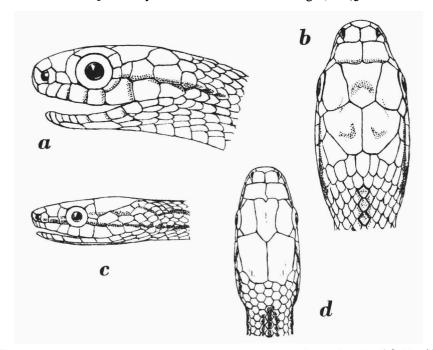


Fig. 1a, Pseustes sulphureus sulphureus (Wagl.), type of Dipsas dieperinkii Schl., side view of head; fig. 1b, id., upper view of head; fig. 1c, Alsophis antillensis antillensis (Schl.), lectotype of Psammophis antillensis Schl., side view of head; fig. 1d, id., upper view of head; figs 1a—b, × 2; figs. 1c—d, × 3.

Fitzinger (1843, p. 26) with Coluber poecilostoma Wied (= Phrynonax sulphureus poecilostoma auct.) as type, has pagepriority over Pseustes, but it is preoccupied by Thamnobius Schoenherr, 1836 (fide Sherborn, Index Animalium, Sectio sec., pt. 26, 1931, p. 6480).

XVI. ON A SMALL COLLECTION OF AMPHIBIA FROM CENTRAL EAST BORNEO

The Amphibia enumerated in the present note were collected in East Borneo by Dr H. C. Siebers in 1925. The specimens had been sent to Prof. Dr P. N. van Kampen, and were received by me after his retirement. Though only a few specimens were taken the collection is interesting for the presence of a number of species, which are rarely met with in museums.

For the greater part the species have not yet been recorded from eastern Borneo.

Megophrys nasuta (Schl.). 1 ex., Long Petah, 24. IX. 1925; 1 juv., near Long Petah, 1172 m, 15—20. X. 1925.

Bufo leptopus Gthr. 2 ex., Long Hoet, VIII. 1925.

Caluella brooksii (Blgr.). I Q, Long Petah (see description at the end of the paper).

Rana macrodon Dum. & Bibr. 2 ex., Long Petah, 1. X. 1925.

Rana whiteheadi Blgr. 1 of, Long Petah, 14. 1X. 1925.

Rana hosii Blgr. 1 ex., Long Petah, 28. IX. 1925.

Rhacophorus fasciatus Blgr. 1 ex., Long Petah, 27. IX. 1925.

Rhacophorus dulitensis Blgr. 1 ex., Long Petah, 20. IX. 1925; 1 ex., Marah, 23. XI. 1925.

Rhacophorus appendiculatus appendiculatus (Gthr.). 1 ex., Marah, 22. XI. 1925.

Caluella brooksii (Blgr.) (Plate I)

Colpoglossus Brooksii Boulenger, Ann. Mag. Nat. Hist., ser. 7, vol. 13, 1904, p. 43, pl. II. Colpoglossus brooksii, Nieden, Das Tierreich, Lfg. 49 (Anura II), 1926, p. 90, fig. 50. Colpoglossus brooksi, Van Kampen, Amph. Indo-Austr. Arch., 1923, p. 97; Parker, Monograph Microhylidae, 1934, p. 31, figs. 5, 6.

1 Q, Long Petah.

This specimen seems to be the second one which reached a museum, the species being known up till now only from the type, a male from Sarawak. As the female shows some differences from the type as described by Boulenger (1904, p. 43, pl. II) and by Parker (1934, p. 31) it may be worth while to give a more extensive description of it.

Snout much depressed, not prominent, r.8 times as long as the diameter of the eye; canthus rostralis very indistinct; loreal region very oblique; the nostril is nearer to the tip of the snout than to the eye; the interorbital space is slightly over three times as wide as the upper eyelid. Fingers short, obtusely pointed, the first shorter than the second, which is slighly shorter than the fourth. Toes with very faintly dilated tips, webbed at the base and with very narrow lateral fringes. The fifth toe is much shorter than the third; the subarticular tubercles are rather indistinct. A large, prominent inner metatarsal tubercle is present; no outer metatarsal tubercle. The tibiotarsal articulation reaches the tympanic region. Skin of back rugose, with numerous small warts and rounded tubercles; those on the head and on the anterior part of the back better developed than those posteriorly. The sides and head granulate. Chin and throat granulate, a row of tubercles on the ventral border of the lower jaw.

Coloration: Brownish above, darkest on the snout, becoming gradually lighter posteriorly. A pair of dark bands on the head; the left one bifurcate anteriorly, the outer branch passing over the upper eyelid, and joining the inner branch on the snout, the two branches thus forming a dark loop with a lighter centre. On the right side the loop is not complete, the posterior part of the inner branch being absent. Each band is dark brown bordered by a black line and laterally of this a whitish line. The bands bend slightly inward on the occiput, bend outward again, and become much broader on the scapular region, where each band bifurcates. The branches continue over the back, the inner ones ending at the thighs; the outer ones are continued over the upper surface of the thigh and the tibia. On the back the bands are of unequal width, sometimes diminishing to a narrow dark line. The tubercles in the bands have a dark border at their base, their tips sometimes being of a much lighter colour than the rest of the band. Between the branches of the dark bands more or less distinct dark vermiculations are present. Laterally of the outer branch the back is much lighter, being yellowish-whitish mottled with light brownish. On the right side a roundish light spot is present between the posterior branches of the band. Another dark band starts behind the eye and is continued over the shoulder on to the back, where it diminishes to a more or less distinct, narrow dark line, which separates the light colour of the back from the brownish flanks. A dark spot or a very short band is present on the knee. The hindfeet are whitish with a dark reticulation above and below. The inner side of the arm is whitish; the fingers are white, a dark reticulation being present only on the 3rd and 4th fingers. Chin and throat with dark marblings, interrupted by larger whitish, black-edged spots. Pectoral region with a pair of large whitish black-edged spots, separated from the whitish colour of the inner surface of the arms by a darker band. Belly with dark marblings and smaller and larger whitish black-edged spots. The posterior part of the belly and the lower surface of the thighs are uniformly whitish, except for dark markings at the knee-joint and around the vent.

Snout to vent: 60.5 mm.

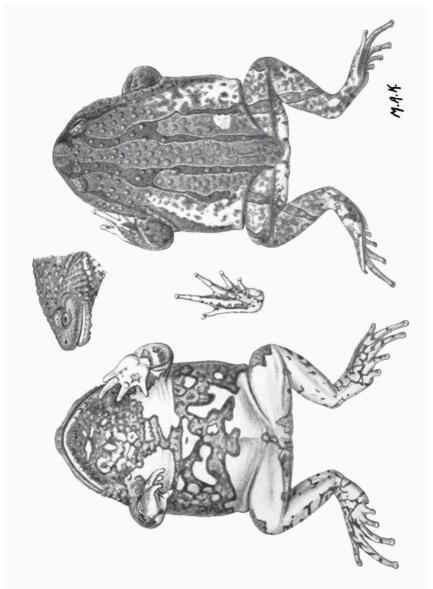
As this specimen differed from the type in the more rugose back, and in the coloration of the belly, Dr H. W. Parker, British Museum (Natural History), London was so kind as to compare these two specimens. Dr Parker too believes that the specimens are conspecific; the differences existing between the two might perhaps be explained by the difference in sex, the type being a male, while the present specimen is a female. At the same time Dr Parker draws my attention to some important features of the shouldergirdle, "which is almost exactly like that of Caluella", and he adds:

"It looks to me rather as if Caluella and Colpoglossus ought to be united". With these points in mind I examined the shouldergirdle of the female more closely, and it proved that the pectoral girdle is much more complete than that of the type. In this female the clavicles and procoracoids are well developed; the former are weak mesially, as is also the case in Caluella. The procoracoids widen mesially into a thin plate which shows several perforations. Parker (1934, p. 30, fig. 6) mentioned that vestiges of clavicles and procoracoids are present in the type; the shouldergirdle of the type probably was damaged by Boulenger when he dissected it. For comparison I examined the pectoral girdle of Caluella volzi (Van Kampen), which Prof. Dr L. F. de Beaufort, Zoölogisch Museum, Amsterdam, kindly placed at my disposal. The shouldergirdles of Caluella volzi (Van Kampen) and of Colpoglossus brooksii Blgr. show such a striking likeness, that I do not hesitate to confirm the supposition made by Dr Parker, and hence I have transferred brooksii to the genus Caluella Stol.

It may be mentioned that the plicate pouch of the tongue described in the type of *Colpoglossus brooksii* is indicated in the female by a very feeble depression only; this seems to confirm the opinion expressed by Parker (1934, p. 6), that this pouch is not a structure of considerable importance.

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Caluella brooksii (Blgr.), & ventral and dorsal views, side view of head, and plantar view of hindfoot, all figures natural size.