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STUDIES IN AUSTRALIAN REPTILES.

No. 2.*

BY

J. R. KINGHORN, Zoologist, Australian Museum.

(Plates xxv.-xxvi., and Figures 1-9).

The following paper deals with specimens contained in the Australian Museum and includes a new variety of *Notechis scutatus*, from Kangaroo Island, South Australia; a re-examination of Krefft's types of *Hoplocephalus ater*, and *Denisonia ornata*; a discussion on the status of *Dendrelaphis schlenckeri*, Ogilby; and the recording of *Pseudechis mortonensis*, De Vis, and *Denisonia maculata* var. *devisi*, Waite and Longman, from north-western New South Wales. Where necessary, re-descriptions and figures have been added.

NOTECHIS ATER, Krefft.

(Plate xxv., figs. 5-7).

Hoplocephalus ater, Krefft, Proc. Zool. Soc., 1866, p. 370, and Snakes of Australia, 1869, p. 55, pl. xi., fig. 2.

Having examined Krefft's type of *Hoplocephalus ater*, I have no hesitation in reinstating the species, but as *Notechis ater*, under which genus Mr. Boulenger placed it.¹ On comparing the type with the original description and figure, I found that it did not quite agree with either in some of the details of the head shields; furthermore, Krefft's own figure and description do not accord with each other. The colour, as described by Krefft, together with many errors in his description, has led several authors to place this species as a melanotic form of *Notechis scutatus*. As I am fortunate enough to have the type on hand, I am able to extend my examination, for comparative purposes, to a large series of *Notechis scutatus* in the Australian Museum collection, and I find that more than one character, quite apart from the colouration, shows that Krefft's specimen is a very distinct species.

COMPARATIVE.

Temporals.—In *Notechis scutatus* the lower anterior temporal is the largest and it is wedged in between the fifth and sixth upper labials; while in *Notechis ater* the upper posterior temporal is the largest and the lower anterior is wedged in between the fourth and fifth upper labials.

* For No. 1, see Rec. Aust. Mus., Vol. xiii., No. 3, 1920, p. 110.

¹ The errors in Krefft's description led Mr. Boulenger to place *H. ater* in the synonymy of *Notechis scutatus*; see Brit. Mus. Cat. Snakes, 1896, iii., p. 351.

Upper Labials.—Throughout the Australian Museum series of *Notechis scutatus* there are never less than six upper labials, while an occasional specimen may have seven, and invariably the third and fourth enter the eye. Contrary to this, *Notechis ater* has only five upper labials, and the second and third enter the eye. The first and second of these shields are comparatively larger than the corresponding ones in *N. scutatus*, the first reaching back to the posterior extremity of the nasal. All these shields are very clearly defined on both sides of the head, and there is not the slightest sign of any fusing or abnormality.

Errors in the original description.—Kreffft states that the anterior frontals are as large again as the posterior ones (he was evidently referring to the internasals and prefrontals), but the latter are twice as large as the former, as his and my figures show, and not the reverse as stated by him in his text. He also stated that there were six upper labials and only one narrow anterior temporal, but he undoubtedly mistook the large, lower anterior temporal for a labial shield, as it actually forms the border of the upper lip for a short distance; this distance, however, is a little greater on the left² than on the right side of the head. If this temporal be counted as a labial, there would be six upper labials as in *N. scutatus*, but this would leave only three temporals, one narrow anterior and two posterior, and so under ordinary circumstances it could be counted as an abnormality. In the present case whether it be regarded as a temporal, or a labial, it has not so much bearing upon the relationship of *N. ater* to *N. scutatus*, as have those outstanding characters already referred to, that is, the second and third upper labials enter the eye, and the upper posterior temporal is the largest.

Re-description from the type.—Eye longer than high; as long as the nasal, and as high as its distance from the mouth. Pupil round. Rostral broader than deep, the portion visible from above about half as long as its distance from the frontal. Internasals once and one half times as broad as deep at their deepest point, and about half the size of the prefrontals which bend down over the sides of the snout forming an oblique suture with the nasal. Frontal a fraction longer than broad, about twice as broad as the supra-oculars across their centre; it is shorter than the suture formed by the parietals, and a little longer than its distance from the posterior border of the rostral. Parietals nearly twice as long as the frontal. Nasal entire, in contact with the single preocular. Nostril oblique, not reaching to the edges of the nasal shield. Two post-oculars; temporals 2+2; of the anterior pair the upper is long and narrow, the lower is the larger and it is wedged in between, and entirely separates the fourth and fifth upper labials, reaching the lip. The upper posterior temporal is the largest. Five upper labials, the second and third entering the eye. Seven lower labials, and the first three are in contact with the anterior chin shield which is as long as the posterior. Scales in 17 rows; ventrals 163; anal single; subcaudals 47, in a single row. Total length 650 mm., of which the tail measures 110 mm.

² Side figured.

Colour.—As given by Krefft:—"General colour black, chin shields whitish on the outer margin. Beneath, bluish black, clouded with a somewhat lighter tint on the posterior part."

As the specimen appears to-day in spirits, the markings remain unchanged, but the tint of the upper parts has changed to a dark olive green.

Described from a single specimen from Flinders Range, South Australia. Holotype in Australian Museum, Reg. no. 6577.

KEY TO THE SPECIES OF *Notechis*.

- (1) 6 upper labials, third and fourth entering the eye.
- a. Posterior chin shields largest. Colour above varying shades of brown to olive, with dark cross bars, belly yellowish.....*scutatus*.
 - b. Chin shields equal in length. Colour black above, belly bluish grey, chin shields and surrounding scales whitish*scutatus var niger*.
- (2) 5 upper labials, second and third entering the eye.....*ater*.

NOTECHIS SCUTATUS, var. *NIGER*, var. nov.

(Plate xxvi., figs. 6-8).

A large *Notechis scutatus* before me from Kangaroo Island, South Australia, is so distinct in its colouration from the typical form, and from the black specimens from Tasmania referred to by Krefft,³ that I hold the opinion that it should be provided with a varietal name. In colour it closely resembles *N. ater*, Krefft, but its scaling and lateral head shields at once distinguish it from that species and place it as a variety of *N. scutatus*. I have examined a large series of the latter species in the Australian Museum collection and one of these, a Tasmanian one, is the nearest approach to the specimen before me, its colour being (in spirits) a very dark olive above, while the ventrals are light grey with dark blotches across their edges; the lateral scales here and there show slight traces of the dark cross bands which are representative of the typical form. In this specimen the scales are in very irregular rows, caused by their great variety of shapes and sizes, and they number 15, 16, or 17 at different points, it being most difficult to follow one row completely round the body. The remainder of the series examined, although ranging from a coppery to an olive colour above, show distinct cross bars. The majority have 19 rows of scales round the body, but four have 15 to 17.

The frontal shield varies slightly in length in comparison to its breadth, and may be shorter or longer than its distance from the end of the snout.

³ Krefft—Snakes of Australia, 1869, p. 53.

I propose calling the variety before me *Notechis scutatus*, var. *niger*, and it may be distinguished from *N. scutatus* not only by its colour but by having the chin shields equal in length, while in the latter species (as shown throughout the series) the posterior are distinctly longer than the anterior.

Description.—Eye longer than high, as long as its distance from the mouth, half as long as its distance from the end of the snout. Pupil round. Rostral broader than deep, the portion visible from above about two thirds as long as the suture between the prefrontals. Internasals once and one half as broad as deep, and about half the size of the prefrontals, which bend down over the side of the snout forming oblique sutures with the nasals. Frontal once and one sixth as long as broad, twice as broad as the supraoculars on a line drawn across their centre; it is as long as the suture formed by the junction of the parietals and not quite so long as its distance from the one of the snout. Parietals once and two-thirds as long as the frontal. Nasal entire, angulate, in contact with the single preocular. Nostril large, reaching to the upper and lower edges of the nasal shield. One preocular; two post-oculars; temporals 2 + 2, the lower anterior largest, wedged in between, and almost entirely separating the fifth and sixth upper labials, and in contact with the lower post-ocular. There are several enlarged scales behind the temporals. Six upper labials, the third and fourth entering the eye. Six lower labials; three are in contact with the anterior chin shield which is as long as the posterior. Scales in 19 rows. Ventrals rounded, 184. Subcaudals 45, in a single row. Anal entire. Male. Total length, taken when freshly captured, 1,430 mm., of which the tail is 162 mm.

Colour.—From life. Head black. Back dark steel blue (in spirit, black), most of the scales of the anterior portion being distinctly tinged with brown along their free edges and at their bases. Ventral shields shiny dark-blue grey (in spirit the anterior ones have the effect of being marbled) and in some lights and angles show a brown tinge. Several of the scales posterior to the chin shields on either side are white, while the next five or six which border the ventrals along either side of the neck are whitish on their outer edge. There is a white line across the lowest visible portion of the rostral.

Locality.—Deep Creek, 20 miles from Kingscote, Kangaroo Island, South Australia.

Described from a single specimen which was collected by Mr. E. le G. Troughton, of the Australian Museum staff, and by whom the colour notes as above were made on the spot.

Habits.—The inhabitants of the island evidently being under the impression that this species was a variety of the black snake (*Pseudechis porphyriacus*), described it as being more sluggish than the mainland type, and having a dull coloured belly. Mr. Troughton found this specimen to be anything but sluggish; he shot it while it was attempting to drag away a rat which was caught in a trap, and which was already dead. It was shaking the rat and trap violently, and when disturbed, began to

moye off tail foremost, dragging them after it. When being carried back to camp it was observed to flatten and distend about four inches of its neck, immediately behind the head. When opened for examination the stomach and bowels were found to be empty.

Holotype in Australian Museum. Reg. no. R. 7124.

DENISONIA MACULATA, Steindachner.

A re-examination of Krefft's type of *DENISONIA ORNATA*.

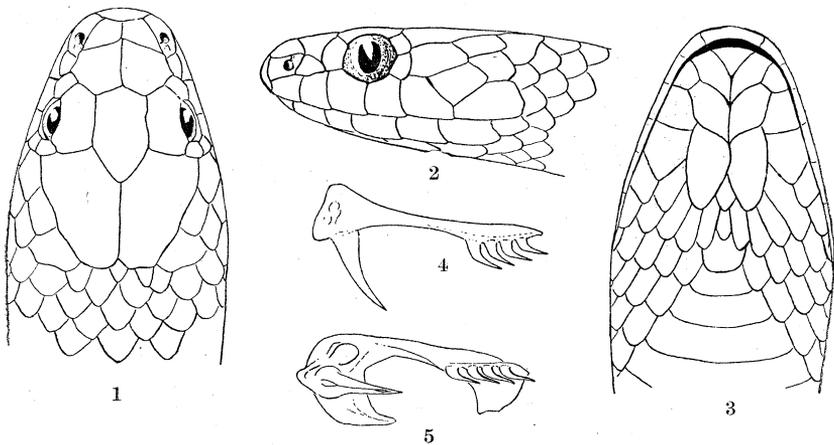
(Figs. 1-5.)

Hoplocephalus maculatus, Steindachner, Reise der Novara Reptiles, p. 81.
Id., Günther, Journ. Mus. Godeff., xii., 1876, p. 46.

Denisonia ornata, Krefft, Proc. Zool. Soc., 1869, p. 321, fig. 7, and Snakes of Australia, 1869, p. 82, pl. xi., fig. 4.

Denisonia maculata, Boulenger, Brit. Mus. Cat. Snakes, iii., 1896, p. 341.
Id., Waite and Longman, Rec. S.Austr. Mus., i., 3, 1920, p. 177, text fig. 35, pl. xxvii., fig. 1.

The loreal shield described by Krefft, and later stated by Günther to be accidental, is an abnormal, divided nasal, the division having taken place well behind the nostril, and its suture connecting with that of the internasals and prefrontals. This character is present on both sides of the head. In all other respects Krefft's type agrees with the description of *D. maculata*, as given by Mr. Boulenger.



Figs. 1-5.

As the original figures of this specimen do not show the head shields very clearly, and as they are not quite correctly delineated, I have re-drawn them as shown here (Figures 1-3).

Boulenger does not mention New South Wales as a locality from which this species has been recorded, but on looking through Steindachner's original description, I find that both his specimens are from this State, and it is noted that they were collected by the author.

Maxillary bone.—Examination of the maxillary bone shows that there is a very strong projection in front of the fang, and that this projection is much more pronounced than the corresponding one in *D. maculata*, var. *devisi*. The fang is followed by four sharp, strongly recurved, grooved teeth, and the distal portion of each is curved almost at a right angle to the basal portion (see figs. 4-5).

The palatine and pterygoid teeth are identical in shape with the maxillary teeth, but they are solid, there being no trace of grooves.

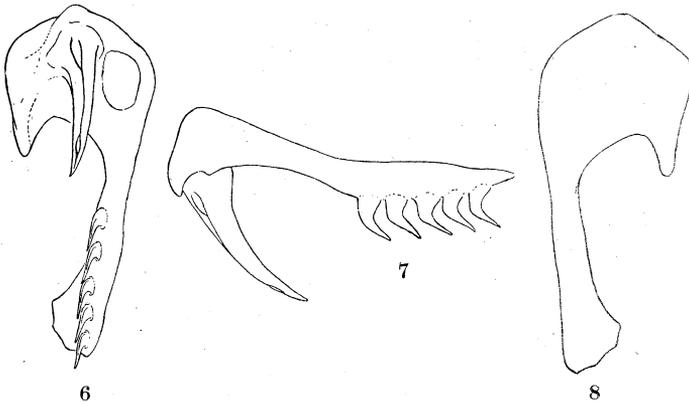
In the Australian Museum collection this species is represented by a single specimen, the type of *Denisonia ornata*, Krefft, which is from Rockhampton, Queensland. (Reg. no. 6697). Many other specimens which were previously placed as *D. maculata*, have proved to be *D. maculata*, var. *devisi*, of Waite and Longman.

DENISONIA MACULATA VAR. DEVISI, Waite and Longman.

(Plate xxvi., figs. 4-5, and Figures 6, 7, 8).

Hoplocephalus ornatus, De Vis, Proc. Roy. Soc. Qld., i., 1884, p. 100, pl. xv. *Id.*, Boulenger, Brit. Mus. Cat. Snakes, iii., 1896, p. 341.

Denisonia maculata var. *devisi*, Waite and Longman, Rec. S.Austr. Mus., i., 3, 1920, p. 178, Pl. xxvii., fig. 2, text fig. 36.



Figs. 6-8.

In the Australian Museum collection there are twenty-six specimens which belong to this variety, and their localities show that they are not confined to western Queensland, as previously supposed. I wish to place on record their extension to, and over a wide tract of country in New South Wales. One specimen is labelled as having been collected at

Casino, on the North Coast, but there is a query after the name of the town; all the others, however, are authentically recorded from localities on the table lands and the plains west of the Great Dividing Range. The majority are from districts round about Moree, and Narrabri, two are from Quirindi, and the remainder from Bourke, Brewarrina, and Warren.

The series shows a fair degree of variation in the structure of the head shields.

The fang is followed by five sharp, strongly recurved, grooved teeth.

VARIATION.

The Prefrontals.—These shields are invariably larger than the internasals. The length of the centre suture of the respective shields varies in different specimens, that of the prefrontals generally being longer than that of the internasals, but in some specimens they are equal.

Frontal.—The shape of this shield is very variable. It may be broad in front, gradually narrowing posteriorly to the sutures of the parietals and supraoculars, or with a constriction at the centre, broadening a little towards the suture of the supraoculars and parietals, from which point it is produced backwards so as to form either an obtuse or an acute angle. In a few specimens the sides of the shield are almost parallel, with an obtuse angle anteriorly and an acute angle posteriorly. Its length in comparison to its breadth varies from once and one third, to once and three quarters as long as broad, but in the majority of specimens it is about once and a half times as long as broad. It may be as long as its distance from the rostral to a little longer than its distance from the end of the snout. It is nearly always once and one half times as broad as the supraoculars, but in one specimen it is only a fraction broader, in a second it is once and three quarters, while in two others it is twice as broad⁴.

Parietals.—The extreme length of this shield is about equal to the distance from the posterior border of the frontal to the posterior border of the rostral. The shape of its outer margin varies slightly according to the disposition of the surrounding scales.

Pupil.—This is elliptical throughout the series, but the comparative measurements of the ellipse vary somewhat, so that in two specimens it might be termed almost circular and in several others the shape of the pupil is different in the two eyes.

Chin Shields.—In the majority of specimens the posterior are longer than the anterior, but in three examples they might be termed equal in size and length.

The Ventral Shields.—The total numbers of these shields are from 124-139, and the subcaudals, 25-34, single. The ventrals and subcaudals added together number from 155-166.

⁴ This latter measurement may be abnormal, as it is certainly extreme, but in all other characters the specimen agrees with the majority.

Colour markings.—The dark cross bands on the body are generally very distinct; in some of the darker specimens they form more or less irregular mottlings, but can nevertheless be easily counted. In others, in which the body colour has become somewhat bleached through the action of preservative, the dark cross bands stand out very clearly. One specimen has as many as sixty-nine of these bands, two others have fifty-nine and sixty respectively, five have less than fifty, while eighteen others have round about fifty-three.

Abnormal specimens.—A few specimens have extra, or abnormal head shields, and may have three postoculars on one side and two on the other, while one specimen has three on each side. There also may be a small extra temporal, situated either anteriorly or posteriorly to the normal ones.

Two specimens from Moree, New South Wales, are very much swollen round the body through the presence of eggs. The head is considerably puffed behind the temporal regions, probably through the action of preservative on the tissue, and the general appearance is therefore not unlike that possessed by *Acanthophis*⁵. In one of these specimens, the frontal, if placed crosswise upon itself, would reach from one of its lateral borders to the outer edge of the opposite supraocular, and it is not as long as its distance from the end of the snout. In the other it is longer than its distance from the end of the snout and if placed crosswise upon itself would reach almost to the outer edges of both supraoculars. In the latter specimen the prefrontals have divided into four separate shields; in the former, the fifth upper labial has completely divided into two, making seven for that side of the head. In all other respects these abnormal specimens agree with the series examined.

The status of *DENDRELAPHIS SCHLENCKERI*, *Ogilby*.

(Plate xxvi., figs. 1-3).

DENDRELAPHIS SCHLENCKERI, *Ogilby*, Proc. Linn. Soc. N.S.Wales, xxiii., 3, 1898, p. 361, fig.

Having occasion to examine the type of the above species, which is in the Australian Museum, I found it to be identical with a well-known species of a different genus, viz. *Dendrophis calligaster*, Günther⁶, and on referring to my catalogue I found a note by the late Dene B. Fry to the following effect —“ Australian Museum 21, xi., 1910.—Mr. T. Steel, who was responsible for the procuring of the types of this species, took home some co-types to Mr. Boulenger who said they were a well-known species, and not even in the right genus.” As I cannot find any reference to this species in literature, other than that quoted above, I am taking

⁵ It might be as well to mention here, that on several occasions when enquirers have brought *D. maculata* var. *devisi*, to me for identification, they have been under the impression that it was the Death Adder, *Acanthophis antarcticus*.

⁶ Günther—Ann. Mag. Nat. Hist., 1867, xx. (3), p. 53, and Boulenger, Brit. Mus. Cat., Snakes, 1894, Vol. ii., p. 80.

this opportunity of defining its status, figuring it from the type, and giving some further details of its characters to supplement Ogilby's description, which was compiled from several specimens.

GENERIC CHARACTERS.

Maxillary teeth.—The type has twenty-one maxillary teeth and not twenty, as stated by Ogilby. The anterior one is very small, the second a little larger, while the third and onwards to the twenty-first might almost be termed subequal in length, but a few of the posterior ones are stouter than the anterior, this being a character of *Dendrophis*.

Vertebral scales.—These scales are slightly enlarged as in *Dendrophis*.

SPECIFIC CHARACTERS.

Body scales.—In the original description, those measurements which relate to the scaling, are the totals of the smallest and largest numbers, and for convenience I have recounted those of the type, which are as follows:—Scales in 13 rows. Ventrals 187. Sub-caudals 116. Anal divided.

Temporals.—These shields are different on the two sides of the head; on the right side there are two upper and three lower, the upper anterior being as long as the first and second lower, while on the left side there are three pairs of shields.

Labials and Chin shields.—On the left side of the jaw there are five lower labials in contact with the anterior chin shield, the fifth just touching it, while there are only four labials in contact with the corresponding chin shield on the right side. The fifth is the largest, and the total number on each side is nine.

There are eight upper labials, and the fourth and fifth enter the eye. The posterior chin shields are much longer and narrower than the anterior, while the right anterior is divided into two in the type.

Affinities.—The characters of Ogilby's species are, in many cases, intermediate between those of *D. calligaster* and *D. punctulatus*⁷, as will be seen by the description, but those of the type are closer to the former species, under which name I have placed it.

Holotype in Australian Museum, Reg. no. R 2380.

Louneberg and Andersson remark on two specimens in their possession, which are in many characters intermediate between *D. punctulatus* and *D. calligaster*, and they doubt whether the two species should remain distinct. I am inclined to agree with them, and hope at a later date to be able to go more fully into the question, and supply data that will either prove or disprove the validity of the latter species, or will enable more experienced workers to carry on the investigations to finality.

⁷ In, Kungl. Sven. Vet. Akad. Handl., 1915, lii., 7, p. 8.

PSEUDECHIS MORTONENSIS, *De Vis*.

(Plate xxv., figs. 1-4).

Pseudechis mortonensis, De Vis, Ann. Qld. Mus. x., 1911, p. 24. *Id.*, Fry, Rec. Austr. Mus., x., 2, 1913, p. 18 (record only.) *Id.*, Longman, Mem. Qld. Mus. i., 1912, p. 24.

Pseudechis porphyriacus var. *mortonensis*, Waite and Longman, Rec. S. Austr. Mus. i., 3, 1920, p. 175.

This species was described from a single specimen from Brisbane, Queensland, in 1911. Since then several other specimens have been collected; one from Bundaberg is in the Queensland Museum, while there are three in the Australian Museum, one of them being from Eidsvold, Burnett River, Queensland, and the other from Willow Tree, New South Wales⁸.

Type of the species.—I forwarded one of my specimens to Mr. Longman, Director of the Queensland Museum with the request that he might compare it with De Vis species, and he wrote to me as follows:—“There is no specimen in the Queensland Museum labelled as the type of *P. mortonensis*, and no specimen which fully agrees with De Vis' description. The specimen which may have been the type is at least 1250 mm. in length (it is now coiled); body scales 19 rows, ventrals 191; subcaudals $31\frac{2}{3}$ 1. It is difficult to reconcile the discrepancies in the caudal scales.”

The specimen which is 1250 mm. long, instead of 1035 as quoted by De Vis, appears to have most of the characters of his species; and, counting the tip of the tail, it has 32 single and 28 pairs of subcaudals, whereas De Vis counted 22 single and 38 pairs; if it be allowed that De Vis' figures have been reversed by a *lapsus calami*, or by a printer's error, the discrepancy disappears.

Affinities.—Waite and Longman, in a key to the species of *Pseudechis*, placed *P. mortonensis* as a variety of *P. porphyriacus*. This is evidently erroneous, since the latter species has only 17 rows of scales round the body, whereas *P. mortonensis* has 19. Mr. Longman also wrote to me as follows:—“We have also two blue-bellied black snakes from Pimpama, South Queensland with 17 rows of scales, and these are certainly colour varieties of *P. porphyriacus*. A blue-bellied specimen from Bundaberg, which has recently been received alive, and which has 19 scales round the body appears to me to be specifically distinct. There is thus a more or less blue-bellied form of the common black snake, *P. porphyriacus*, with 17 scales; and an allied but apparently distinct species, *P. mortonensis*, with 19 scales.”

The main structural differences between the two species are as follows:—*P. porphyriacus*, scales in 17 rows round the body, the frontal shield not broader than the supraocular, and only 5-20 of the subcaudals

⁸ This specimen was collected by Mr. W. W. Froggatt, Govt. Entomologist, and it establishes a new record for the species in this State.

are single. A fairly large series of this species in the Australian Museum collection prove these characters to be constant; furthermore, none of the specimens have more than 13 single subcaudals. In *P. mortonensis* the scales are in 19 rows round the body, the frontal is broader than the supraocular, and 22-40 of the subcaudals are single.

If it be accepted that De Vis' figures for the subcaudals in his species have been reversed, and should remain as 32 single and 28 paired, the difference between the two species would then be made even greater.

Variation from the description of the type.—The Burnett River specimen comprises a complete head, neck, and tail, but the body is represented by a flat skin, of which an inch or so appears to be missing. The posterior chin shields are a fraction longer than the anterior. Ventrals 175 (incomplete), subcaudals 59, of which 40 are single and 19 paired. In the New South Wales specimen the posterior chin shields are slightly longer than the anterior ones. The frontal is a little longer than its distance from the rostral, which is not quite as long as the internasals at their longest, and the upper portion as seen from above is contained nearly three times in its distance from the frontal. Ventrals 193. Subcaudals 51, of which 35 are single and 15 paired, plus an extra single one between the 6th and 7th pairs. In my definition of the species I have used all the information available, including De Vis' original description.

Definition of the species.—Eye longer than high, its vertical diameter contained once and one quarter to once and one half times in its distance from the mouth. Pupil round. Rostral one quarter broader than high, its upper surface about two and a half times shorter than its distance from the frontal. The suture between the internasals half as long as that between the prefrontals. Internasals about half the size of the prefrontals. Frontal a little broader than the supraocular, as long as, or a little longer than its distance from the rostral, once and one half times as long as broad, not as long as the suture formed by the parietals. The greatest length of the parietals is equal to the distance between the eyes. The nostril almost divides the nasal shield, the posterior portion of which is in contact with the single preocular. Oculars 1 + 2, temporals 2 + 2, (in the type 2 + 0 on one side), the lower anterior is the largest, and it is wedged in between the fifth and sixth upper labials. Six upper labials, the third and fourth entering the eye. The first three lower labials are in contact with the anterior chin shield which is equal in length to, or a little shorter than the posterior. Scales in 19 rows round the body. Ventrals 191-193. Subcaudals 59-61; 22-40 may be single, and 15 to 38 in pairs⁹.

Colour.—Shiny-black above, belly dark-grey, with a bluish tinge. The ventrals with a narrow darker tinge on their posterior edges. Subcaudals paler than the ventrals. The specimen from Willow Tree was

⁹ These figures include those in De Vis' original description, and should his count be incorrectly stated, the subcaudals, in my definition of the species should then read:—total number 59-61, of which 32-40 are single and 15-28 in pairs.

brought in alive, and, since being preserved, the colour of the upper surfaces tends to brownish; but the belly remains bluish-grey. The flat skin from the Burnett River has been in spirits for some years, and the brownish tinge is more evident than in the Willow Tree specimen.

Total length of specimen figured 1335 mm., of which the tail is 175 mm.

Localities.—Brisbane suburbs, type specimen, in Queensland Museum. Eidsvold, Burnett River, Queensland, in Australian Museum. Willow Tree, New South Wales, in Australian Museum, figured, Reg. no. R. 7114.

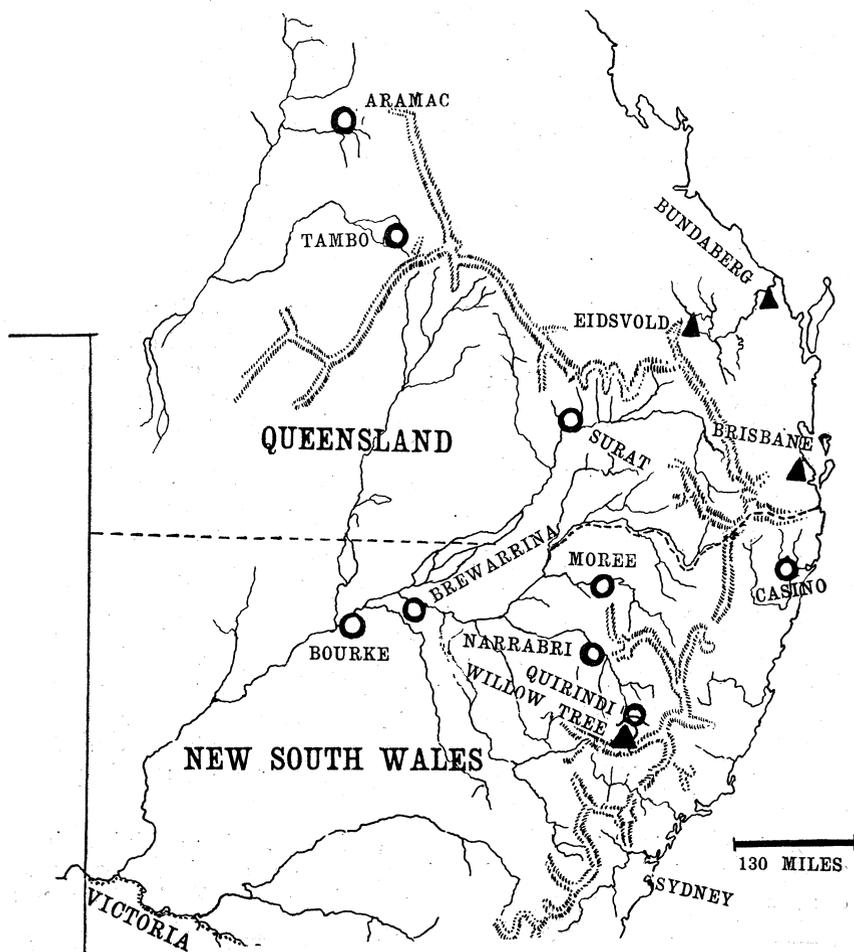
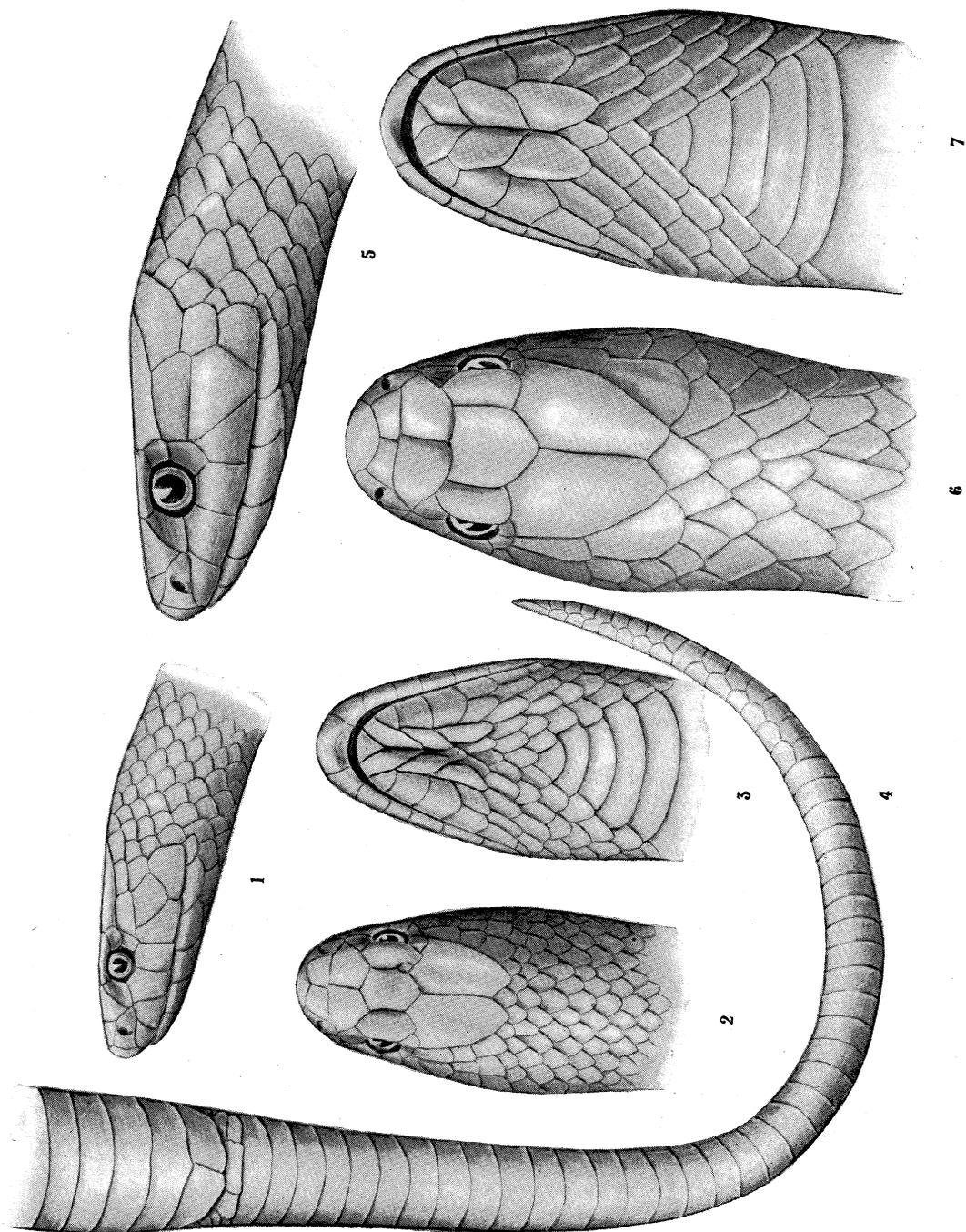


Fig. 9. Map of portion of New South Wales and Queensland, showing the distribution of *Denisonia suta, var. devisi*, ○ and *Pseudochis mortonensis*, ▲

EXPLANATION OF PLATE XXV.

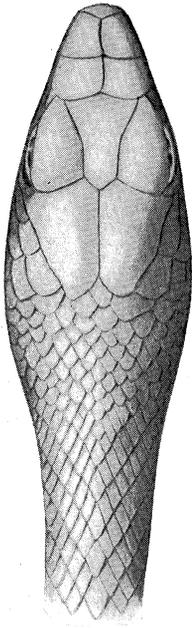
- Figs. 1-4. *Pseudechis mortonensis*, De Vis. Drawn from the specimen from Willow Tree, New South Wales.
- „ 5-7. *Notechis ater*, Krefft. Drawn from the Holotype of *Hoplocephalus ater*, Krefft.



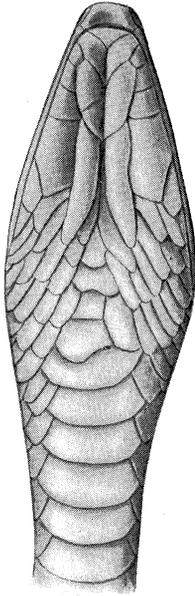
J. R. KINGHORN, del.

EXPLANATION OF PLATE XXVI.

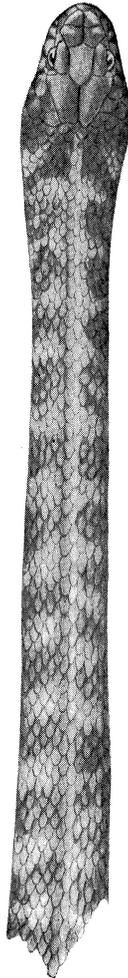
- Figs. 1-3. *Dendrophis calligaster*, Günther. Drawn from the Holotype of *Dendrelaphis schlenckeri*, Ogilby.
- „ 4-5. *Denisonia maculata*, var. *devisi*, Waite and Longman. Drawn from a New South Wales specimen.
- „ 6-8. *Notechis scutatus*, var. *niger*, var. nov. Drawn from the Holotype. Kangaroo Island, South Australia.
- Fig. 6. *a* indicates the tip of the tail.



1



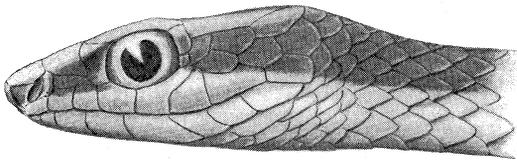
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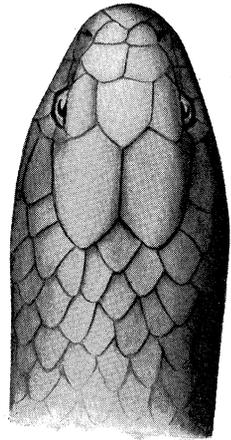
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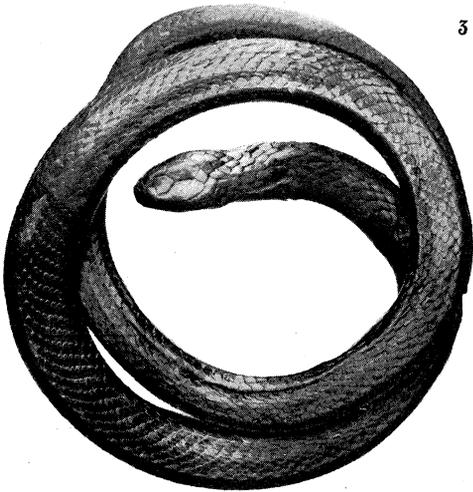
5



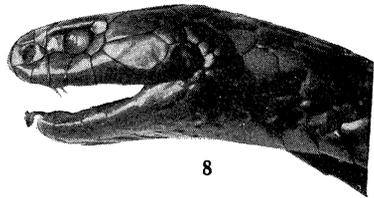
3



7



6



8

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C. CLUTTON, photo.