

Key to the Snakes of South Australia



Pseudechis australis

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KEY TO THE SNAKES OF SOUTH AUSTRALIA

ELAPIDAE, PYTHONIDAE

Snake identification traditionally depends on scale features, especially the arrangement of scales under the tail, the number of body scales on the back and sides of the body and the arrangements of the larger scales on the head and lips. Close examination is therefore sometimes necessary and so it must always be kept in mind that an unidentified snake could be a dangerously venomous snake.

As far as possible we have aimed to use distinguishing features that can be seen in a photograph or observation of a live snake without handling, but in many cases precise identification will require handling by a trained person, or be limited to dead specimens.

1. a. Eyes rudimentary, visible as small dots buried under head scales; tail extremely short, blunt, tipped with a small spine; no enlarged belly scales **Blind snakes (Typhlopidae)**
Refer to separate key for blind snakes
- b. Eyes obvious; tail tapering, not blunt-ended; a single row of enlarged scales runs down the middle of the belly **2**



1a. *Anilius bicolor*



Anilius bicolor

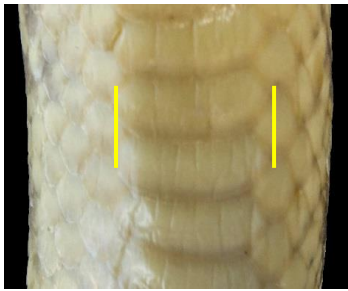
1a. Tiny head and rudimentary eye



Anilius bicolor

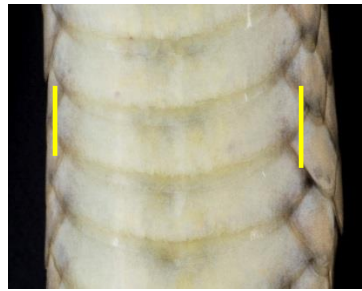
1a. Blunt tail with spiny tip

- 2. a. Belly scales not covering the full width of the belly; more than 30 mid-body scale rows **Pythons (Pythonidae) 3**
- b. Belly scales cover the full width of the belly and wrap slightly onto the lower sides of the body; 23 or fewer mid-body scale rows **Venomous land snakes (Elapidae) 5**



Antaresia stimsoni

2a. Narrow belly scales



Demansia psammophis

2b. Broad belly scales

- 3. a. Lower lip and snout scales smooth, without pockets; pale yellow-brown to dull olive with brown blurry crossbands, sometimes very faint in large adults **Aspidites (ramsayi)**
- b. Lower lip scales, and sometimes the snout scales, with central pockets; strongly patterned with irregular blotches or bands **4**



Aspidites ramsayi

3a. All lip scales smooth



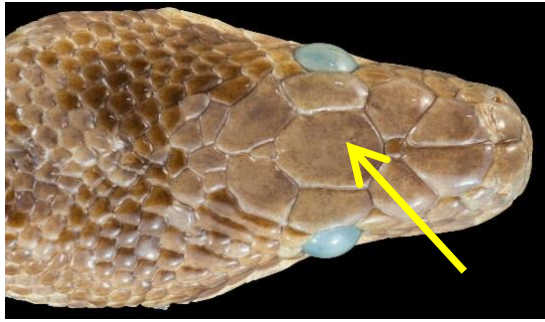
Antaresia stimsoni

3b. Some lip scales have 'pockets'



3a. Weakly banded pattern of *Aspidites ramsayi*

- 4. a. Scales on the top of head (between and behind the eyes) forming large symmetrical plates; rostral and anterior upper lip scales not deeply pitted **Antaresia (stimsoni)**
- b. Scales on top of head (between and behind the eyes) small and irregular; deep pits in the rostral and anterior upper labial scales **Morelia (spilota)**



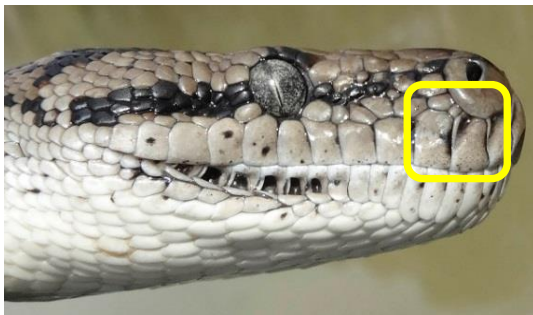
Antaresia stimsoni

4a. Large symmetrical plates



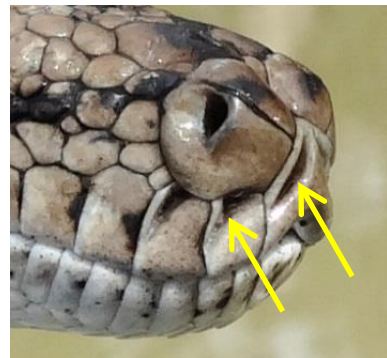
Morelia spilota

4b. Irregular small scales



Morelia spilota

4b. Pockets in scales on the front of the snout



- 5**
- a.** Body relatively short and stout and strongly patterned with cross-bands; tail much narrower than the body and tipped with a single spiny scale; head very broad posteriorly and distinct from neck
 - b.** Various body and head shapes, from moderately stout to very slender; tail tapering gradually to the tip, not ending with an enlarged spiny scale

Acanthophis

6



Tail narrows abruptly

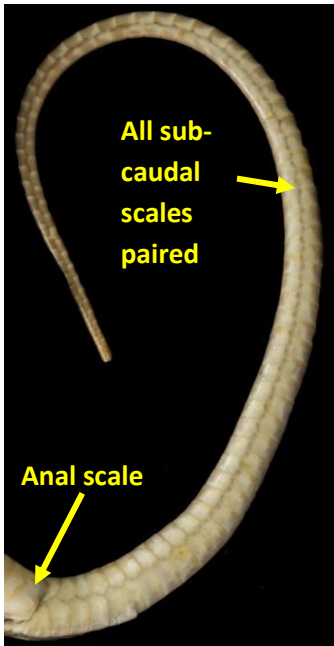
5a. *Acanthophis antarcticus*



5a. Spiny tail tip

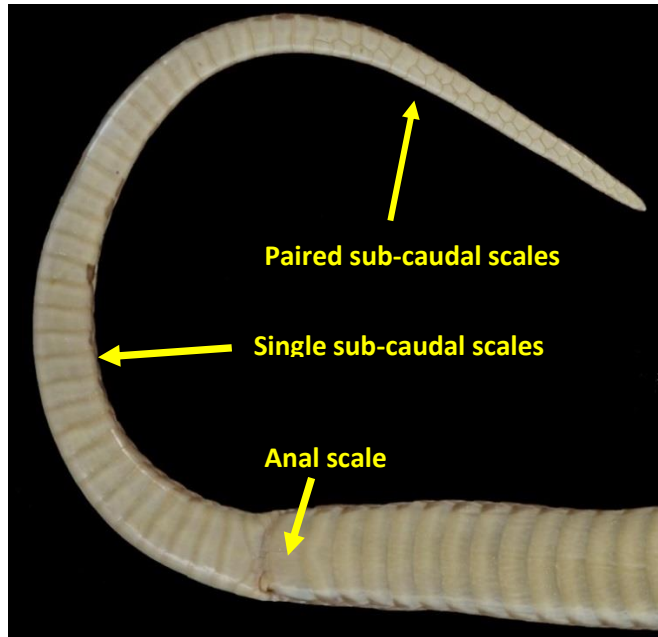
- 6**
- a.** All sub-caudal scales paired **7**

- b. At least some sub-caudal scales single 14



Pseudonaja textilis

6a. All subcaudals paired



Pseudechis australis

6b. Most subcaudals single

- 7. a. Anal scale entire; mid-body scales in 21 or more rows **Oxyuranus**
- b. Anal scale divided; mid-body scales in 21 or fewer rows 8



Oxyuranus microlepidotus

7a. Anal scale entire (single)



Pseudechis australis

7b. Anal scale divided

- 8 a. Body coloured completely in a pattern of black and cream to white rings that encircle the body **Vermicella (annulata)**
- b. Colour pattern not as above 9

**Black-and-white
ringed pattern of
a Bandy Bandy**



8a. *Vermicella annulata*

- 9**
- a.** Body coloured in a pattern of black and bright yellow to orange-yellow rings that encircle the body (including the belly scales) . . . ***Simoselaps***
 - b.** Colour pattern not as above; if dark rings present they do not cross the belly **10**



9a. *Simoselaps bertholdi*

- 10**
- a.** Eyes with the iris distinct from the pupil. **11**
 - b.** Eyes 'beady', appear solidly black, iris not distinguishable from pupil **12**



Pseudonaja guttata

10a. Golden ring on the iris makes pupil distinct

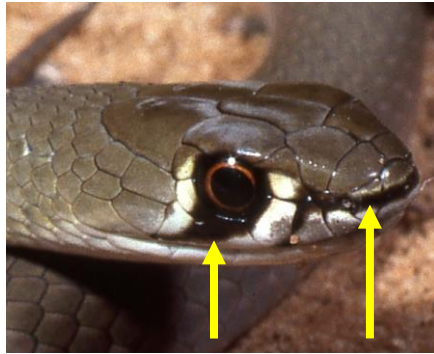


Brachyuropsis semifasciatus

10b. Iris dark, similar to pupil

11 a. Eyes with a black, pale-edged comma-shaped marking surrounding the eye, and a pale-edged dark line that runs over the rostral from nostril to nostril **Demansia**

b. No yellow markings or comma-shaped patch over the eye; small individuals with a black patch on top of the head and/or a black collar **Pseudonaja**



Demansia psammophis

11a. Comma-shaped eye markings and line crossing snout

12 a. Tail short, 30 or fewer pairs of sub-caudals; body patterned in transverse rows of black, reddish-brown and/or cream scales . . . **Brachyuropis**

b. Tail longer, with 35 or more pairs of sub-caudals; body with a uniform pattern of dark-edged scales giving a 'fishnet' appearance and typically a red patch behind the head followed by a black patch or collar (red collar lost in larger specimens of *Furina ornata*) **13**



12a. *Brachyuropis semifasciatus*

13 a. Top of head uniformly black; upper lip scales white **Furina**

b. Top of head with black patch that stops at the level of the eyes; upper lip scales coloured like adjacent scales **Neelaps (bimaculatus)**



Furina ornata (A. Fenner)

13a. Black cap continues to snout



Neelaps bimaculatus

13b. Black cap stops at the eyes

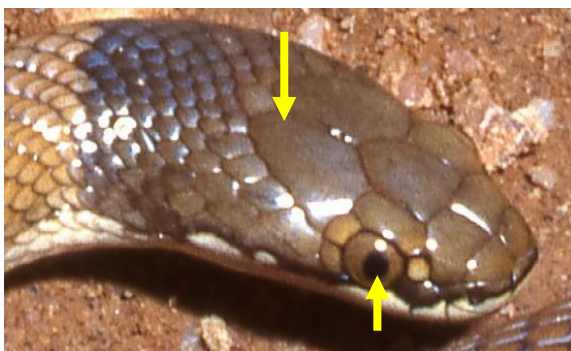
- 14 b. Anal divided (see fig. 7b); some, sometimes most, of the sub-caudals divided ***Pseudechis***
- a. Anal entire (see fig. 7a); all sub-caudals single **15**
- 15 a. A narrow white stripe edged above by black runs from the nostril across the upper lip and below the eye to the neck ***Drysdalia***
- b. No black and white lip stripe; if white markings on upper lip scales, they take the form of pale scale edges or vertical bars (see figs 19a and 19b) **16**



Drysdalia coronoides

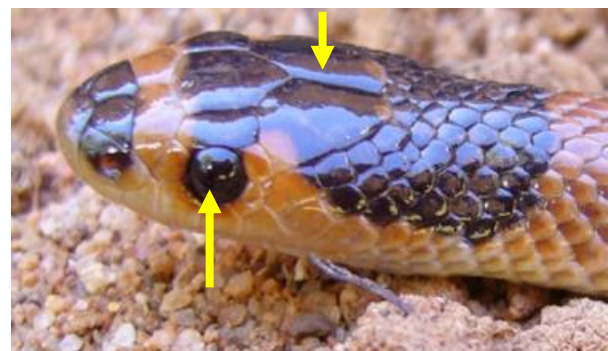
15a. White lip stripe edged above by black

- 16 a. Top of head black or brown, contrasting with lighter brown to orange body colour; with highly polished scales **17**
- b. Head not as above; scale surface glossy or matt **18**
- 17 a. Eye yellow-brown with vertical oval pupil; head usually brown rather than black (blackish in young animals, < 20 cm long); mid-body scales in 19 rows. ***Suta (suta)***
- b. Eye black, pupil not distinguishable from iris; head patch black; mid-body scales in 15 or 17 rows ***Parasuta***



Suta suta

17a. Pupil distinct, head patch brown in adults



Parasuta spectabilis

17b. Pupil not distinct, head patch black

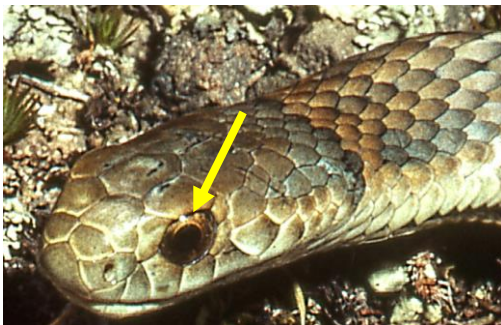
- 18 a. Scales of upper lip same colour and pattern as the rest of the dorsal head colour **Notechis (scutatus)**
 b. Scales of upper lip with white edges (refer to fig. 19a and b, below) or vertical bars or mostly whitish, in contrast to darker brownish dorsal head colouring **19**

Upper lips
without light
patterning



18a. *Notechis scutatus*

- 19 a. Pupil round in bright light; head no wider than neck; dark grey to dark brown or almost black above, uniform, or with dull orange wash on the lateral scales. **Austrelaps 20**
 b. Pupil vertically elliptical in bright light; head broader than neck. .



Austrelaps superbus

19a. Round pupil



Echiopsis curta

19b. Elliptical pupil

- 20 a. Uniformly light matt grey-brown to medium brown above **Echiopsis (curta)**
 b. Patterned with numerous narrow beige and dark brown cross-bands, scales rather glossy. **Denisonia (devisi)***



20a. *Echiopsis curta*

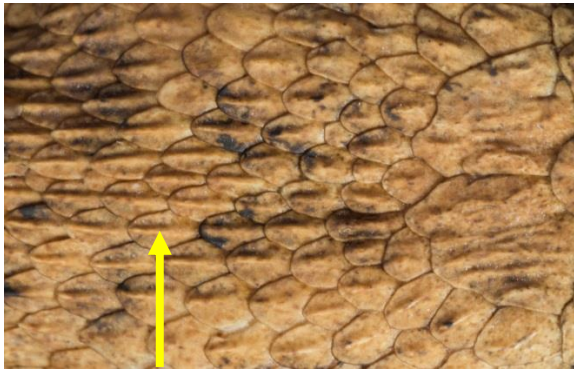


20b. *Denisonia devisi**

* Not yet recorded in South Australia but known to occur along the Murray River in Victoria, west of Mildura

KEY TO THE SOUTH AUSTRALIAN SPECIES OF *ACANTHOPHIS*

- 1. a. Head scales rough and keeled ***A. pyrrhus***
- b. Head scales smooth ***A. antarcticus***



Acanthophis pyrrhus

1a. Scales with central keel



Acanthophis antarcticus

1b. Scales without central keel

KEY TO THE SOUTH AUSTRALIAN SPECIES OF *AUSTRELAPS*

- 1. a. Upper lips with strongly contrasting pattern, each scale dark brown, most with a sloping white bar along the leading edge of each scale; maximum length 75 cm, usually smaller; Mt Lofty Ranges, Fleurieu Peninsula and Kangaroo Island ***A. labialis***
- b. Upper lips with weakly contrasting pattern, each scale whitish to pale brown with narrow white leading edge; maximum length 1.4 m; lower South-East of SA ***A. superbus***



Austrelaps labialis

1a. Strongly contrasting lip pattern



Austrelaps superbus

1b. Weakly contrasting lip pattern

KEY TO THE SOUTH AUSTRALIAN SPECIES OF *BRACHYUROPHIS*

- 1. a. Snout relatively unmodified, head rather flat ***B. fasciolatus***
- b. Front of snout with a curved-up sharp edge ending in a point, head rounded **2**



Brachyuropis fasciolatus

1a. Head flat, no 'shovel'



Brachyuropis australis

1b. Head domed; snout with sharp-edged 'shovel'

- 2. a. Dorsal surface of body with alternating even bands of reddish and blackish grey ***B. semifasciatus***
- b. Body dull to bright red with narrow black bands, each including a regular scattering of white scales ***B. australis***



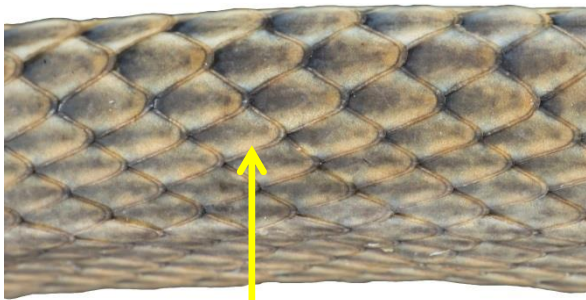
2a. *Brachyuropis semifasciatus*



2b. *Brachyuropis australis*

KEY TO THE SOUTH AUSTRALIAN SPECIES OF *DEMANSIA*

- 1. a. A pattern of pale light narrow lines running along the dorsal scale edges; belly 'sunset coloured', orange or pink and yellow; ***D. rimicola***
- b. No trace of light longitudinal lined pattern on dorsal scales (scales may have dark, not light, edges); belly whitish to pale grey, sometimes with a darker midline zone. **2**



Demansia rimicola

1a. Light streaks run along the edges of the scales



Demansia psammophis

1b. No light lines along the body

- 2. a. Head and tail same colour as body ***D. psammophis***
- b. Head and tail sandy brown to yellow-orange, contrasting with the main dorsal colour of greenish- or bluish-grey ***D. reticulata***



Demansia psammophis

2a. Uniform body colour



Demansia reticulata

2b. Head and tail different to body

KEY TO THE SOUTH AUSTRALIAN SPECIES OF *DRYSDALIA*

- 1. a. Yellow or orange collar *D. mastersi*
- b. No pale collar *D. coronoides*



Drysdalia mastersi

1a. Pale collar



Drysdalia coronoides

1b. No pale collar

KEY TO THE SOUTH AUSTRALIAN SPECIES OF *FURINA*

- 1. a. Red patch separates the black head from the black collar *F. ornata*
- b. Red patch surrounded by black, the black collar connected on either side to the black head colouring *F. diadema*



Furina ornata (A. Fenner)

1a. Red collar interrupts black



Furina diadema (A. Fenner)

1b. Red collar surrounded by black



1a. *Furina ornata* - large individuals become dark and drab (A. Fenner)

KEY TO THE SOUTH AUSTRALIAN SPECIES OF *OXYURANUS*

- 1. a. Snout and head somewhat darker than the rest of the body (whole head may be blackish); Lake Eyre Basin and Channel Country ***O. microlepidotus***
- b. Snout and head paler than the rest of the body; Great Victoria Desert and Northwest Ranges ***O. temporalis****



Oxyuranus microlepidotus

1a. Snout and head darker than body



Oxyuranus temporalis (Karl Brennan)

1b. Snout and head paler than body

**O. temporalis* has not yet been recorded in South Australia but it occurs close to the eastern border of Western Australia and its habitat appears to continue into adjacent South Australia.

KEY TO THE SOUTH AUSTRALIAN SPECIES OF *PARASUTA*

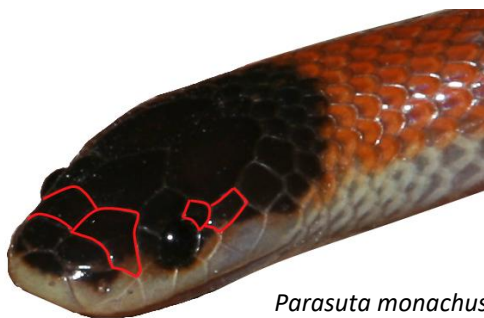
- 1. a. Mid dorsal zone blackish ***P. nigriceps***
- b. Mid-dorsal zone same orange to brownish colour as rest of the dorsal surface **2**



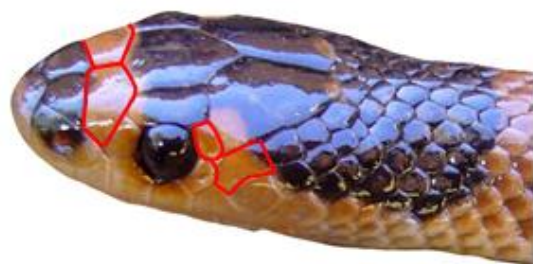
Parasuta nigriceps

1a. Broad, dark vertebral stripe

- 2. a. Head uniformly black from snout to nape, so that the prefrontals, upper post-ocular and upper temporal scales are all black ***P. monachus***
- b. Black head colouring interrupted across the snout and behind the eyes, so that the pre-frontal, upper post-ocular and upper temporal scales are mostly or entirely light brown **3**



Parasuta monachus
(A. Fenner)

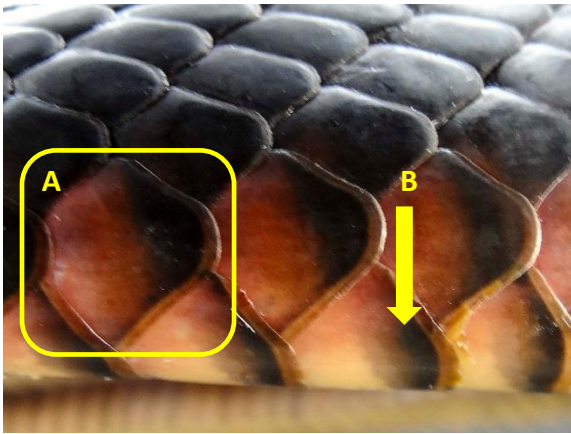


Parasuta spectabilis

- 2a.** Black scales in front of and behind the eye
- 2b.** Brown scales in front of and behind the eye
- 3. a. 17 mid-body scale rows ***P. flagellum***
- b. 15 midbody scale rows. ***P. spectabilis***

KEY TO THE SOUTH AUSTRALIAN SPECIES OF *PSEUDECHIS*

1. a. Dorsally uniformly black, usually with each of the scales in the lateral most scale row half black and half bright red (A); belly pale greyish to pink, with the trailing edge of each ventral scale black (B) ***P. porphyriacus***
- b. Dorsally variable from pale yellow to black, usually dark grey (central and northern SA) or dark reddish brown (adjacent to eastern border); each dorsal scale typically light at the base and dark along the trailing edge producing a 'fish-net stocking' effect; belly uniformly white to cream or dull yellow ***P. australis***



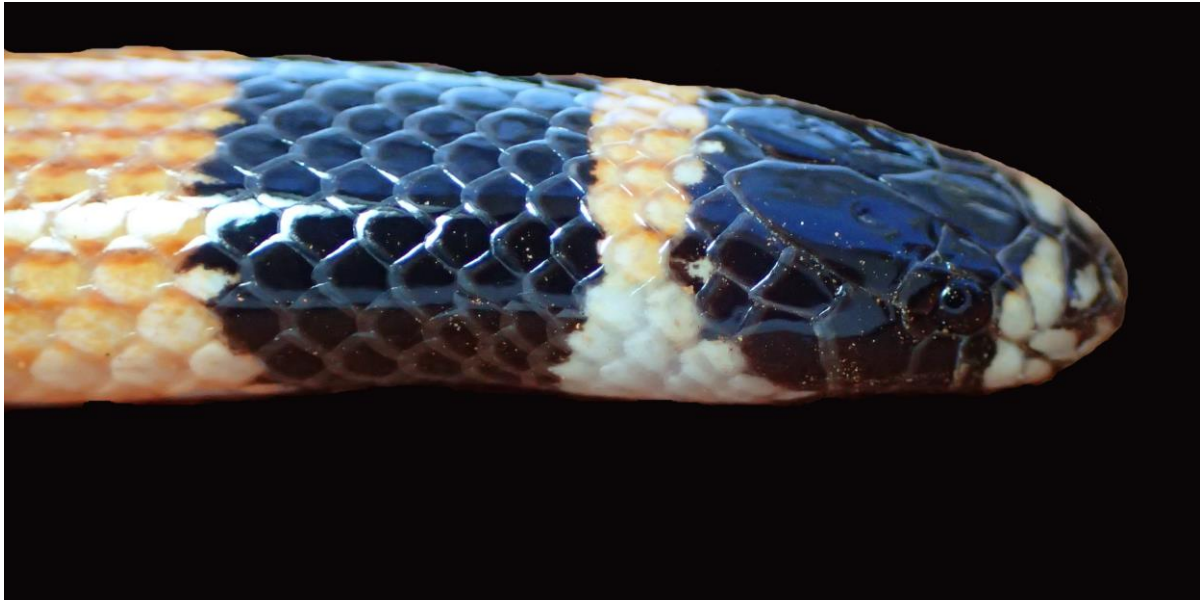
1a. *Pseudechis porphyriacus*



1b. *Pseudechis australis*

KEY TO THE SOUTH AUSTRALIAN SPECIES OF *SIMOSELAPS*

1. a. Head mostly black *S. anomalus*
b. Head whitish mottled with pale brown *S. bertholdi*



1a. *Simoselaps anomalus*



1b. *Simoselaps bertholdi*

KEY TO THE SOUTH AUSTRALIAN SPECIES OF *PSEUDONAJA*

- 1. a. 21 (sometimes 19) mid-body scale rows; far northeast corner of South Australia. ***P. guttata***
- b. 17 (a few far SW corner *P. affinis* have 19) mid-body scale rows **2**
- 2. a. 180 or fewer ventral scales; maximum length 60 cm, frequently smaller; colour pattern (if present) consists of a black head patch and collar, with about five black bands each about as wide as the collar widely spaced along the light brown to pinkish brown body and tail ***P. modesta***
- b. 190 or more ventral scales; maximum length more than one metre; colour pattern not as above **3**



2a. *Pseudonaja modesta*, strongly marked



2a. *Pseudonaja modesta*, weakly marked

- 3. a. Length 50 cm or less, with obvious black head markings (juveniles) **4**
- b. Length greater than 50 cm. (sub-adults to adults) **8**
- 4. a. Black head markings a continuous black cap from above the eyes to the nape, with no collar and tending to blur into the adjacent body colour). **juv. *affinis***
- b. Black markings consist of a black cap over the eyes and a black collar separated by pale brown to pinkish or orange (see figs **5a** and **5b** below) **5**



Pseudonaja affinis, juv.

4a. Black cap continuous

- 5. a. Black cap over the eyes well-defined and sharp-edged; body occasionally with numerous narrow black crossbands 6
- b. Black cap over the eyes often less intense than neck patch, tending to merge with lighter colour around it 7



Pseudonaja textilis, juv.

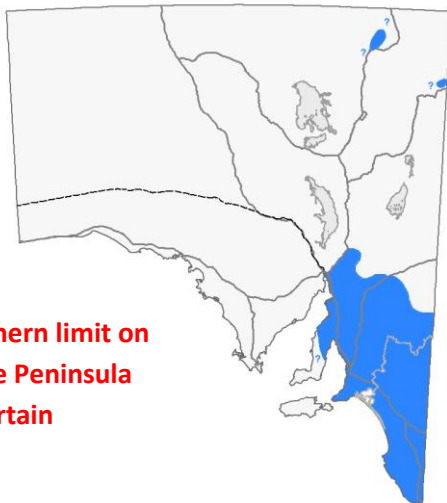
5a. Cap uniformly black, sharp-edged.



Pseudonaja aspidorhyncha, juv

5b. Cap brownish and black, margins blurred

- 6. a. Eastern SA, as far west as northern Yorke Peninsula and the northern Spencer Gulf coast **juv. *textilis***
- b. Southern Yorke Peninsula west to the southern Eyre Peninsula and the Nullarbor Plain **juv. *inframacula***

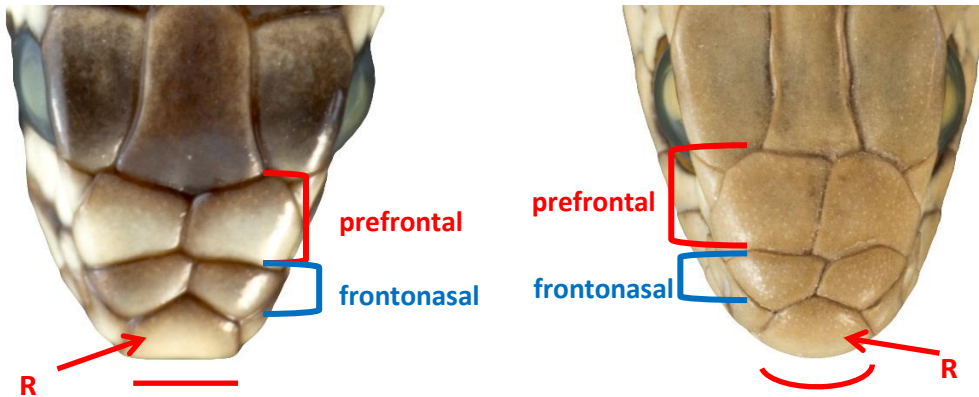


6a. Distribution of *Pseudonaja textilis*



6b. Distribution of *Pseudonaja inframacula*

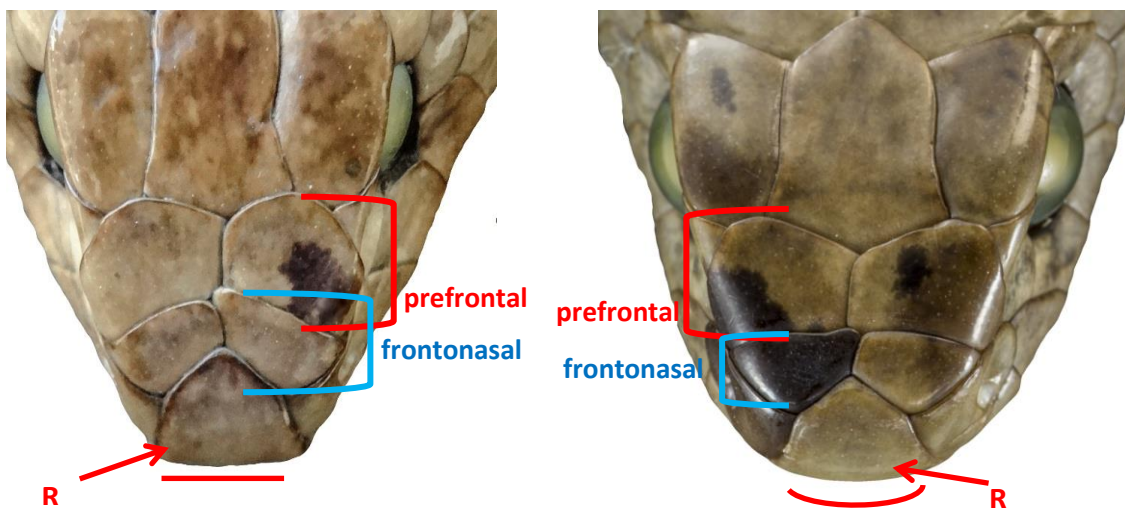
7. a. Margins of rostral scale (R) somewhat raised compared to adjacent scales, and front of snout almost straight-edged when viewed from above; prefrontal scales less than twice as long as frontonasal scales. **juv. *aspidorhyncha***
- b. Margins of rostral scale flush with adjacent scale margins, front of snout rounded when seen from above; prefrontal twice as long as frontonasal scales **juv. *mengdeni***



7a. *Pseudonaja aspidorhyncha*, juv

7b. *Pseudonaja mengdeni*, juv

8. a. Margins of rostral scale (R) somewhat raised compared to adjacent scales, and front of snout almost straight-edged when viewed from above; prefrontal scales less than twice as long as frontonasal scales. ***P. aspidorhyncha***
- b. Margins of rostral scale flush with adjacent scale margins, front of snout rounded when seen from above; prefrontal twice as long as frontonasal scales **9**

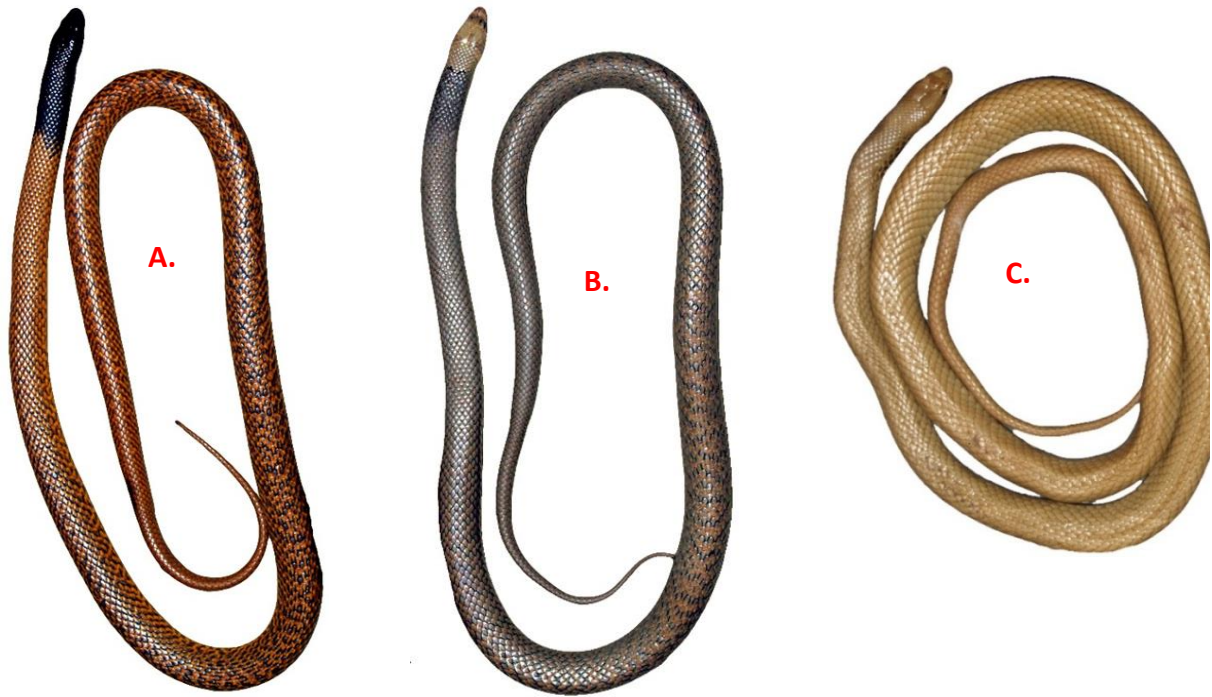


8a. *P. aspidorhyncha*

8b. *P. affinis*

9. a. Lining of mouth pale pink; body usually uniformly coloured with no irregular or contrasting dark body or head markings *P. textilis*
 b. Lining of mouth dark greyish pink to black; head and body may have either irregular spots or contrasting dark markings on the head, neck or body 10

10. a. Lining of mouth black; belly cream with bright orange freckles; dorsal colour conforms to one of three morphs (A) body yellow to bright tan heavily flecked with black; head and neck uniform glossy black above; (B) body pale sand to grey-brown with darker scale edges; head and neck pale creamy brown to bone coloured usually with a darker greyish zone or group of scales on the nape; (C) body and head golden brown; chin and throat may be blackish *P. mengdeni*
 b. Lining of mouth dark greyish pink; belly either a duller version of the dorsal colour or dark grey to black; dorsal colour often irregularly speckled and spotted, not conforming to any of the three morphs of *P. mengdeni* 11



Black-headed morph Pale-headed morph Gold morph

10a. *P. mengdeni*

11. a. Ventral scales of adults plain dark grey, their lateral margins off-white to pale brown; on southern Yorke Peninsula ventrals may be spotted in grey rather than solidly grey *P. inframacula*

- b. Ventral scales of adults a paler version of the dorsal colour with obscure darker speckling; underside of neck black *P. affinis*



11a. *Pseudonaja infracula*



11b. *Pseudonaja affinis*