

Aprasia picturata (Squamata: Pygopodidae), a new legless lizard from the interior of Western Australia

LA Smith¹ & J Henry²

¹Western Australian Museum of Natural Science, Francis Street, Perth WA 6000
email: smithl@museum.wa.gov.au

²Ninox Wildlife Consulting, Lot 14, The Glade, Keysbrook WA 6206

Manuscript received November 1998; accepted April 1999

Abstract

A new species of pygopod, *Aprasia picturata* is described from the arid interior of Western Australia. The two specimens of the new species are from stony terrain near Leonora about 250 km from Bungalbin sandplain where the nearest *Aprasia* (*A. repens*) has been collected.

The head scalation of the new species is most like *Aprasia rostrata*, the colouration most like *Aprasia smithi*.

Introduction

The 35 species and eight genera of legless lizard (Pygopodidae) currently recognised are confined to Australia and New Guinea. Of these, 34 species and all eight genera occur in Australia (Cogger 1992) and in New Guinea there is one genus and two species (Kluge 1974). In Western Australia there are 23 species and six genera of pygopods (Storr *et al.* 1990). The monotypic genera *Aclys* and *Pletholax* and eight of the 10 known worm-like fossorial species of *Aprasia* are only found in Western Australia and then, almost exclusively, along the coast. In Western Australia, members of the genus *Aprasia* are found on Hermite Island in the north and on the mainland from North West Cape south and east to Esperance and the southeast coast east of the vicinity of Toolina Rockhole (Fig 1). Even *A. repens*, which occurs as far inland as Lake Magenta (33° 27' S, 119° 11' E) and the Bungalbin sandplain (30° 17' S, 119° 45' E), where an isolated population occurs, is most common on the Swan Coastal Plain.

The first specimen of the new species described below was collected by J Henry while carrying out an environmental assessment of a mining lease in the eastern gold-fields of Western Australia. Its habitat is unusual for an *Aprasia* in that it is in the arid interior, often dominated by mulga (*Acacia aneura*) on stony, loamy soil (Fig 2). Furthermore, its colouring is unique; on the back it is rich orange-brown rather than being sombre grey or light or pale brown like other members of the genus.

Systematics

Aprasia picturata sp nov

Holotype

R126998 an adult male collected 35 km E of Leonora in latitude 28° 57' 15" S, longitude 121° 47' 23" E by J Henry on 3 October 1996.

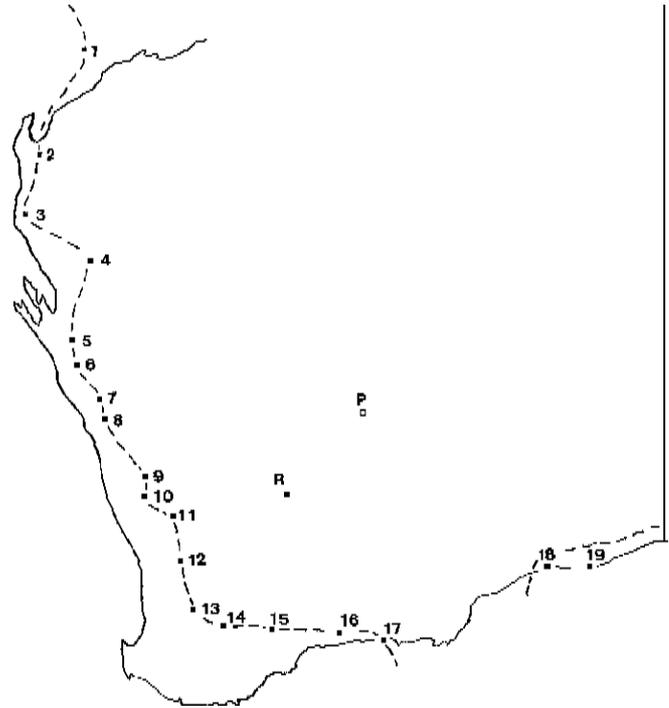


Figure 1. Southern portion of Western Australia showing the distribution of *Aprasia* in Western Australia. Dotted line indicates the inland limits of *Aprasia* species in Western Australia; the numbers the most inland records for various species: 1 (*A. rostrata* Hermite I), 2 (*A. fusca* Bullara), 3 (*A. fusca* 9 km E Point Cuvier), 4 (*A. smithi* Towrana), 5 (*A. smithi* Nerren Nerren), 6 (*A. smithi* 46 km N Galena), 7 (*A. smithi* East Yuna Reserve), 8 (*A. repens* Eradu), 9 (*A. repens* 15 km N Marchagee), 10 (*A. repens* Coomberdale), 11 (*A. repens* Wongan Hills), 12 (*A. repens* York), 13 (*A. repens* Lomos), 14 (*A. repens* Dumbleyung), 15 (*A. repens* Lake Magenta), 16 (*A. repens* Oldfield River), 17 (*A. repens* Esperance), 18 (*A. inaurita* Vicinity of Toolina Rockhole), 19 (*A. inaurita* Middini Beach). "R" indicates the Bungalbin population of *A. repens* and "P" the *A. picturata* localities.



Figure 2. Habitat of *A. picturata* paratype photographed by B Maryan.

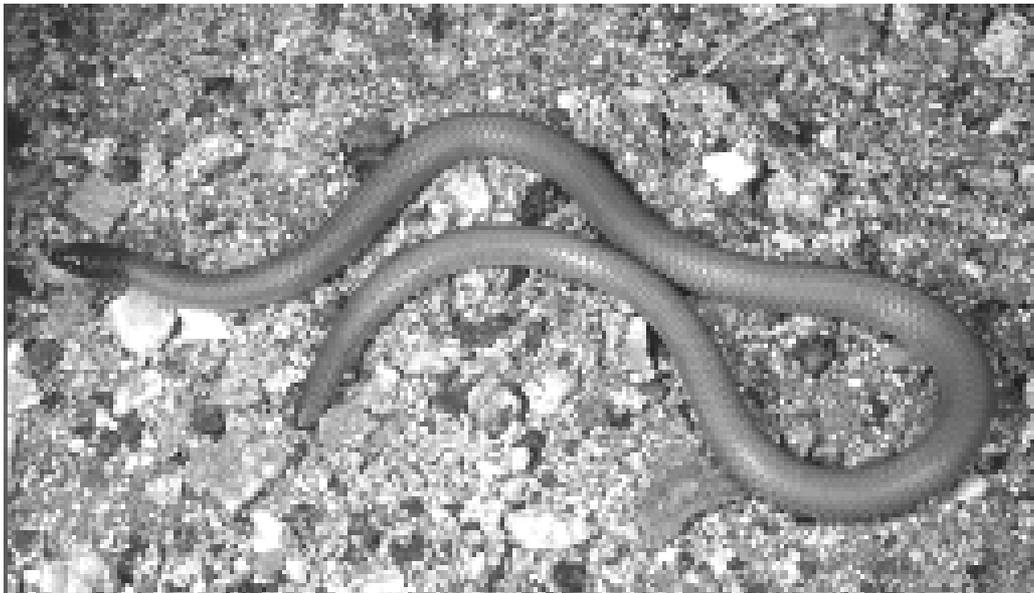


Figure 3. Paratype of *A. picturata* in life photographed by B Maryan.

Paratype

R131647 collected 3.5 km S of Minara HS in latitude 28° 27' 00" S, 121° 48' 00" E by B Maryan, G Harold and M True on 3 September 1997.

Diagnosis

In colouration *Aprasia picturata* is most like *Aprasia smithi* in having a black head but differs from it by lacking white lips and a black tip to the tail and having a rich orange-brown rather than yellowish-brown back (Fig 3). With five upper labials, a postocular (albeit small), 14 midbody scale rows and the first labial fused to the nasal anterior to the nostril *A. picturata* is most like *A. rostrata* (Table 1). Both species also have a beaked rostral but *A. rostrata* is pale brown on the back.

Table 1

Number of midbody scales rows and number and condition of upper labials in Western Australian *Aprasia* species.

Species	Upper labials	Midbody scale rows	Postocular free	First labial partly fused to nasal
<i>fusca</i>	5	14 (sometimes 12)	No	Yes
<i>haroldi</i>	4	14	No	Yes
<i>inaurita</i>	5	14	Yes	Yes
<i>picturata</i>	5	14	Yes	Yes
<i>pulchella</i>	5	14	Yes	No
<i>repens</i>	5	12	No	Yes
<i>rostrata</i>	5	14	Yes/No	Yes
<i>smithi</i>	5	12	No	Yes
<i>striolata</i>	5	12	Yes	Yes

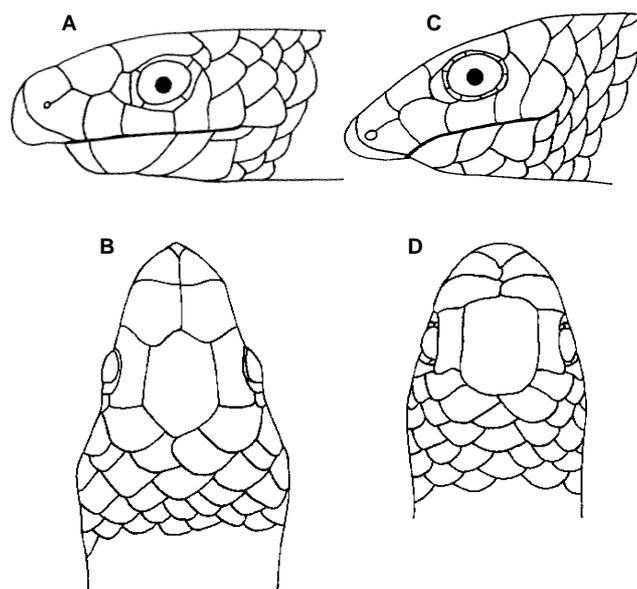


Figure 4. Head of holotype of *Aprasia picturata* (A & B) and head of *Aprasia smithi*, WAM 64350 (C & D). The small, shallow third lower labial is present on both sides of both specimens of *A. picturata*.

Description

Snout-vent length of holotype 122 mm, tail 97 mm (85% of SVL); SVL of paratype 143 mm, tail damaged.

Rostral barely visible from above, beaked in profile (Fig 4). Prefrontal in equal contact with first and second labials. One preocular. One postocular. Five upper labials, first anteriorly fused to nasal, the fourth high but separated from the supraocular by the postocular. Parietals fragmented. Midbody scale rows 14.

Top of head back to four nuchals beyond the parietals black, the black gradually merging with the orange-brown of the back. Mental and infralabials brownish-black. Eleven gular scales behind the mental particoloured (anterior half dark brown, posterior half brownish white). Back rich orange-brown in life (pinkish-brown in alcohol) with four weak, interrupted brown streaks which continue onto the yellowish-brown tail. Tip of tail

freckled black. Lateral scales smudged brown, smudges on each scale tending to align in 2-3 lines. Ventrals smudged brown, subcaudals less so.

Distribution

Two sites in close proximity in the arid interior of southern Western Australia (Fig 1).

Habitat

The holotype was pit-trapped on the crest of a low rocky greenstone ridge with small pockets of sandy loam. The surrounding vegetation comprised a shrubland of *Acacia aneura*, *A. burkittii*, *A. stowardii*, and *A. ramulosa* over mixed low shrubs and grasses. The paratype was collected from under a rock on a low rocky ridge with sparse *Acacia* and *Eremophila* shrubs (Fig 2).

Remarks

The testes of the male holotype are turgid (7.1 and 6.8 mm long). The paratype is a female.

Etymology

The specific epithet *picturata* (Latin for 'painted') alludes to the bright colour of this species compared with other *Aprasia*.

Acknowledgements: We are grateful to PC Withers, University of Western Australia, for his unpublished records from the Bungalbin sandplain where seven specimens of *A. repens* were trapped in 1992 and one in 1995. We also thank B Maryan, G Harold, G Barron and M Peterson for their enthusiasm and persistence which led to the collection of the paratype. B Maryan also provided the photographs for figures two and three. R Johnstone assisted with figure four.

References

- Cogger HG 1992 Reptiles and Amphibians of Australia. Reed Books, Chatswood, NSW.
- Kluge AG 1974 A taxonomic revision of the lizard family Pygopodidae. Miscellaneous Publications of the Museum of Zoology 147. University of Michigan, Ann Arbor, Michigan.
- Storr GM, Smith LA & Johnstone RE 1990 Lizards of Western Australia III. Geckos & Pygopods. Western Australian Museum, Perth.