Revision of Lerista aericeps (Lacertilia: Scincidae) of central Australia

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Abstract

Lerista aericeps, L. xanthura and L. taeniata are redescribed.

Introduction

In 1986 I described Lerista aericeps aericeps and L. aericeps taeniata, the first from the eastern interior of the Northern Territory and south-west Queensland, the second from the western interior of the Northern Territory. Recently Greer (1990) concluded that L. taeniata was a full species and that L. a. aericeps was the same as L. xanthura of the far eastern interior of Western Australia. In order to check these conclusions and to redescribe L. taeniata (which has recently been found in Western Australia) I examined specimens in the South Australian Museum (catalogue numbers prefixed by SAM), Australian Museum (AM), Queensland Museum (QM), Northern Territory Museum (NTM) and Western Australian Museum (WAM).

Even if the apparent sympatry between L. taeniata and L. aericeps in South Australia were not confirmed, I would agree that these taxa differ in too many ways (including two additional characters discovered by Greer) to be conspecific. However I am not yet convinced that L. aericeps is the same as L. xanthura. More specimens are required of the latter; and the critical area that separates them (the far south of the Tanami Desert) needs exploring.

One of Greer's reasons for merging *L. aericeps* in *L. xanthura* was the breakdown of a character I used in separating them, i.e. number of preoculars. As Greer pointed out, the condition is variable in *L. aericeps*. At one extreme the upper preocular is as large as the lower and completely above it; at the other it is much smaller and located more caudal, wholly or partly within the orbital depression, and thus scarcely to be construed as a preocular at all. I have avoided the difficulty of defining preoculars by reverting to my earlier practice of only counting the scales behind the loreals and immediately above the labials, and calling the lower preocular a presubocular.

Systematics

Lerista aericeps Storr

Lerista aericeps aericeps Storr (1986: 145).

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Diagnosis

A small slender *Lerista* with 4 fingers, 4 toes and immovable eyelid (a spectacle), distinguishable from *L. xanthura* by its darker coloration, stronger pattern (including dark loreo-temporal stripe and narrow bands on tail) and shorter appendages, and from *L. taeniata* by absence of dark upper lateral stripe and fewer midbody scale rows (mostly 18, v. mostly 20).

Description

Snout-vent length (mm): 24-52 (N 75, mean 42.3). Length of appendages etc. (% SVL): foreleg 8-14 (N 73, mean 10.2), hindleg 19-30 (N 72, mean 23.6), tail 104-133 (N 20, mean 122.4), snout to foreleg 24-34 (N 72, mean 28.3).

Nasals narrowly to very narrowly separated (N 22), just touching (22) or in very short to medium contact (20). Prefrontals widely separated. Frontoparietals in short to long contact (N 47), just touching (1) or very narrowly separated (4); a little larger or little smaller than interparietal. Nuchals 0-5 on each side (N 63, mean 2.8). Supraoculars 3, first two in contact with frontal. Supraciliaries 5, second and fifth smallest (N 56) or 4 (1). Loreals 2, second much the smaller (except in two of 53 specimens, where fused to first presubocular). Presuboculars 2, second much to very much the smaller. Upper labials 6. Midbody scale rows 18 (N 56) or 20 (3). Lamellae under longest toe 11-17 (N 57, mean 13.9), each with a fine keel.

Head and back pale to moderately dark reddish brown (dorsals edged with golden brown), tinged with olive or grey and marked with dark brown or blackish brown: stipples on head, 4 rows of dots on back (central pair extending to proximal quarter of tail) and two rows of upper lateral spots on body which coalesce on side of head to form a diffuse or ragged stripe. Upper and lateral surfaces of tail pale reddish brown, stippled with greyish brown, markings distally becoming larger and more transverse so that distal half or two-thirds of tail is narrowly cross-banded. Upper surface of limbs pale reddish brown, stippled with greyish brown. Lower lateral and ventral surfaces whitish.

Distribution

Arid eastern interior of Australia: east of Northern Territory north nearly to the Barkly Tableland and west to Mt Doreen and Mt Conner; far western Queensland north to the Tropic; north-eastern South Australia west to Billa Kalina and south nearly to the Murray River; and far western New South Wales south to the Menindee district. See map, Figure 1.

Remarks

The palest specimens come from the vicinity of the Simpson Desert. Much the darkest specimen is the westernmost (Mt Doreen), and it alone has 4 supraciliaries. For colour photograph of a specimen from Kinchega see Wilson and Knowles (1988, pl. 521).

Material

Northern Territory: 71 km W Barry Caves (WAM 55381-2); Tennant Creek (SAM 3376A-B); Kurundi (NTM A/S1140); Barrow Creek (SAM 3378; AM 52048, 95770); Mt Doreen (AM 49547); Dulcie Range (NTM 14496-8); Ewaninga (NTM A/S1573;

G.M. Storr

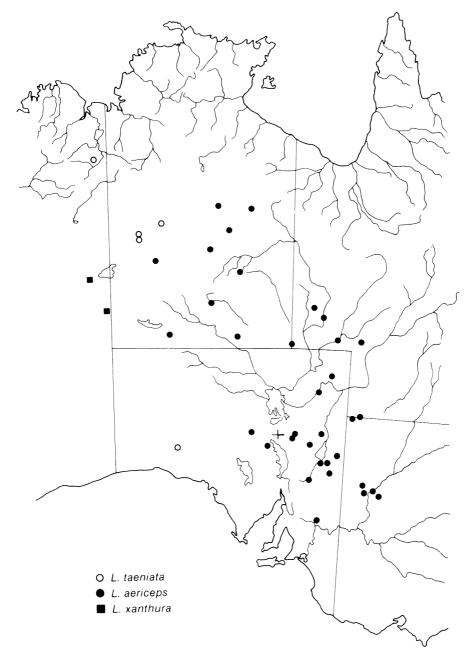


Figure 1 Map of central parts of Australia showing location of specimens of *Lerista taeniata*, *L. aericeps* and *L. xanthura*. A cross indicates where both an *L. taeniata* and an *L. aericeps* were collected.

WAM 95833); near Old Andado (AM 26536, 26553-4); 24 km SSE Curtin Springs (SAM 29943).

Queensland: 10 km N Sandringham (AM 93700); 20 km N Ethabuka (AM 113222); Cluny (QM 34137); Durrie (QM 39572); Cuddapan (QM 26502); 25 km N Poeppel Corner (QM 44235; AM 113223-5).

South Australia (all in SAM): Coongie Lake (32452, 32454); Cooper Creek in $27^{0}54$ 'S, $139^{0}21$ 'E (24549); 7 km S Prescott Point, Lake Eyre (31012-3); Billa Kalina (17282); Wilpoorinna (18049); Farina (15952); Old Moolawatana (11954, 15952); 3 km SW Mulgaria (19074); Roxby Downs (20941, 20962-3); Gammon Ranges National Park (24904); Glenmanyie Bore (14884); Frome Downs (12426A-B) and 15 km E (19075); Strathern (16819A-G, 17333-5); Baratta (3377); Bungunnia (15041).

New South Wales (all in AM): Binerah Downs (105992); Fort Grey (61386); Menindee district, including Kinchega National Park (32606, 68366-9, 68371-81, 73739-40, 87671).

Lerista xanthura Storr

Lerista xanthura Storr (1976: 247).

Diagnosis

A small, slender, almost patternless *Lerista* with 4 fingers, 4 toes and immovable eyelid (a spectacle), distinguishable from *L. aericeps* by its paler coloration, longer appendages (especially foreleg and tail) and absence of loreo-temporal stripe and of narrow bands on tail.

Description

Snout-vent length (mm): 32-36.5 (N 2). Length of appendages etc. (% SVL): foreleg 14-16, hindleg 28-30, tail 142-145, snout to foreleg 31-32.

Nasals in moderately long contact or narrowly separated. Prefrontals widely separated. Frontoparietals in moderately long to long contact, about as large as interparietal. Nuchals 1-3 on each side. Supraoculars 3, first two in contact with frontal. Supraciliaries 5, second and fifth smallest. Loreals 2, second much the smaller. Presuboculars 2, second much the smaller. Upper labials 6. Midbody scale rows 18. Lamellae under longest toe 14-16, each with a fine keel.

Upper surfaces pale pinkish brown (palest on head and tail), each scale edged with brown. In the Lake Hopkins specimen (but not the holotype) body and tail faintly flecked with reddish brown, and an upper lateral series of small faint reddish brown spots that disappear on snout and posterior part of body. Lower surfaces whitish.

Distribution

Arid far eastern interior of Western Australia. See Map, Figure 1.

Remarks

In colour and pattern the Lake Hopkins specimen of *L. xanthura* approaches the palest specimens of *L. aericeps*. It is, however, very different from the geographically nearest specimen of *L. aericeps*, viz. AM 49547 from Mt Doreen, which is dark and has short limbs (foreleg 9% and hindleg 22% of SVL).

Material

Western Australia: 7 km SW Pollock Hills (holotype WAM 40174); near Lake Hopkins (AM 26388).

Lerista taeniata Storr

Lerista aericeps taeniata Storr (1986: 148).

Diagnosis

A small slender *Lerista* with 4 fingers, 4 toes and immovable eyelid (a spectacle), distinguishable from *L. xanthura* and *L. aericeps* by its dark upper lateral stripe and more numerous midbody scale rows (usually 20, v. usually 18).

Description

Snout-vent length (mm): 21-44 (N 21, mean 35.6). Length of appendages etc. (% SVL): foreleg 10-16 (N 13, mean 13.9), hindleg 23-31 (N 13, mean 26.8), tail 116-142 (N 6, mean 121.8), snout to foreleg 27-33 (N 13, mean 30.3).

Nasals in short to moderately long contact (N 16), just touching (1) or very narrowly separated (1). Prefrontals widely separated. Frontoparietals in medium to long contact (N 18), a little larger or little smaller than interparietal. Nuchals 1-4 on each side (N 18, mean 2.4). Supraoculars 3, first two in contact with frontal. Supraciliaries normally 5 (second and fifth smallest); 4 on side of at least two specimens due to fusion of first and second. Loreals 2, second much the smaller. Presuboculars 2, second very much the smaller. Upper labials 6. Midbody scale rows 18 (N 3), 19 (1) or 20 (14). Lamellae under longest toe 14-18 (N 16, mean 15.7), each with a fine keel.

Upper surfaces brownish white, very pale brown or pale, slightly reddish brown, palest on head and along narrow dorsolateral strip on body; all scales edged with brown and mid-dorsals flecked with brown; occasionally a paravertebral series of dark brown dots. Narrow diffuse or wide sharp-edged dark brown or blackish brown upper lateral stripe, becoming broken on base of tail and extending forward to nasal and sometimes narrowing, curving down and meeting opposite number of rostral (as in *Lerista orientalis*). Dorsal and upper lateral surfaces of tail and upper surface of limbs stippled with dark brown or blackish brown. Lateral scales of body and tail edged with brown. Remaining surfaces whitish.

Distribution

Disjunct in arid and semiarid interior: east Kimberley of Western Australia, Tanami Desert of Northern Territory, and north-western South Australia. See map, Figure 1.

Remarks

Only the two South Australian specimens have the foreleg less than 13.5% of SVL. For colour photograph of holotype see Wilson and Knowles (1988, pl. 522).

Material

Western Australia: Bungle Bungle National Park (WAM 103012, 103055).

Revision of Lerista aericeps

Northern Territory: Tanami Desert in 20°15'S, 131°45'E (NTM A/S1043), in 20°34'S, 130°38'E (NTM A/S1565-7, 1569-72, 1574-6; WAM 95834-7) and in 20°53'S, 130°24'E (NTM 14472, A/S1314).

South Australia: 3 km SW New Mulgaria (SAM 19060); 5.5 km S Immarna (SAM 32057).

References

- Greer, A.E. (1990). The taxonomic status of *Lerista aericeps* Storr 1986 with a diagnosis of the *Lerista orientalis* species group. Rec. West. Aust. Mus. 14: 443-448.
- Storr, G. M. (1976). Revisionary notes on the Lerista (Lacertilia, Scincidae) of Western Australia. Rec. West. Aust. Mus. 4: 241-256.
- Storr, G.M. (1986). A new species of Lerista (Lacertilia, Scincidae) with two subspecies from central Australia. Rec. West. Aust. Mus. 13: 145-149.
- Wilson S.K. and Knowles, D.G. (1988). Australia's Reptiles, a Photographic Reference to the Terrestrial Reptiles of Australia. Collins, Australia.