# Revision of Lerista terdigitata (Lacertilia: Scincidae)

### G.M. Storr\*

#### Abstract

Lerista terdigitata was found to consist of four allopatric species, namely L. tridactyla sp. nov. of the south-eastern interior of Western Australia, L. terdigitata (Parker) of southern South Australia west of the Flinders and Mt Lofty Ranges, L. elongata sp. nov. of the north-western interior of South Australia, and L. speciosa of the far north-west of South Australia.

#### Introduction

In my revision of *Lerista* (Storr 1972) it appeared that the Western Australian population of *L. terdigitata* was isolated and morphologically distinct from the South Australian population. Subsequent field work in the south-east of Western Australia has confirmed the extent of the gap (c. 800 km) between the populations, and additional material has permitted the description of a western species. Meanwhile Schwaner and Edwards (1985) had reported a large extension of known range in South Australia, but their arid-zone specimens proved to belong to two new species, which are also described herein.

This revision is based on material in the Western Australian Museum (WAM) and specimens kindly loaned by the South Australian Museum (SAM), Victorian Museum (NMV) and Australian Museum (AM).

### **Systematics**

## Lerista tridactyla sp. nov.

## Figure 1

### Holotype

17422 in Western Australian Museum, collected by G. M. Storr on 13 December 1962 at Wonberna Rock, Western Australia, in 32° 36′S, 123° 45′E.

### Paratypes (all in WAM)

Eastern Division (WA): 9 km NNE Buningonia Spring (65608) and 3 km SW (65588, 65650); 30 km NW Heartbreak Ridge (65517). Eucla Division (WA): 7 km S Balladonia Hotel (17467); 17 km N Charlina Rock (59853); Mardabilla Rock (93810, 93835); Coragina Rock (18197).

## Diagnosis

A small *Lerista* with 3 fingers, 3 toes and movable eyelids, distinguishable from *L. terdigitata* by its wider and sharper-edged upper lateral stripe, and from *L. elongata* by its darker coloration.

### **Description**

Snout-vent length (mm): 43-56 (N 10). Tail (% SVL): 85-100 (N 6).

Nasals in short to moderately long contact (N 7) or narrowly separated (3). Prefrontals widely separated. Frontoparietals in contact (N 9) or very narrowly

<sup>\*</sup> C/o Western Australian Museum, Francis Street, Perth WA 6000.

separated (1). Nuchals 2-4. Supraoculars 4, first two in contact with frontal. Supraciliaries 5 (N 9) or 6 (1). Upper labials 6. Midbody scale rows 18 (N 1), 20 (8) or 22 (1). Lamellae under longest toe 12-15.

Dorsally brownish grey or greyish brown, back and tail with 4 rows of small black spots. Wide, sharp-edged, dark brown upper lateral stripe from nasal to base of tail. Upper surface of limbs brownish white or pale brown, spotted with dark brown. Brown ventral dots in 8-10 rows on body.



Figure 1 A Lerista tridactyla from Balladonia, photographed in life by R.E. Johnstone.

## Distribution

Semiarid eucalypt woodlands of south-eastern interior of Western Australia. See map, Figure 2.

### Derivation of name

Greek for three-fingered and three-toed.

# Lerista terdigitata (Parker, 1926)

Figure 3

# Diagnosis

A medium-sized *Lerista* with 3 fingers, 3 toes and movable eyelids; most like *L. tridactyla* and *L. elongata* but having upper surface olive grey and upper lateral stripe usually narrow, diffuse and ragged-edged.

# Description

Snout-vent length (mm): 29.5-71 (N 53, mean 61.2). Tail (% SVL): 88-110 (N 13, mean 98.5).

Nasals in short to moderately long contact (N 42), point contact (3) or narrowly separated (7). Prefrontals widely separated. Frontoparietals in contact (48) or narrowly separated (5). Supraoculars 4, first two in contact with frontal. Supraciliaries 6 (5 if last construed as upper postocular). Upper labials 6. Nuchals 1-4. Midbody scale rows 20 (N 42), 21 (1) or 22 (10). Lamellae under longest toe 12-16 (N 52, mean 13.8), usually smooth, occasionally weakly keeled.

Dorsally olive grey (ground colour almost obliterated in most heavily marked specimens); back with 6 (occasionally 4) rows of small black spots, pattern continuing, but less regularly, on to tail. Narrow, ragged-edged blackish upper lateral stripe from nasal to base of tail (wider in Streaky Bay district). Upper surface of limbs pale brown to greyish brown, blotched with brown to blackish brown. Small ventral spots in 12 or 14 (occasionally 8 or 10) rows, brown to blackish brown, largest and darkest laterally, sometimes disappearing medially.

### Distribution

Western and central South Australia (mainly semiarid zone): northern Eyre Peninsula, including two large islands (St Peter and Flinders); Yorke Peninsula; and coastal plains east of Spencer Gulf and Gulf St Vincent, from Port Augusta south to Gawler. See map, Figure 2.

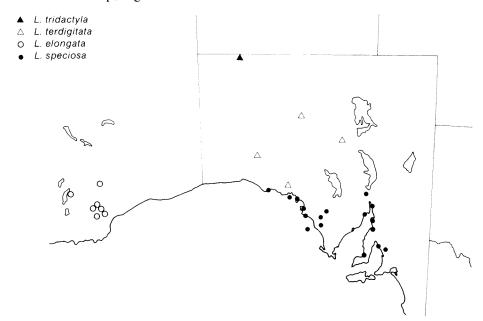


Figure 2 Map of South Australia and south-eastern Western Australia, showing location of specimens of Lerista tridactyla, L. terdigitata (including holotype), L. elongata and L. speciosa.



Figure 3 A Lerista terdigitata from Moonta Forest, photographed in life by M. Peterson.

# Material (in SAM unless otherwise indicated)

South Australia: Fowlers Bay (AM 100217-22, 102402-7; WAM 24568); St Peter I. (32571); Smoky Bay (WAM 24566-7); near Streaky Bay (17788; AM 100121, 100146-60); Wedina Hill (31029); 7 km S Baird Bay (9225); 2 km E Wudinna Hill (WAM 53322); Uncontichie Hill (9226); Minaro Downs (14207); Whyalla (NMV D11769); Uro Bluff (23274); Redcliff, 23 km SSE Port Augusta (14300); lower Broughton River (26439); near Port Broughton (24816); near Dublin and Port Prime (14033, 15038, 17874A and B, 29519-20); between Gawler and Roseworthy (2484); Brentwood (562A and B).

# Lerista elongata sp. nov.

### Holotype

20992 in South Australian Museum, collected by P. Bird on 18 October 1981 at 18 km N Billa Kalina, South Australia, in 29°45′S, 136°15′E.

### Paratypes (all in SAM)

South Australia: Ooldea (10805); 23 km N Koonibba (15017); 25 km NNW Coober Pedy (30410); 25 km NE Billa Kalina (21022) and 18 km N (20991).

### Diagnosis

A pale Lerista with 3 fingers, 3 toes and movable eyelids, distinguishable from L. terdigitata by its wider, sharper-edged upper lateral stripe.

# Description

Snout-vent length (mm): 38-61 (N 6). Tail (% SVL): 93-123 (N 2).

Nasals in short contact (N 5) or narrowly separated (1). Prefrontals widely separated. Frontoparietals in short to medium contact (N 5) or very narrowly separated (1). Supraoculars 4, first two in contact with frontal. Supraciliaries 6. Upper labials 6. Nuchals 1-3. Midbody scale rows 20 (N 5) or 22 (1). Lamellae under longest toe 12-16, usually smooth, occasionally weakly keeled.

Dorsally pale reddish or greyish brown; back with 4 (occasionally 2) rows of blackish brown dots; tail irregularly flecked with blackish brown. Moderately wide, sharp-edged, blackish brown upper lateral stripe from nasal to base of tail. Upper labials (especially upper and posterior edges) marked with blackish brown. Ventral dots in 10 or 12 rows, dark greyish brown to blackish, largest and darkest laterally, smallest and tending to disappear medially.

### Distribution

Arid north-west of South Australia. See map, Figure 2.

### Remarks

For photograph of holotype see Figure 2 (upper) in Schwaner and Edwards (1985).

## Lerista speciosa sp. nov.

### Holotype

25883 in South Australian Museum, collected by W. Zeidler on 10 May 1983 near foot of Mt Morris, South Australia, in 26°12′S, 131°04′E.

### Diagnosis

A dark, strongly patterned *Lerista* with 3 fingers, 3 toes and movable eyelids, differing markedly from *L. tridactyla*, *L. terdigitata* and *L. elongata* in coloration, including dark dorsal stripes (instead of rows of spots) and a white midlateral stripe.

# **Description** (of single available specimen)

Snout-vent length (mm): 51. Tail (% SVL): 121.

Nasals in contact. Prefrontals widely separated. Frontoparietals in contact. Supraoculars 4, first two in contact with frontal. Supraciliaries 6. Loreals 2. Presuboculars 2. Upper labials 6. Nuchals 2-3. Midbody scale rows 20. Lamellae under longest toe 13-14.

Dorsally moderately dark brown; head spotted with black; back with 4 narrow black stripes, breaking up into spots on tail. Wide, sharp-edged, black upper lateral stripe from nasal to base of tail, breaking up into spots on tail. White midlateral stripe from upper lip to base of tail. Narrow black ventrolateral stripe on body and base of tail. Limbs pale brown, blotched with dark greyish brown. Lower surface heavily spotted with dark greyish brown; spots large, transversely elongate and arranged in 8 rows on body.

### Distribution

Only known from one locality in Musgrave Ranges in arid, far north-west of South Australia. See map, Figure 2.

## Remarks

For photograph of holotype see Figure 2 (lower) in Schwaner and Edwards (1985).

# Derivation of name

Latin for handsome.

#### References

Schwaner, T.D. and Edwards, A. (1985). Distribution of *Lerista terdigitata* (Sauria: Scincidae) in South Australia. *Trans. R. Soc. S. Aust.* 109: 55-56.

Storr, G. M. (1972). The genus *Lerista* (Lacertilia, Scincidae) in Western Australia. J. Proc. R. Soc. West. Aust. 54: 59-75.