

FIVE NEW SKINKS FROM QUEENSLAND RAINFORESTS

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Five skink species are erected in the *Lampropholis delicata* complex. *L. robertsi* sp.nov. inhabits montane rainforests on high peaks in northeastern Queensland and is sympatric with *L. coggeri* sp.nov. However, *L. coggeri* is widespread throughout montane and coastal rainforests in the northeast. *L. adonis* sp.nov. is known from two separate regions of rainforest in the mid-east and southeast of the State. In the south, it is sympatric with *L. couperi*. *L. colossus* sp.nov. is only known from the rainforests and Bunya Pine associations of the Bunya Mountains, southeastern Queensland. A key to the *Lampropholis delicata* complex is provided. □ *Scincidae, Lampropholis delicata* complex, rainforests, Queensland.

Glen J. Ingram, Queensland Museum, PO Box 300, South Brisbane, Queensland 4101, Australia; 28 February, 1991.

Ingram and Rawlinson (1981) erected three species in the *L. delicata* complex from eastern Australia. At the time, we were aware of several other new taxa but chose not to describe them because of the difficulty of characterising the species. These taxa differed little morphologically and most of the differences were in colour and pattern. Other workers have noticed the existence of undescribed taxa (Czechura and Miles, 1983; Czechura, 1986; Wilson and Knowles, 1988; Mather, 1990). In particular, Mather (1990) performed an electrophoretic and morphological comparison of the populations of *L. delicata* and concluded there were four distinct taxa in eastern Australia: three undescribed taxa and *L. delicata*. In this paper, while agreeing with Mather's taxa, I recognise two more undescribed species.

I distinguish the new taxa mainly by their different colour-patterns. In doing this, I am hypothesising that the colour-patterns are part of the Specific-Mate Recognition Systems (Lambert and Paterson, 1984) of the skinks. In this, I follow Paterson's (1985) Recognition Concept of Species in preference to the Biological Species Concept. *Lampropholis* species are alert, diurnal lizards that use visual cues in their behaviour and breeding displays (pers. obs.). Thus, it is not unreasonable to assume that they are capable of recognising patterns. Even so, the proposed species are testable hypotheses that can be refuted by showing that colour-pattern is not part of Specific-Mate Recognition Systems in these skinks.

With these new species, there are ten taxa in

the *L. delicata* complex. A key to them is given at the end of the paper. Abbreviations, measurements and morphological characters follow Ingram and Covacevich (1988), except for supraciliaries and supralabials, which are counted on the right side only. All specimens are housed in the Queensland Museum.

SYSTEMATICS

Lampropholis robertsi sp.nov.

(Figs 1-3)

Lampropholis sp. (3). Wilson and Knowles, 1988, p. 291, photo no. 504.

MATERIAL EXAMINED

HOLOTYPE J43911, Thornton Pk, via Daintree, NEQ (16°10'S, 145°23'E), collected by S. Wilson, J. Covacevich and G. Monteith on 24 September, 1984.

PARATYPES: Thornton Pk, via Daintree (J39856, 39857, 43912, 43964, 49648, 49659); Thornton Pk, boulder ranges (J43918); Thornton Pk, Summit (J43958); Pauls Luck, Carbine Tableland (J51948); Mt Lewis, via Mt Molloy (J47097, 48295); Mt Lewis, 25km along road (J51406); Bellenden Ker NP (J46193); Bellenden Ker Ra, Cable Tower 3 (J39855); Mt Bellenden Ker Summit (J39490, 39491); Mt Bellenden Ker, summit, nr TV Tower & Stn (J40033, 40036-9); Mt Fisher, Whiteing Rd, 7km SW Millaa Millaa (J41706-41708); Mt Fisher, 7km SW Millaa Millaa (J40609, 40610); Mt Fisher, via Millaa Millaa (J31194-31200); Mt Bartle Frere, E Face (J40041); Mt Bartle Frere (J47956, 47959); no data (J51405).

DIAGNOSIS

A large (maximum SV 49), robust (maximum

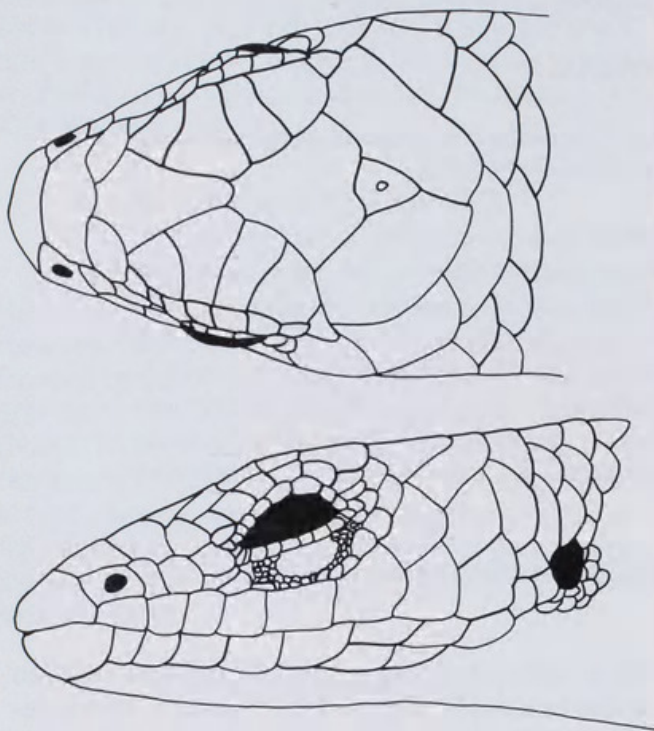


FIG. 1. *Lampropholis robertsi* (holotype J43911). Above: Dorsal view of head. Below: Lateral view of head.

HW 17) *Lampropholis* with fused frontoparietals, a free interparietal, seven supralabials, seven supraciliaries, short hindlimbs (HL<40) and with darker upper lateral surface colouration distinctly demarcated midlaterally from lighter lower lateral colouration. The demarcation can

be due to a sharp transition of dark to light pigments or be delineated by a pale brown to golden midlateral stripe or series of spots. Further distinguished from *L. colossus* and *L. delicata* by ventral colouration: grey with black-edged scales flecked with black; throat, chin, lower part of body and tail usually heavily black spotted; under the tail, the black markings often coalesce to outline a longitudinal series of white chevrons vs bright yellow to cream (*L. colossus*) or white (*L. delicata*) with or without black flecking on throat and tail, which can coalesce into lines.

DISTRIBUTION

Known only from rainforests of montane peaks from Thornton Peak south to Mt Bartle Frere, northeastern Queensland.

DESCRIPTION

SV: 21–49 (N=37). HW: 13–17 (N=30, mean 14.4). HL: 33–43 (N=25, mean 36.7). TL: 108–139 (N=7, mean 123.4).

Four supraoculars. Frontoparietals fused. Interparietal distinct. Supraciliaries 7, rarely 8 (N=26, mean 7.1). Supralabials 7 (N=27). Nuchals contacting parietals 2 (N=27). Midbody scale rows 25–30 (N=20, mean 27.8). Mid-dorsal scales smooth with 3–4 striations or weakly tricarinated. Number of scales from chin to vent 54–63 (N=22, mean 58.5). Lamellae under fourth toe 22–27 (N=24, mean 24.3).

Dorsal ground colour reddish brown to golden



FIG. 2. *Lampropholis robertsi* Mt Bartle Frere, above 1.5km (Bruce Cowell).

brown, sometimes with black longitudinal dashes. Upper lateral surface black to chocolate brown. Lower lateral surface light grey to brown with dark flecks and spots. Dorsolateral area golden to light brown tending to form an irregular stripe. Upper and lower lateral colouration sometimes separated by a golden to pale brown midlateral line, which can be broken into a series of spots. Ventrally, grey with black-edged scales flecked with black; throat, chin, lower part of body and tail usually heavily black spotted; under the tail, the black markings often coalesce to outline a longitudinal series of white chevrons.

REMARKS

L. robertsi is sympatric with *L. coggeri*.

ETYMOLOGY

For the Queensland naturalist Gregory Roberts.

***Lampropholis adonis* sp. nov.**
(Figs 3–5)

Lampropholis sp. (5). Wilson and Knowles, 1988: 292, photo no. 506.

Lampropholis delicata Form B. Mather, 1990:570.

MATERIAL EXAMINED

HOLOTYPE: J35097, 18km N of Dalrymple Heights, MEQ (21°04'S, 148°36'S), collected by G.J. Ingram on 2 December, 1978.

PARATYPES: Conway NP (J49750, 49563); Brandy Ck, Site 13 (J32754, 32793, 32795); Eungella NP, nr Vlasak property (J49591, 49597); Eungella NP (J46191, 49748, 49573, 49751); Thurgood Farm, 18km N Dalrymple Hts (J35104, 35122); Dalrymple Hts, 18km N (J35097); Crediton, Site 7 (J32644, 32652, 32701, 32706); Collaroy Holdings, Remnant Hut (J49746, 49753); Bulburin SF, Site 1a (J33604, 33607, 33609); Bulburin SF, adjoining Site 1a (J33701, 33717, 33718, 33720–33724); Bulburin, SF 67, via Lowmead (J23806–23808, 23805); Bulburin SF, 9km E Forestry Stn (J33736); Bulburin Barracks,

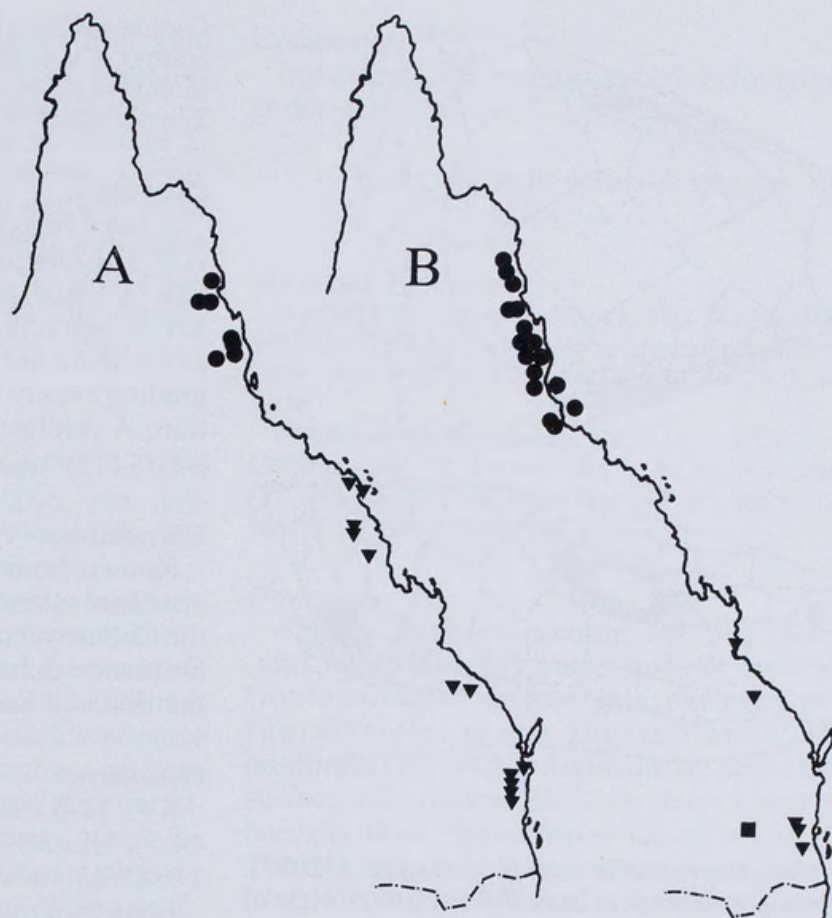


FIG. 3. A, Distribution of *Lampropholis robertsi* (●) and *L. adonis* (▼). B, Distribution of *L. colossus* (■), *L. coggeri* (●) *L. couperi* (△).

via Bullyan (J51319, 51323); Bulburin SF, top of ra (J27822, 27825, 27833); Bulburin SF, Granite Ck, nr Bruce Hwy Xing (J27820, 45297, 45298); Lowmead, 8–9.6km S (J23867); Dundowran, via Hervey Bay (J35198); Casy Ck, via Imbil (J27725); Cold Ck, via Imbil (J27732); Little Yabba Ck, via Kenilworth (J27721); Kondalilla NP (J49747).

OTHER MATERIAL: Brandy Ck, Site 13 (J32753, 32755–6, 32759, 32764, 32765, 32773, 32789, 32796); Cathu SF, Muirs Rd, nr western end of SF (J45825, 45826); Eungella (J28809); Thurgood Farm, 18km N Dalrymple Hts (J35101, 35123, 35124); Dalrymple Hts, 18km N (J35095, 35098, 35099); Finch Hatton NP, Site 9 (J34046); Finch Hatton NP, Site 9a (J34037, 34090); Eungella Schoolhouse (J46173); Crediton, Site 7 (J32636–32643, 32646, 32647, 32649–32651, 32698, 32699, 32700, 32702–32705, 32731, 32741, 32742); Crediton, Site 7a (J32670, 32672); Collaroy Holding, S of Sarina (J49592); Bulburin SF, Granite Ck, 13k SE Miriam Vale (J45775–45784); Lowmead, 3.2–4.8km N (J23825–6, 23828); Bulburin SF, adjoining Site 1a (J33699, 33710–33716, 33719, 33722, 33725); Bulburin SF, forestry camp (J33648, 33688); Bulburin SF, Site 1a (J33608, 33611, 33637, 33638, 33683); Bulburin SF (J33616–21); Bulburin SF, top of ra (J27823, 27824, 27826–27829, 27834); Bulburin SF, Granite Ck, via Many

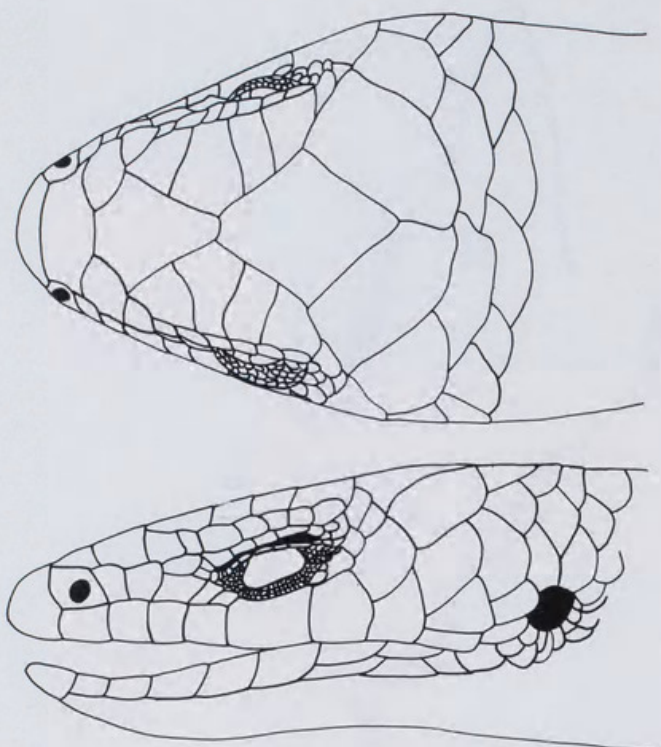


FIG. 4. *Lampropholis adonis* (holotype J35097). Above: Dorsal view of head. Below: Lateral view of head.

Peaks (J27817-27819); Brooyar Fire Tower, via Glastonbury (J28255); Cooloola, 1.6km E of L Cooloomera (J24496); Marys Ck, via Gympie (J27744); Cold Ck, via Imbil (J27731); Borumba Dam area, nr

Conondale Ra (J31867); Conondale Ra, Coonoon Gibber Ck (J36918); Kondalilla NP (J49572); Montville (J24499); Wootha, nr Maleny, ca.4km SW Town (J42425, 42428-42431).

DIAGNOSIS

A large (maximum SV 51), robust (maximum HW 18) *Lampropholis* with fused frontoparietals, a fused interparietal, seven supralabials, seven supraciliaries, short hindlimbs ($HL < 40$) and with darker upper lateral surface colouration grading evenly into lighter lower lateral colouration. A midlateral light brown to white line or series of spots is never present.

DISTRIBUTION

Known from two separate regions. Mid-eastern Queensland: from near Proserpine south to the Collaroy, north of St Lawrence. Southeastern Queensland: from Bulburin State Forest south to the Blackall Range.

DESCRIPTION

SV: 17-51 ($N=51$). HW: 13-18 ($N=1$, mean 14.5). HL: 30-40 ($N=45$, mean 34.3). TL: 137-148 ($N=3$, mean 141.7).

Four supraoculars. Frontoparietals and interparietal fused to form one scale. Supraciliaries 7, very rarely 8 ($N=48$, mean 7.1). Supralabials 7, very rarely 8 ($N=48$, 7.0). Nuchals contacting parietals 2 ($N=49$). Midbody scale rows 25-33 ($N=42$, mean 28.4). Mid-dorsal scales smooth



FIG. 5. *Lampropholis adonis* Eungella National Park (David Knowles).

with 3–4 striations. Number of scales from chin to vent 50–61 ($N=37$, mean 54.5). Lamellae under fourth toe 19–24 ($N=44$, mean 21.8).

Colour pattern is very similar to that of *L. coggeri*. However, the juveniles are heavily spotted with white on the lateral surface. Also, the males of *L. adonis* have breeding colours of red on the sides of the body and tail, cherry-red reticulations on the underside of the tail, and blue on the throat, chin and labial scales.

REMARKS

Mather (1990) noted that there were two species of *Lampropholis* at Warro, the type locality of *Mococa delicata* de Vis (1888). He contended that de Vis's description was inadequate for allocating the name to either taxa and, because the holotype was lost, he selected a neotype. The new name-bearing specimen chosen by Mather is an example of a taxon that most people would know as *L. delicata* because it is common in gardens throughout eastern Australia. However, there is doubt that his assessment of de Vis's description was correct. De Vis wrote, 'interparietal incompletely separate....' The other taxon on Warro is *L. adonis*, which has the interparietal fused. More than likely, it was to this taxon de Vis referred because *L. delicata* has a separate interparietal. As well, *L. adonis* is common along riverine scrubs throughout Warro, while *L. delicata* is uncommon (pers. obs.).

Despite the doubt, however, Mather's decision is sensible. If he had selected an example of *L. adonis* as neotype, *Leiolopisma hawaiiensis* Loveridge (1933), based on an introduced population in Hawaii (Baker, 1979), would have become the available name for the other taxon. This would have been nomenclaturally inconvenient because it is unknown from where in Australia the Hawaiian population originated and whether or not this polynesian population would continue to exist. With Mather's decision, *Leiolopisma hawaiiensis* became a junior synonym of *Mococa delicata* and, for most purposes, nomenclaturally irrelevant.

Of interest is the similarity between *L. adonis* and *Carlia rhomboidalis*. *C. rhomboidalis* is a rainforest skink that has breeding colours of red sides and a blue throat and, coincidentally, a fused interparietal (see Ingram and Covacevich, 1989). If *L. adonis* had four fingers instead of five, it would not be out of place in the genus *Carlia*. Further investigation is needed into the status of the two genera.

ETYMOLOGY

For Adonis, the beautiful youth beloved of the goddess Venus.

Lampropholis colossus sp. nov.

(Figs 3,6,7)

MATERIAL EXAMINED

HOLOTYPE: J49687, Bunya Mts National Park, SEQ (26°53'S 151°37'E), in rainforest near Tim Shea Falls, collected by K.R. McDonald on 26 January, 1974.

PARATYPES: Bunya Mts NP, 0.5km S TV Towers (J46095-46097); Bunya Mts NP, Survey Site 56 (J27549,27550); Bunya Mts NP (J30655-30657, 30659, 30660, 49689, 49692).

DIAGNOSIS

A very large (maximum SV 56), delicate (maximum HW 14) *Lampropholis* with fused frontoparietals, a free interparietal, seven supralabials, seven supraciliaries, short hindlimbs ($HL < 40$) and with darker upper lateral surface colouration distinctly demarcated mid-laterally from lighter lower lateral colouration. The demarcation can be due to a sharp transition of dark to light pigments or be delineated by a white midlateral line or series of spots. Further distinguished from *L. delicata* by large size (maximum SV 56 vs 45) and ventral colouration (bright yellow to cream vs white). Further distinguished from *L. robertsi* by ventral colour pattern (see the diagnosis of that species).

DISTRIBUTION

Known only from the rainforests and Bunya Pine associations of the Bunya Mountains, southeastern Queensland.

DESCRIPTION

SV: 40–56 ($N=13$). HW: 11–14 ($N=13$, mean 12.4). HL: 28–37 ($N=13$, mean 33.4). TL: 150–189 ($N=3$, mean 172.8).

Four supraoculars. Frontoparietals fused. Interparietal distinct. Supraciliaries 7 ($N=13$). Supralabials 7 ($N=13$). Nuchals contacting parietals 2 ($N=13$). Midbody scale rows 23–27 ($N=13$, mean 25.2). Mid-dorsal scales smooth with 3–4 striations. Number of scales from chin to vent 54–62 ($N=13$, mean 58.8). Lamellae under fourth toe 21–26 ($N=13$, mean 23.1).

Dorsal ground colour reddish to olive-brown with light to golden brown dorsolateral stripes and black laterodorsal stripes; the latter may be broken into a series of black dashes. Upper lateral surface dark brown to black and markedly

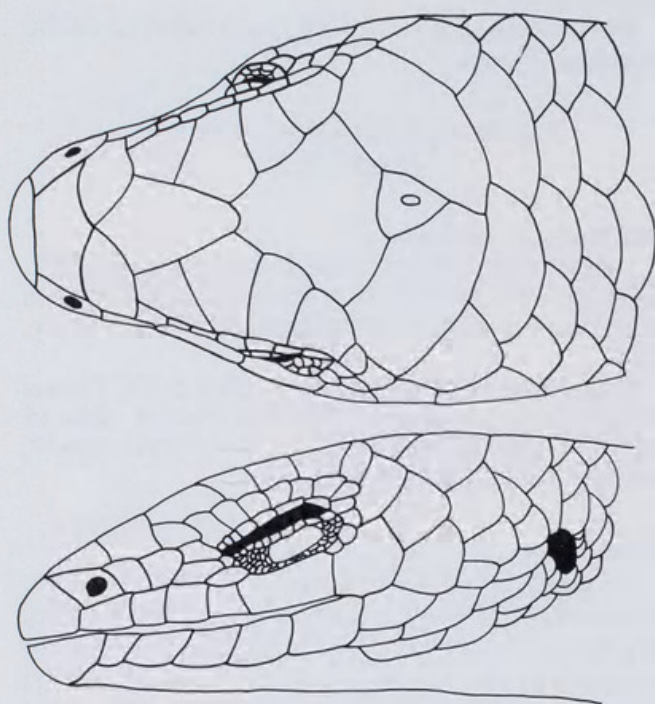


FIG. 6. *Lampropholis colossus* (paratype J30655). Above: Dorsal view of head. Below: Lateral view of head.

separated from the light brown to grey lower surface; sometimes the separation is marked by a strong, white, midlateral stripe, which can be broken into a series of spots. Ventrally bright yellow to cream; tail with black speckling that sometimes forms longitudinal, black, broken lines.

REMARKS

The specific status of *L. colossus* needs further

investigation. It is very similar to *L. delicata* and may just be an isolated, large form of that species. Moreover, there are several other unnamed, distinctly coloured populations of *L. delicata* throughout eastern Queensland that warrant similar investigations. Undoubtedly, the taxon *L. delicata* is still a complex of species.

ETYMOLOGY

Latin, *colossus*, a statue; refers to the skinks large size.

Lampropholis coggeri sp.nov.

(Figs 3,8,9)

Lampropholis sp. (4). Wilson and Knowles, 1988: 291, photo no. 505.

Lampropholis delicata Form D. Mather, 1990:570.

MATERIAL EXAMINED

HOLOTYPE: J27133 Shiptons Flat, Cape York Peninsula, Qld (15°48'S 145°16'E), collected by G. Ingram and J. Covacevich on 18 November, 1975.

PARATYPES: Mt Hedley (J25243, 25244); Mt Hartley (J25251-25255, 25271); Twelve Mile Scrub, Gap Creek (J25299, 25300); Home Rule (J25139, 25201-25203, 25230, 25241, 25285, 25330); Shiptons Flat (J27130-27134); Mt Finnigan (J25217, 26301, 40536); Windsor Tableland (J40663); Daintree area (J29622); Mossman Gorge (J21408); Bakers Blue Mountain, 17km W of Mt Molloy, 900m (J39872); Mt Molloy (J27008-27011); Cableway Base Station, Bellenden Ker (J39858, 39864); Crater, Atherton Tableland (J12205); 20km N of Innisfail (J14092); 16km W of Innisfail (J18006); Walter Hill Ra, Charappa Ck drainage, Suttees Rd (J48170, 48172); Billy Ck Bridge SF 758, vicinity of bridge (J48210); Upper Boulder Creek via Tully, 650-900m (J42276, 42277, 42294); Paluma State Forest, 950m (J41733); Palm Island (J14009, 14022).



FIG. 7. *Lampropholis colossus* (holotype J49687) Bunya Mountains National Park (Gary Cranitch).

OTHER MATERIAL: Mt Finnigan NP (J25269, 40542); Gold Hill, China camp (J33170); Table Mt, 10km S Cape Tribulation (J41722); Thornton Pk, Summit (J43901); Thornton Pk, via Daintree (J43910); Windsor Tblld SF, survey peg TA213 (J48693); Windsor Tblld, 28km NNW Mt Carbine (J40658); Karnak - Devils Thumb, 8-12km NW Mossman (J51566); Bakers Blue Mt, 17km W Mt Molloy (J39871, 49582-1, 51567); Mossman Bluff (J49580); Lamb Ra, Emerald Ck (J41130); Lamb Ra, 19km SE Mareeba (J48557); Danbulla SF (J49739, 49740, 49743); Danbulla SF, Kauri Ck, Mt Haig Rd (J48277, 48278); Severin, Boar Pocket (J49614); Bellenden Ker NP, TV stn (J49593); Bellenden Ker Ra, Cableway Base Stn (J39865); Gadgarra SF (J49741); Upper Mulgrave R, below Gadgarra SF Tookeys Ck (J42308); Gadgarra SF, Upper Bull Ck (J48691); L Eacham (J47096, 48425, 49619, 49620, 49622); Russell R, cave site (J45916, 45918); Crater NP (J49576, 49613); near Herberton-Ravenshoe Crater Junction (J43632); Majors Mt, N side (J48139); Majors Mt, via Ravenshoe (J31112, 31113, 31133-31137); Charmilan Ck (J41361, 41362, 47628); Walter Hill Ra, Charappa Ck drainage, Suttees Rd (J48171); Forestry 'H' Rd, via Tully (J48244, 48245); Kirrama Ra, Bryce-Henry Logging Area (J51420); Kirrama Ra, Macks Logging Area (J51419, 51421, 51422); Kirrama Ra (J48310); Kirrama Ra, Alma Gap Logging Rd (J48317); Cardwell Ra, Upper Broadwater Ck, Valley (J48305); Hinchinbrook Is, Gayundah Ck (J44173, 44199); Wallaman Falls Rd (J48306,

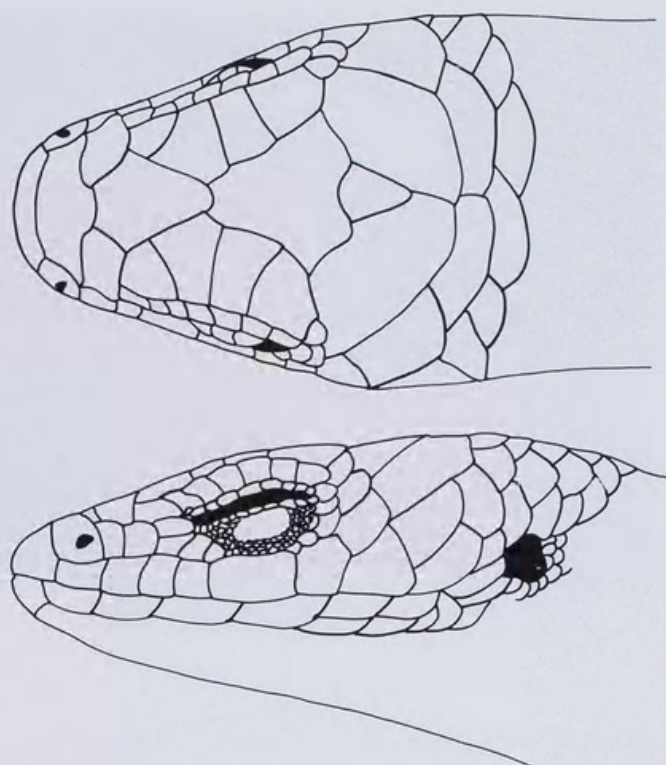


FIG. 8. *Lampropholis coggeri* (holotype J27133). Above: Dorsal view of head. Below: Lateral view of head.



FIG. 9. *Lampropholis coggeri* Thornton Peak (Steve Wilson).

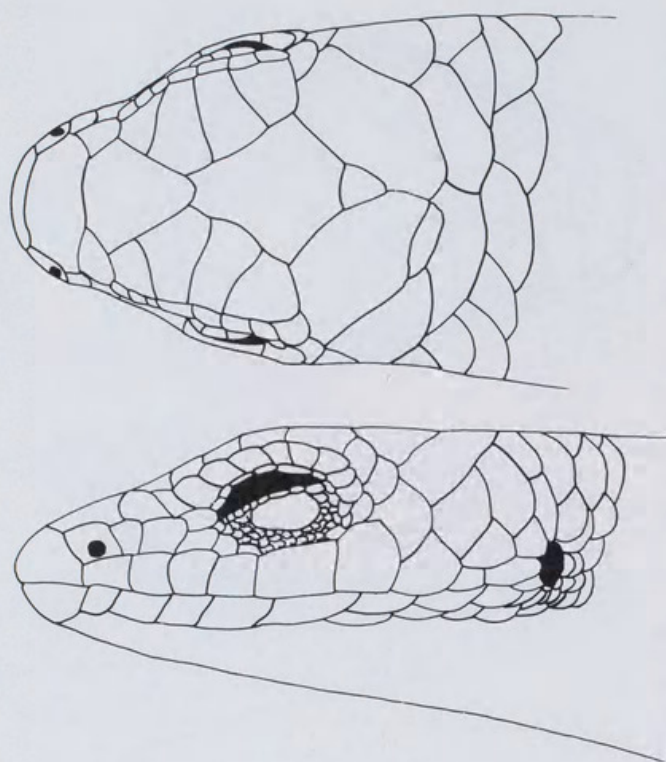


FIG. 10. *Lampropholis couperi* (holotype J49575). Above: Dorsal view of head. Below: Lateral view of head.

48307); Curacoa Is, Palm group (J49610, 49644); Elk Is (J49635, 49653, 49665); Bluewater Ra, N of Townsville (J46777).

DIAGNOSIS

A small (maximum SV 41), robust (maximum HW 18) *Lampropholis* with fused frontoparietals, a free interparietal, seven supralabials, seven supraciliaries, short hindlimbs (HL<40) and with darker upper lateral surface colouration grading evenly into lighter lower lateral colouration. A midlateral light brown to white line or series of spots is never present. Further distinguished from *L. couperi* by colour pattern: dorsal colour reddish to olive brown usually flecked with pale spots and black longitudinal dashes; the dashes can coalesce to form up to six dorsal lines; the outer two lines can delimit a paler brown dorsolateral stripe; lateral ground colour dark brown to reddish brown flecked with paler spots and, usually, black dashes vs dorsal colour uniform olive brown; upper lateral surface evenly black; dorsolateral area pale brown, edged strongly in black below.

DISTRIBUTION

Rainforests from near Cooktown south to Palm

Island and Bluewater Range near Townsville, NEQ.

DESCRIPTION

SV: 17–41 (N=40). HW: 14–18 (N=38, mean 15.4). HL: 30–39 (N=7, mean 33.8). TL: 140.6 (N=1).

Four supraoculars. Frontoparietals fused. Interparietal distinct. Supraciliaries 7, very rarely 6 or 8 (N=40, mean 7). Supralabials 7, very rarely 6 (N=40, mean 7). Nuchals contacting parietals 2, very rarely 3 (N=38, mean 2.0). Midbody scale rows 26–31 (N=38, mean 27.3). Mid-dorsal scales smooth with 3–4 striations. Number of scales from chin to vent 50–60 (N=38, mean 53.8). Lamellae under fourth toe 19–25 (N=37, mean 21.6).

Dorsal ground colour reddish to olive brown, usually flecked with pale spots and black dashes. The dashes tend to follow behind each other forming six longitudinal lines. The outer two can enclose a poorly defined, paler brown, dorsolateral stripe. Lateral ground colour dark brown to olive brown flecked with paler spots and, usually, black dashes; on lower lateral surface, ground colour is light brown; sides of tail tend to have black and light grey blotching on a brown background. Ventral ground colour light grey to creamy yellow, sparsely spotted with black; on the tail, the spotting is denser closer to the body, usually becoming concatenated to form black reticulations on a white background; sometimes the black markings are reddish brown on the edges.

REMARKS

L. coggeri is common in rainforest leaf-litter. It is sympatric with *L. robertsi* in parts of its range.

ETYMOLOGY

For Dr Harold Cogger, Australian Museum.

Lampropholis couperi sp.nov. (Figs 3,10,11)

Lampropholis form A. Czechura and Miles, 1983: 95.

Lampropholis sp. Czechura, 1986:63.

Lampropholis sp. (2). Wilson and Knowles, 1988: 291, photo no. 503.

Lampropholis delicata Form C. Mather, 1990:570.

MATERIAL EXAMINED

HOLOTYPE: J49575, Kondalilla NP, SEQ (26°41'S, 152°52'E), collected by D.G. Crossman and K.R. McDonald on 28 August, 1974.



FIG. 11. *Lampropholis couperi* Mt Nebo (Garry Cranitch)

PARATYPES: Kroombit Tops, Ubobo Rd, campsite, ca. 18 km W, on rd (J40153-7); Kroombit Tops (J42156); Kroombit Tops, Upper TA47, 45 km SSW Calliope (J43956); Bulburin SF, Site 1a (J33605); Little Yabba Ck, via Kenilworth (J27723); Jimna SF, Griffith Logging area (J49660); Jimna SF (J49669); Conondale Ra, E Side (J30293); Conondale (J30827); Wootha, nr Maleny, @ 4 km SW Town (J42426); Mt Nebo (J34162, J47950-1, J51663); Mt Glorious SF, Pine Shire, via Brisbane (J49752).

OTHER MATERIAL: Byfield, nr Rockhampton (J25741, 25745).

DIAGNOSIS

A large (maximum SV 49), delicate (maximum HW 16) *Lampropholis* with fused frontoparietals, a free interparietal, seven supralabials, seven supraciliaries, short hindlimbs (HL < 40) and with darker upper lateral surface colouration grading evenly into lighter lower lateral colouration. A midlateral light brown to white line or series of spots is never present. Further distinguished from *L. coggeri* by colour pattern (see the diagnosis of that species).

DISTRIBUTION

In rainforests from near Rockhampton, central eastern Queensland, south to Mt Glorious near Brisbane, southeastern Queensland.

DESCRIPTION

SV: 18–49 (N=21). HW: 11–16 (N=18, mean 13.6). HL: 27–38 (N=17, mean 32.8). TL: 112–141 (N=5, mean 124.2).

Four supraoculars. Frontoparietals fused. In-

terparietal distinct. Supraciliaries 7 (N=44). Supralabials 7 (N=20). Nuchals contacting parietals 2, very rarely 3 (N=20, mean 2.0). Midbody scale rows 26–30 (N=20, mean 27.2). Mid-dorsal scales smooth with 3–4 striations. Number of scales from chin to vent 52–62 (N=18, mean 55.5). Lamellae under fourth toe 20–24 (N=17, mean 22.4).

Dorsal colour uniform olive brown. Upper lateral area black, grading evenly into grayer lower lateral surface, which can have paler speckling. Dorsolateral colouration is paler brown, tending to form a bright stripe strongly edged below with black. On the tail, the lateral colouration breaks up into black speckling on a brown background. Ventrally, grey with black flecking that can be well-defined dots on the chin and throat; on the tail, the black markings are well-defined and tend to coalesce and form black reticulations.

REMARKS

The specific identity of the two specimens from Byfield, near Rockhampton, deserves further investigation. The locality is the only coastal lowland record of the species. I have tentatively allocated them to *L. couperi* but it is difficult to be sure because of their poor condition.

The identification of Wilson and Knowles (1988) photo number 503 as this species is also tentative. The skink looks like *L. couperi* but the sides are not black enough. The population, which is from Carnarvon Gorge, needs to be

collected and the identity of the species confirmed.

L. couperi is widely sympatric with *L. adonis* in southeastern Queensland.

ETYMOLOGY

For Patrick Couper, Queensland Museum.

KEY TO THE *L. DELICATA* COMPLEX

1. Usually 6 supralabials; 3 supraoculars.....
.....*L. caligula*

Usually 7 supralabials; 4 supraoculars.....
.....2

2. Usually 5 supraciliaries; midbody scale rows usually <23.....*L. amacula*

Usually 6 or 7 supraciliaries; midbody scale rows usually >23.....3

3. Interparietal fused with frontoparietals to form one scale.....*L. adonis*

Interparietal free.....4

4. Usually 6 supraciliaries; dark vertebral stripe present.....*L. guichenoti*

Usually 7 supraciliaries; dark vertebral stripe absent.....5

6. Hindlimbs long, usually >45% of SV; subdigital lamellae under fourth toe usually >27.....
.....*L. mirabilis*

Hindlimbs not long, usually (<40% of SV; subdigital lamellae under fourth toe usually <27.....7

7. Darker upper lateral surface colouration grades evenly into lighter lower lateral colouration. A midlateral light brown to white line or series of spots is never present.....8

Darker upper lateral surface colouration distinctly demarcated midlaterally from lighter lower lateral colouration. The demarcation can be due to a sharp transition of dark to light pigments or be delineated by a golden brown to white midlateral line or series of spots.....9

8. Dorsal colour uniform olive brown. Upper

lateral surface evenly black. Dorsolateral area pale brown, edged strongly in black below. Maximum SV 49mm.....*L. couperi*

Dorsal colour reddish to olive brown usually flecked with pale spots and black longitudinal dashes; the dashes can coalesce to form up to six dorsal lines. The outer two lines can delimit a paler brown dorsolateral stripe. Lateral ground colour dark brown to reddish brown flecked with paler spots and, usually, black dashes. Maximum SV 41mm.

.....*L. coggeri*

9. Overall: brown, black and gold, robust skinks (HW 13-16% of SV). Ventrally, grey with black-edged scales flecked with black; throat, chin, lower part of body and tail usually heavily black spotted; under the tail, the black markings often coalesce to outline a longitudinal series of white chevrons.....
.....*L. robertsi*

Overall: brown, black, grey and white, delicate skinks (HW 11-14% of SV). Ventrally, yellow to white with black flecking on throat and tail, which can coalesce into thin lines.....10

10. Ventrally yellow. Maximum SV 56mm. Rain-forest dwelling.....
.....*L. colossus*

Ventrally white. Maximum SV 45mm. Open forest, woodland and heath dwelling.....
.....*L. delicata*

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