

A NEW *LEPIDODACTYLUS* (REPTILIA: GEKKONIDAE) FROM GUADALCANAL ISLAND, SOLOMONS

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Abstract. — A new species of *Lepidodactylus* (Gekkonidae) from Guadalcanal, Solomon Islands, is described. It belongs to Group I, with undivided subdigital scansors, and is related to *L. mutahi* and *L. euaensis*.

Brown & Parker (1977) recognized 13 species of the genus *Lepidodactylus* as occurring in the island region of the Indo-Australian archipelago and the Pacific, placing them in three species groups. *Lepidodactylus lugubris*, a commensal of man, with range extending beyond the boundaries of the region, is the only species in Group III. The seven species in Group I and the five species in Group II exhibit restricted ranges, often a single or small group of islands. Since 1977, two more Group I species, *L. browni* Perretta & Black (1983) from Papua New Guinea and *L. euaensis* Gibbons & Brown (1988) from Tonga, have been described. The species described at this time is also a Group I species, known thus far only from the type locality on Guadalcanal Island. The only other Group I species thus far recorded from the Solomons is recorded only from Bougainville Island.

A single specimen of a *Lepidodactylus*, a female, was collected by McCoy from the near top of Mt. Austen, Guadalcanal Island, Solomon Islands, in September, 1978. It was examined at the time by Brown and McCoy, and identified as related to *Lepidodactylus mutahi*, differing from that species primarily in the greater number of subdigital scansors and the yellow eye ring. That specimen was not cataloged at the time, and cannot be found. In November, 1990, a second example of this species was collected by Rodda from near the top of Mt. Austen (320 m).

Lepidodactylus flaviocularis, new species Fig. 1

Holotype: USNM 313865, an adult male, collected on Mt. Austen, Guadalcanal Island, Solomon Islands, by Gordon H. Rodda, 23 November, 1990.

Diagnosis. — Distinguished from other species of *Lepidodactylus* by the following combinations of characters: intermediate in size, snout–vent length 49.5 mm (in life), 47.5 mm (preserved); digits dilated; toes $\frac{1}{4}$ to $\frac{1}{2}$ webbed (to base of eleventh scansor on fourth toe); 18 undivided scansors below fourth toe; 10 or 11 below first toe; 38 pre-anal and femoral pores in a continuous series, extending almost to distal end of thigh; 12 upper labials, tenth below eye.

Description. — An intermediate-sized *Lepidodactylus*, SVL 49.5 mm in life (47.5 mm, preserved) for the male holotype; snout tapered, length 4.9 mm (53.8% of head breadth); head length 12.6 mm; head breadth 9.1 mm (72.2% of head length and 19.2% of snout–vent length); eye diameter 4.1 mm (83.7% of snout length and 45.1% of head breadth); axilla–groin distance 21.4 mm; rostral broader than high; nostril bordered by rostral, first upper labial, supranasal, postnasal and one enlarged dorsal scale; supranasals separated by three scales; 38 rows of interorbital granules; 12 upper labials, tenth below center of eye; nine lower labials; mental triangular, bordered posteriorly by

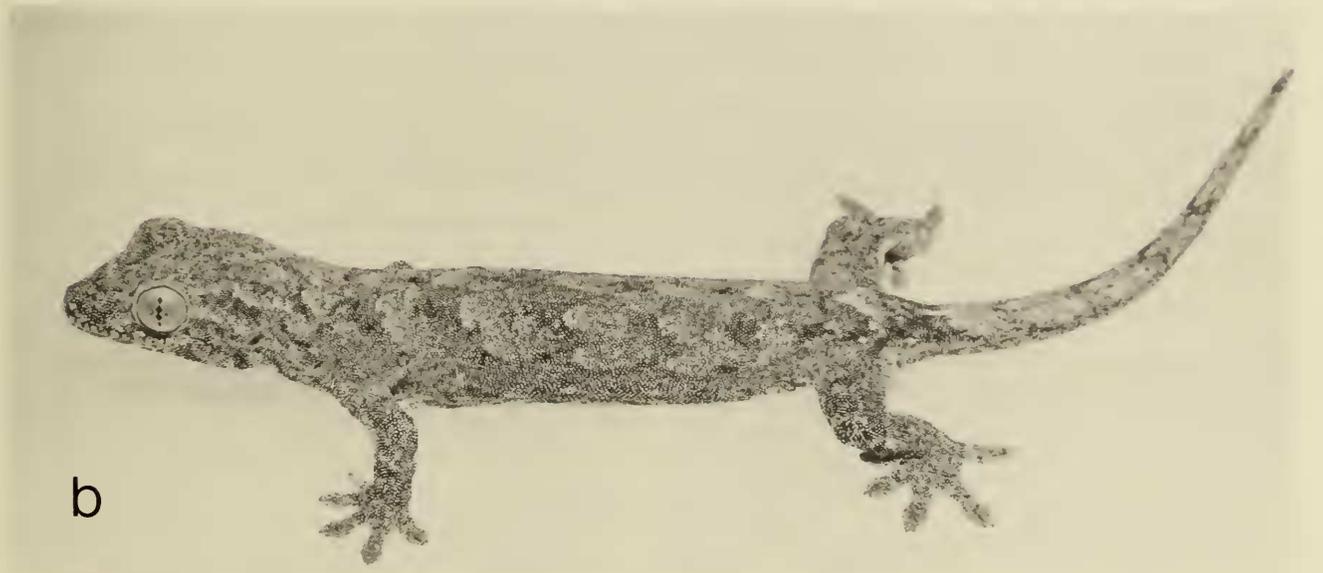
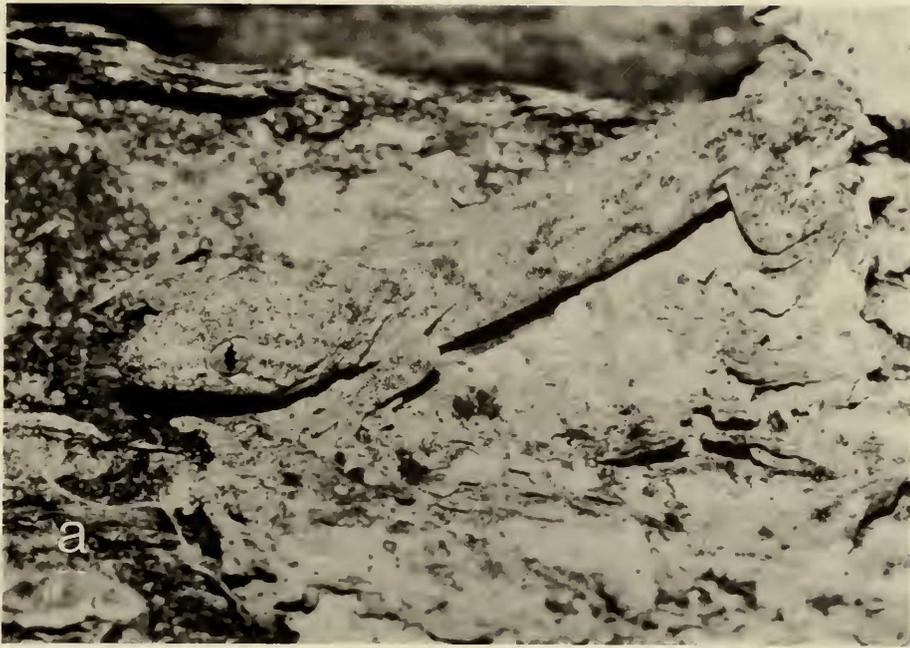


Fig. 1. a: Photograph of the holotype of *Lepidodactylus flaviocularis* (USNM 313865), a male with abbreviated tail; b: Photograph of female collected at the same locality in 1978 (specimen lost).

2(on left)–3(on right) rows of enlarged scales; dorsal and lateral surfaces covered by small, mainly uniform, granular scales; venter covered by flat scales, about 30 distinct rows at midbody, grading into granular scales on lower lateral surfaces; preanal-femoral pore scales greatly enlarged, male with 38 pores extending almost to knee, bordered anteriorly by flattened scales, as on venter, and posteriorly by small, granular scales except

in region of vent; length of hind limb 15.9 mm (74.3% of axilla-groin distance); toes $\frac{1}{4}$ to $\frac{1}{2}$ webbed, moderately dilated, breadth of fourth toe 26.5% of its length; scansors covering underside of toes to base, 18 under fourth toe, 10–11 under first toe; tail sub-cylindrical (tail of holotype broken near base and scaled-over).

Color.—Dorsal ground color, in preservative, rusty tan with some diffuse grayish

Table 1.—Snout-vent length, ratio of eye-diameter to head breadth (ED/HB), extent of webbing between third and fourth toes, and scansor and pore counts for *L. flaviocularis*, *L. mutahi*, and *L. euaensis*. Numbers in parentheses refer to number of specimens.

Characters	<i>L. flaviocularis</i>	<i>L. mutahi</i>	<i>L. euaensis</i>
SVL (mm)	47.5 (1)	37.5–56.3 (10)	41.4–50.0 (12)
Preanal and femoral pores	38 (1)	27–34 (15)	33–35 (2)
ED/HB	0.45 (1)	0.40–0.53 (14)	0.35–0.41 (8)
4th toe scansors	18 (1)	9–11 (17)	10–13 (14)
Webbing between toes 3 and 4	½ (1)	¼ (17)	⅓ (14)

blotches and small blackish flecks, most prominent on the head and neck. Lateral surfaces more gray with scattered dark flecks. Venter ivory-white with scattered dark flecks, especially under the head. Labials flecked with brown and black. In life, the venter was bright yellow on the belly region and under the hindlimbs, more creamy yellow or cream elsewhere. Eye encircled by a bright yellow ring.

Etymology.—The bright yellow eye ring is the basis for the name.

Comparison.—*Lepidodactylus flaviocularis* belongs to species Group I as defined by Brown & Parker (1977). It is most similar to *L. mutahi* from Bougainville Island of the Solomon Archipelago, and *L. euaensis* from Eua Island, Tonga (Gibbons & Brown 1988). It differs from these species primarily in the number of preanal and femoral pores, the number of scansors under the fourth toe, and the more extensive webbing between the toes (Table 1). It further differs from *L. euaensis*, as does *L. mutahi*, in the slightly larger eye relative to head breadth (Table 1). The number of scansors under the fourth toe is greater than is known for any other species in Group I. The number of preanal and femoral pores is greater than that of most species, except *L. magnus* and *L. pumilus* of New Guinea and the islands of the Torres Strait.

Habitat.—Both specimens were found

near the top of Mt. Austen at 320 m elevation. The holotype was found about 3 m above the ground on 4–5 mm diameter vines suspended about 30 cm from a slender tree at the edge of a road. The primary forest at the collecting site was being altered by heavy selective logging at the time the holotype was collected. The forest was mostly intact at the time the 1978 specimen was collected.

Literature Cited

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