

A New Locality for the Rare Bornean Skink, *Lamprolepis vyneri* (Shelford, 1905) (Sauria: Scincidae)

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Abstract. - A specimen of the Bornean arboreal skink, *Lamprolepis vyneri* (Shelford, 1905), hitherto known from the holotype from Gunung Balingan, Sibul Division, Sarawak, and a second possible specimen from the upper reaches of Sungei Mahakam, Kalimantan, is reported from Bukit Balian, near the Kayan settlement of Kelep, at Sungei Asap, at the base of Gunung Dulit, Kapit Division, Sarawak. The species is illustrated for the first time.

Key words. - *Lamprolepis vyneri*, redescription, Scincidae, Sarawak, Borneo.

Introduction

The genus *Lamprolepis* Fitzinger, 1843, which was revived from the synonymy of *Dasia* Gray (1829), by Greer (1970) contains four nominal species of arboreal skinks. Two of these are endemic to Borneo (*L. nieuwenhuisii* and *L. vyneri*), a third (*L. leucosticta*) to Java (Manthey and Grossmann, 1997:263) and the fourth (*L. smaragdina*) is widespread in the Philippines, Sulawesi, Lesser Sundas, the Republic of Belau, the Carolines, New Guinea, the Solomons and Santa Cruz Islands (Brown and Alcala, 1980:76-79; Greer, 1970). The first two species are arguably the least well known of all Bornean lizards. *L. nieuwenhuisii* (Lidth de Jeude, 1905) was described from "Long Bloe" (= Long Blu or Bloéoe, 00° 43' N; 114° 25' E), on the upper reaches of Sungei Mahakam, Kalimantan Tengah Province, Indonesia; RMNH 4455, holotype). It has subsequently been collected from isolated localities in northern Borneo, including Nanga Tekalit Camp on Sungei Mengiong, Kapit Division (reported as *Dasia vyneri* by Lloyd et al., 1968, based on FMNH 138542; 147562); and Pangkalan Lobang at Niah National Park, Miri Division (FMNH 131528), both in Sarawak State; and Kiau, Gunung Kinabalu National Park, Ranau District (MCZ 43494; BMNH 1929.12.22.96 and ZRC 2.1595); and Mahunbayon, Gunung Kinabalu National Park, Ranau District (MCZ 43495), both in Sabah State, East Malaysia.

Lamprolepis vyneri (Shelford, 1905) is more poorly known. Named for Charles Vyner Brooke (1874-1963), the Rajah Muda of Sarawak at the time of description of the species, and subsequently, the Third Rajah of Sarawak between 1917-1946, it is only known from the holotype, BMNH 1946.8.15.56 (ex-BMNH 1909.8.18.2), from "Mount Balineau, Muka district, Sarawak" (= Gunung Balingan, 01° 25' N; 111° 28' E,

Sibul Division, East Malaysia), according to the original description. However, in the records of the Sarawak Museum (Anon., 1903), the type locality is given as "Mt. Balingean" (in Muka District, Sibul Division, Sarawak). Lidth de Jeude (1905) questionably assigned to this species a specimen from the upper reaches of Sungei Mahakam (00° 30' S; 117° 15' E), Kalimantan Timur Province, which apparently differed from Shelford's (1905) species in some trivial details of squamation and body proportions. The location of this specimen is unknown, but was examined by De Rooij (1915), who allocated it to the present species. This species has never been illustrated.

A second specimen (ZRC 2.5513; Figs. 1-2) of *Lamprolepis vyneri* is reported here from Bukit Belian (03° 08' 34.4" N; 113° 55' 45.5" E), near the Kayan settlement of Kelep, at Sungei Asap, situated at the base of Gunung Dulit, Kapit District, Sarawak. It was collected dead on 6 November 2001 from a logging road.

Material and Methods

The specimen was photographed upon collection, fixed in neutral buffered formalin and subsequently transferred to 70% ethanol, within a week of collection. The following measurements were taken with Mitutoyo™ dial caliper (to the nearest 0.1 mm): snout-vent length (SVL; from tip of snout to vent), tail length (TL; from vent to end of unregenerated tail; tip missing), tail width (TW; measured at base of tail); head length (HL; distance between posterior edge of last supralabial and snout-tip), head width (HW; measured at angle of jaws), head depth (HD; maximum height of head, from occiput to throat), ear length (EL; greater ear length); eye diameter (ED; greatest diameter of orbit), eye to nostril distance (E-N; distance between anteriormost point of eyes and nostrils), eye to snout distance (E-S; distance

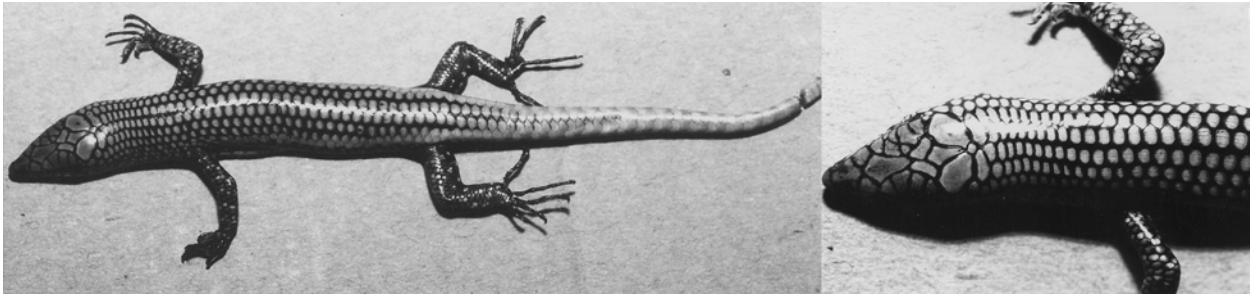


Figure 1. The Sungei Asap specimen of *Lamprolepis vyneri* (ZRC 2.5513), showing (left) general view of body and (right) close-up of head and forebody.

between anteriormost point of eyes and tip of snout), eye to ear distance (E-E; distance from anterior edge of ear opening to posterior corner of eyes), internarial distance (IN; distance between nares), interorbital distance (IO; shortest distance between orbits), tibia length (TBL; straight length of tibia, from knee to sole), in addition to measurements of digits, taken on the left limbs, from the base to tip. Scale counts and external observations of morphology were made using an Olympus SZX9 dissecting microscope. Institutional abbreviations follow Leviton et al. (1985), except ZRC is retained for USDZ, following conventional usage.

Description of *Lamprolepis vyneri* from Bukit Belian, Sungei Asap (ZRC 2.5513). - Habitus relatively slender, snout-vent length 55.2 mm; head elongate (HL/SVL ratio 0.20), narrow (HW/HL ratio 0.65), moderately depressed (HD/HL ratio 0.11), slightly distinct from neck; snout long (E-S/HW ratio 0.72), longer than the eye diameter (ED/E-S ratio 0.75), projecting slightly beyond mandible; interparietal distinct; parietal eye absent; supraoculars four; second and third largest; supraciliaries 8/8; first supraciliary contacts frontal; scales on snout and forehead smooth; rostral contact frontonasal posteriorly; rostral small, wider than deep (rostral width = 2.0 mm; rostral depth = 1.2 mm; width/depth ratio 1.67), contacted posteriorly by nasal and frontonasal; posteroventrally, rostral in contact with first supralabial; nares slit-like, situated on upper level of nasal, oriented laterally; nasal in broad contact with first supralabial; supranasals moderate in size, separated; frontonasal trapezoid, wider than long, contacting frontal and prefrontals posteriorly; frontal longer than frontonasal, not constricted laterally; frontoparietals in contact with each other and with three supraoculars, and posteriorly, with interparietal and parietals; a single pair of parietals contacts interparietal; parietals separated behind by an azygous scale; loreals two, anteriormost longer than deep; a small dorsal presubocular, and a wider ventral one; eye large (ED/HL ratio 0.35); post-suboculars two; supralabials seven, with supralabials 4-6 in suborbital position; supralabials three, fifth and

sixth larger than the others; infralabials six; lower eyelid scaly; a single preocular between loreal and orbit; postoculars two; pretemporals two; two anterior and two posterior temporals; ear opening narrow, measuring 1.9 mm; situated laterally at a level slightly higher than jaws; a few lobules around ear opening present; tympanum deeply sunk; eye-to-ear distance less than eye-to-nostril distance (E-E/E-N ratio 1.26); a pair of enlarged nuchals, partially separated by a single cycloid scale; mental large, semicircular, wider than deep; postmental single, trapezoidal, larger than mental, its width 1.8 mm or 25.4 per cent head width; postmental contacts first infralabial only, bounded posteriorly by a pair of smooth, squarish, juxtaposed chin shields that are in contact; three pairs of enlarged chin shields, the first in contact with each other, the second separated by a single scale, the third separated by three scales; tongue narrowly elongate, narrowed distally, with a median cleft and scattered papillae on the dorsal surface; maxillary and mandibular teeth small, undifferentiated.

Body slender, elongate (SVL/BW ratio 6.81); dorsum and venter with smooth scales, with faint striae, scale size subequal dorsally as well as ventrally; anals six, smooth; outer overlapping inner; preanals three, not greatly enlarged, overlapped by last ventral, third preanal exceeding its posterior level, over vent; flank scales reduced in size.

Limbs well developed, pentadactyle; adpressed limbs meeting at level of heels; lamellae under finger IV numbering 18; lamellae under toe IV numbering 20; relative length of fingers (measurements in mm, in parentheses): 4 (4.5) > 3 (4.4) > 2 (3.5) > 5 (2.7) > 1 (2.0); relative length of toes: (measurements in mm, in parentheses): 4 (7.8) > 3 (5.6) > 5 (5.5) > 2 (4.7) > 1 (3.0).

Tail long, preserved tail length over 40.5 mm (tip missing), longer than snout-vent length; tail base slightly swollen; ventral surface of tail with smooth; subcaudals very wide; scales on the postanal region and at the proximal part of the tail base smooth.

Coloration. - Forehead olive-yellow, edged with black; dark smudges on forehead scales; scales on dorsum of

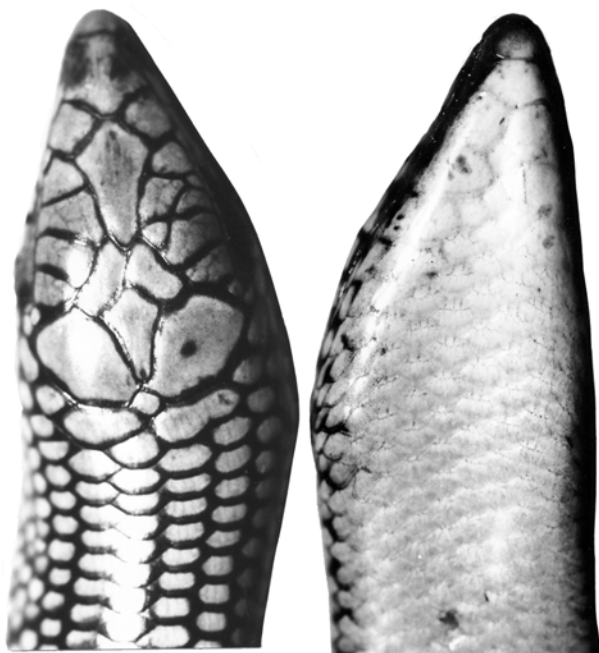


Figure 2. Head of *Lamprolepis vyneri* (ZRC 2.5513) in dorsal (left) and ventral (right) views. Scale bars = 10 mm.

body bright yellow, edged with black, appearing as four dark longitudinal lines that extend along the body to slightly beyond the base of tail; yellow dorsolateral stripe, 2-3 scale wide, runs from behind level of the axilla, across the inguinal region, continuing along the side of the tail; venter, including the gular, pectoral and abdominal regions, undersurface of tail and of limbs yellowish-green, unpatterned; scales on flanks black-edged, reddish-orange, with scattered yellow scales; the same coloration is found on the upper surfaces of the fore and hind limbs; tail alternately banded yellowish-brown, each band one scale wide, and pale yellow; tongue and inner lining of mouth yellowish-pink; inner lining of body cavity yellowish-pink in preservative.

Measurements (in mm). - BW 8.1; ED 3.8; E-E 4.8; EL 1.2; E-N 3.8; E-S 5.1; IN 1.7; IO 4.5; HD 5.8; HL 10.9; HW 7.1; SVL 55.2; TBL 7.7; and TL 40.5 - original unregenerated, tip missing; TW 5.3.

Scutellation. - Ventrals (between postmental and pre-anal) 49; midbody scale rows 22; subcaudal count unknown (tail-tip missing); supralabials seven (fourth, fifth and sixth in suborbital position) and infralabials six.

Variation. - The Sungei Asap specimen differs from the holotype in the following particulars: SVL 55.2 vs 52.0 mm; supraoculars on left side four (vs five in the holo-

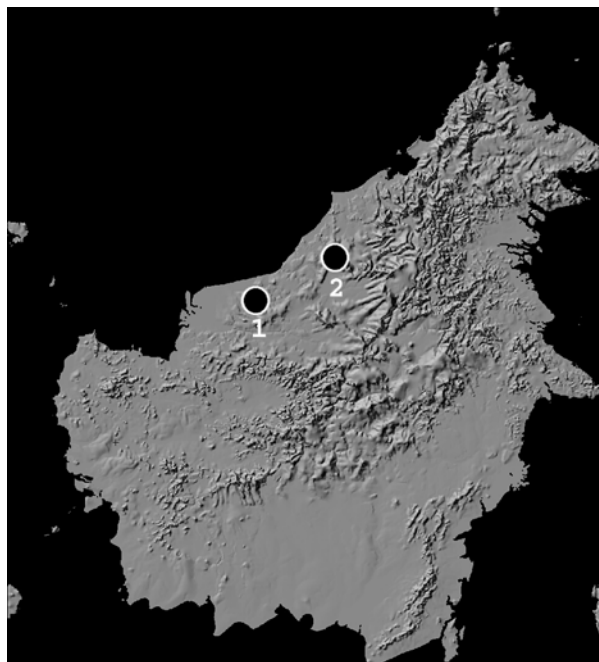


Figure 3. Map of Borneo showing the known localities for *Lamprolepis vyneri*. 1 = Gunung Balingan, Sibuluan Division (type locality); 2 = Bukit Balian, near Sungei Asap, Kapit Division.

type, as shown on the apparently anomalous right side of the head of the Bukit Balian specimen). The bright red and yellow coloration of the flanks of the Bukit Balian specimen turned to dark brown after three months of storage in preservative. Shelford (1905), who presumably examined a preserved specimen, reported the flanks as being olive-gray. van Lidth de Jeude's (1905) specimen was 63 mm in SVL, and showed five black stripes, but only three entering the sacral region and tail-base. This poorly-preserved specimen was described as "putty grey", with several cephalic scales edged with black.

Notes on Natural History. - The specimen being reported here was found freshly dead on a logging track at the base of Bukit Balian (03° 08' 34.4" N; 113° 55' 45.5" E), near Kelep, Sungei Asap, a Kayan resettlement colony in Kapit (Seventh) Division, central Sarawak. It may have fallen off a log that was being transported, because the members of the genus are highly arboreal, and the present specimen was otherwise physically intact, except for the missing tail-tip, and not run over. The area lies within a lowland dipterocarp forest with strands of the Bornean ironwood tree, *Eusideroxylon zwageri* (Iban name: Balian, which gives the hill its name) at 186 m elevation. Perhaps coincidentally, the holotype was taken at a similar-sounding locality, Gunung Balingan, for which no general habitat description is available. One is therefore tempted to speculate

that both localities derive their names for their strands of the Bornean ironwood, a dipterocarp much in demand from the timber industry for its durability, and hence threatened by logging. The new locality, at the base of Gunung Dulit, is ca. 190 km east of the type locality, across the Lumut Range (Fig. 3).

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