

102. [In Japanese.]

**INGER, R. F. & M. LAKIM. 1998.** Rediscovery of the agamid lizard *Calotes kinabaluensis* de Grijs (Lacertilia: Agamidae) in Borneo, with notes on its habitat. *Herpetological Review* 29(3):143–144.

\_\_\_\_ & **R. B. STUEBING. 1994.** First record of the lizard genus *Pseudocalotes* (Lacertilia; Agamidae) in Borneo, with description of a new species. *Raffles Bulletin of Zoology* 42(4):961–965.

**MALKMUS, R., U. MANTHEY, G. VOGEL, P. HOFFMANN & J. KOSUCH. 2002.** Amphibians & reptiles of Mount Kinabalu (North Borneo). Koeltz Scientific Books, Königstein. 424 pp.

**MANTHEY, U. & W. DENZER. 2000.** Description of a new genus, *Hypsiccalotes* gen. nov. (Sauria: Agamidae) from Mount Kinabalu, North Borneo, with remarks on the generic identity of *Gonocephalus schulzestrumi* Urban, 1999. *Hamadryad* 25(1):13–20.

\_\_\_\_ & **W. GROSSMANN. 1997.** Amphibien und Reptilien Südostasiens. Natur und Tier Verlag, Münster. 512 pp.

**OTA, H. & T. HIKIDA. 1991.** Taxonomic review of the lizards of the genus *Calotes* Cuvier 1817 (Agamidae Squamata) from Sabah, Malaysia. *Tropical Zoology* 4:179–192.

\_\_\_\_ & \_\_\_\_\_. 1996. The second specimen of *Calotes kinabaluensis* de Grijs (Squamata: Agamidae) from Sabah, Malaysia, with comments on the taxonomic status of the species. *Journal of Herpetology* 30(2):288–291.

**WELCH, K. R. G. 1994.** Lizards of the world. A checklist. 5. Agamidae, Chamaeleonidae, Cordylidae and Gerrhosauridae. R & A Research and Information Limited/KCM Books, Taunton. 97 pp.

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### HEMIDACTYLUS KARENORUM (SQUAMATA, GEKKONIDAE)- NOT IN INDIA?

In 1868, Theobald recognized the Burmese spotted gecko, *Hemidactylus karenorum*, as a new species from the Sittaung Valley of south-central Burma. Its reported distribution remained confined to the Pegu area (now encompassed by the Ayeyarwady, Bago and Yangon Districts) until De Rooij (1915) gave a Borneo occurrence in addition to the Burmese one. Malcolm Smith (1935) briefly noted that De Rooij's specimen "does not appear to be this species. . ." Although Smith did not see the specimens, De Rooij provided a detailed description in her book (1915) that permitted him to recognize her misidentification. Many aspects of her specimens match *H. karenorum*, e.g., dorsum of small granular scales and numerous small tubercles, number of fore- and hindfoot digital lamellae, but the number of preloacal-femoral pores does not. She described a male with a small chevron of 6 preloacal pores; Burmese *H. karenorum* have 26–38, usually  $\geq 34$  pores (Zug et al., 2007). While Smith removed this erroneous distributional record, he added a new and puzzling locality, "Cachar in Assam." He did not identify the source of this information, and The Natural History Museum, London does not possess a *Hemidactylus* specimen from this locality.

The Assam locality is puzzling owing to its distance and habitat difference from south-central Myanmar. The puzzle has been largely ignored because there have been few voucher specimens to delimit the distribution of *H. karenorum*. The joint California Academy of Sciences-Nature and Wildlife Conservation Division-Smithsonian Institution's Myanmar Herpetofaunal Survey has obtained adequate voucher specimens to define this species distribution as central and south-central Myanmar, hence a distribution with its northern limit distant from Assam and potentially isolated by the mountain ranges separating Myanmar and India.

One of us (SM) recently visited the Zoological Survey of India (ZSI) collection to examine lizard specimens, and discovered four specimens (ZSI 6402, 12050, 12075, 21712) of

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*Hemidactylus* labelled *H. karenorum*. Three of these, now in alcohol, are extremely brittle. The fourth specimen (ZSI 21712) is modestly well preserved. The dehydrated condition makes identification difficult; nevertheless, tentative identification is possible. Two of the dried specimens (ZSI 12050, 12075) and undehydrated one (ZSI 21712) show characteristics distinctive of *H. platyurus*, i.e., digits webbed, ventrolateral trunk fold well-developed, and no enlarged tubercles dorsally; however, of these three specimens, we are confident of our identification as *H. platyurus* on only ZSI 21712 (collected 1964 at “Umtham, Upper, K. & J. Hills [presumably Khasi & Jaintia Hills, Meghalaya State], Assam” by A.K. Nanda). The final dehydrated specimens (ZSI 6402; from “Govindpur, Burma, May 1866 and Oct. 1867”) might represent *H. karenorum*. For characters discernable from the specimen’s current condition, it has moderately large tubercles among the granular scale of the dorsum, lacks webbing between the digits and a ventrolateral fold on the trunk, and has 7 lamellae on finger IV and about 8 on toe IV. The trunk tubercles, however, are arranged in 10–11 distinct longitudinal rows, in contrast to our Myanmar *H. karenorum* that show numerous scattered tubercles without a longitudinal arrangement. The longitudinal rows of enlarged tubercles suggest that this specimen may represent *H. brookii* or a member of the *brookii* complex (Zug et al., 2007).

We have made several assumptions about the ZSI “*H. karenorum*.” First and foremost, that they represent the Assam record reported by M. Smith, because two (ZSI 12050, 12075) derive from Cachar, Assam (collected by J. Woodmason, without date). Second, Smith did not include Govindpur because he already had a Burma record or Smith was uncertain of the specimen’s identification.

We are unable to locate Govindpur as a geographic entity in Burma (Myanmar), but we have located several in India. Our gazetteer (US Board of Geographic Names. India. vol. 1. 1952) lists two Govindpur localities: one as a town at 21° 29’N 85° 21’E, and the other as a canal/stream at 22° 33’N 88° 19’E. A third Govindpur is listed on the web Global Gazetteer 2.1 (www.fallingrain.com) as 25° 22’ N 75° 32’E. These localities are in the states of Orissa, West Ben-

gal, and Rajasthan, respectively. Woodmason’s Cachar locality is presumably 25° 05’N 92° 55’E (for Cachar district) in the state of Assam. What is the likelihood that “true” *H. karenorum* occurs at any of these four localities? The Orissa and Rajasthan localities seem most unlikely to harbour *H. karenorum* owing to their great geographic distance from the known *H. karenorum* distribution. The possibility of *H. karenorum* in Assam and West Bengal is certainly greater because they are geographically closer. Nevertheless, we suggest that if a *H. karenorum*-like gecko occurs at either or both locations, it is likely an undescribed sibling species, as our ongoing studies of the central Burmese herpetofauna continue to demonstrate that lizards may share the same species names between Myanmar and India but they are not the same species (e.g., Zug et al., 2006).

We wish to thank our colleagues at Zoological Survey of India collection Kolkata [ZSI] (**Dr. B.H.C.K. Murthy**) and The Natural History Museum [BMNH] (C. J. McCarthy) for access to their respective collections. We also appreciate S. Biswas’ and J. Vindum’s careful reading and comments for improving this manuscript. GZ’s research into the biology and systematics of Asian herpetofauna has been supported by the Research Opportunity Fund and the Biological Survey and Inventory Program of the National Museum of Natural History, and the NMNH Department of Vertebrate Zoology. The National Science Foundation – Biodiversity Surveys & Inventories program has made the comprehensive survey of the Myanmar herpetofauna possible through DEB–9971861 and DEB–0451832.

#### LITERATURE CITED

- DE ROOIJ, N. 1915.** The reptiles of the Indo-Australian Archipelago. I. Lacertilia, Chelonia, Emydosauria. E. J. Brill Ltd., Leiden. xiv + 384 pp.
- SMITH, M. A. 1935.** The fauna of British India, including Ceylon and Burma. Reptilia and Amphibia. Vol. II—Sauria. Taylor & Francis Ltd., London. i–xiii, 1–440 pp.
- THEOBALD, W. 1868.** Catalogue of the reptiles of British Birma, embracing the provinces of Pegu, Martaban, and Tenasserim; with descriptions of new or little-known species.

Journal of the Linnean Society, Zoology 10:4–67.

- ZUG, G. R., H. H. R. BROWN, J. A. SCHULTE III AND J. V. VINDUM. 2006.** Systematics of the garden lizards, *Calotes versicolor* group (Reptilia, Squamata, Agamidae), in Myanmar: central dry zone populations. *Proceedings of the California Academy of Sciences* 35(2):35–68.
- ZUG, G. R., J. V. VINDUM & M. KOO. 2007.** Burmese *Hemidactylus* (Reptilia, Squamata, Gekkonidae): taxonomic notes on tropical Asian *Hemidactylus*. *Proceedings of the California Academy of Sciences* 58:387–405.

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**FOOD AND FEEDING HABITS OF ELACHISTODON WESTERMANNI REINHARDT, 1863**

(with one text-figure)

Feeding habits of egg-eating snakes have been described in the African egg eater, *Dasypeltis* (Gans, 1952; 1974; Gans and Williams, 1954; Das, 2002). However, there are no reports available on Indian egg eater, *Elachistodon westermanni*, which is known from Nepal, Bangladesh and India. Occurrence of the species in central India was reported by Captain et al. (2005).

No specimens of *Elachistodon westermanni* has ever been kept in captivity and there exists no notes on its habits, with the exception of Reinhardt's (1863) specimen with egg yolk [?]. I observed egg yolk in the stomach of a road-killed specimen, and also report here observations of live specimens feeding on eggs. Observations were made at Wardha (20°45'0"N; 78°37'0"E)

and Akola (20°44'0"N; 77°0'0"E), both in Maharashtra State, western India. Wardha city lies within a scrub forest. Around Akola lies extensive dry deciduous forests, in addition to scrub forests, and is a nesting site of many local bird species. The following plant species are known from the two sites: Teak (*Tectona grandis*) is the dominant species with its common associate, Lendia (*Lagestroemia parviflora*), Moyan (*Lanmea coromondolica*), Ain (*Terminalia tomentosa*), Dhawda (*Anogeissus latifolia*), Haldu (*Adina cordifolia*), Kalanb (*Mitrigyna parviflora*) and Dhaman (*Grewia tiliafolia*).

Feeding habits of *Elachistodon westermanni* reported here are based on observation made in situ in December, 2005 on two live individuals in the wild, and photographed with Nikon FM10. Videos were taken with a Panasonic GS-120 3CCD camera.

*Elachistodon westermanni* is a small, slim snake, with glossy chocolate brown to black colour. Bluish-white flecks are present on posterior of body, black checkered marking on forebody, and a florescent or cream stripe present along the middorsal line from neck to tail tip. Head is brown in colour and dark black arrow mark present on it. Ventrals are white, with brownish dots. It is primarily nocturnal, but has also been observed during the day. These snakes are not aggressive but at times, assume an s-shaped position.

For the present studies, I searched 13 nests of sparrows (*Passer domesticus*), 51 nests of bayas (*Ploceus philippinus*), eight of munias (*Lonchura malabarica*) and 11 nests of doves (*Streptopelia senegalensis*). Ultimately, I observed *Elachistodon westermanni* near the nest of the sparrow. After continuous observation, I recorded the following event. An individual of *Elachistodon westermanni*, after entering a bird nest, examined all eggs in the nest, smelled them and selected one of them, and swallowed it. The time taken for selection, swallowing and glutting was ca. 1 to 1.30 min. After taking the egg in the cervical region, a crushing sound ("Tiss") was heard. Peristaltic muscular movements of esophageal wall to move the egg contents towards the tubular stomach followed. The cervical vertebrae probably aided the crushing of the egg-shell. Similar observations are reported by Gans (1952) for *Dasypeltis*. He suggested that