



The Sarawak Museum Journal

Vol. XLIV No. 65

December 1993



ISSN: 0375-3050

E-ISSN: 3036-0188

Citation: Robert George Sprackland. (1993). The Taxonomic Status of the Monitor Lizard, *Varanus Dumerilii Heteropholis* Boulenger, 1892 (Reptilia: Varanidae). The Sarawak Museum Journal, XLIV (65): 113-122

THE TAXONOMIC STATUS OF THE MONITOR LIZARD, *VARANUS DUMERILII HETEROPHOLIS* BOULENGER, 1892 (REPTILIA: VARANIDAE)

Robert George Sprackland

(University College London, UK.)

ABSTRACT

The taxonomy of *Varanus dumerilii heteropholis* is reevaluated by examination of living and preserved lizards, including the holotypes of *V. heteropholis* Boulenger, 1892, and *V. dumerilii* (Schlegel, 1839). Characters studied included dorsal, cranial, and ventral lepidosis, nostril position, color and dorsal pattern. No morphological criteria can be found to justify the subspecies *Varanus dumerilii heteropholis*, which is placed in junior synonymy of *Varanus dumerilii*.

Keywords: *Varanus dumerilii heteropholis*, taxonomy, morphology, *Varanus dumerilii*.

THE TAXONOMIC STATUS OF THE MONITOR LIZARD,
VARANUS DUMERILII HETEROPHOLIS BOULENGER, 1892
(REPTILIA: VARANIDAE)

by

Robert George Sprackland
(University College London, UK.)

ABSTRACT

The taxonomy of *Varanus dumerilii heteropholis* is reevaluated by examination of living and preserved lizards, including the holotypes of *V. heteropholis* Boulenger, 1892, and *V. dumerilii* (Schlegel, 1839). Characters studied included dorsal, cranial, and ventral lepidosis, nostril position, color and dorsal pattern. No morphological criteria can be found to justify the subspecies *Varanus dumerilii heteropholis*, which is placed in junior synonymy of *Varanus dumerilii*.

Keywords:

Varanus dumerilii heteropholis, taxonomy, morphology, *Varanus dumerilii*.

Varanus dumerilii (Schlegel, 1839) is a large semi-aquatic, semi-arboreal lizard found throughout southeast Asia, from southern Thailand through Malaya, Sumatra, Java, and Borneo (fig. 1). Though described over 150 years ago, it remains rare in museum collections. In spite of this, *V. dumerilii* has been readily available through animal dealers since about 1976, and most of our information on the biology of the species comes from observations on captives (Sprackland, 1976, 1992; Krebs, 1977; Davis *et al.*, 1986; Radford & Paine, 1989; Visser & Horn, 1989).

Varanus dumerilii is a specialized species, having the following characters that are unique within the genus *Varanus*: 1) nasal valves, 2) a nearly completely roofed supratemporal fossa, 3) heterogeneous, round dorsal scales, and 4) a distinct dorsal pattern of broad, solid saddles. Nasal valves may be present in *Varanus mertensi* and *V. mitchelli* (pers. obs.), two other semi-aquatic monitors, but this can only be confirmed by observation of live animals. In adults of *Varanus exanthematicus*, the supratemporal fossa is also largely roofed by bone, though not nearly to the degree seen in *V. dumerilii*. In the former, the skull itself is high in the temporal region, while in the latter it is distinctly depressed.

Varanus dumerilii has frequently been confused with *V. rudicollis* (e.g., Coborn, 1987), because of the large nuchal scales in both species. Among museum specimens of *V. dumerilii* that were labelled "*V. rudicollis*" are NMW 12463 (old number 3655) and NMW 21255, the former listed under *Varanus rudicollis* by Mertens (1942: 361). However, the dorsal pattern in *V. dumerilii* is unique, consisting of a yellowish-tan dorsum with broad, dark brown saddle markings, that do not reach the venter. In contrast, *V. olivaceus* may have distinct bands, but these are narrow and touch the venter. The broad bands of the "*belli*" phase of *V. varius* are unique in having almost equally broad light and dark components, but neither form saddles.