

# Range extension and first record for Indonesia of the Kinabalu Krait, *Bungarus flaviceps baluensis* LOVERIDGE, 1938 (Squamata: Serpentes: Elapidae)

Erweiterung des bekannten Verbreitungsgebietes des Kinabalu-Kraits,  
*Bungarus flaviceps baluensis* LOVERIDGE, 1938, und Erstnachweis für Indonesien  
(Squamata: Serpentes: Elapidae)

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## KURZFASSUNG

Der Kinabalu-Krait (*Bungarus flaviceps baluensis* LOVERIDGE, 1938) wird vom Bahau-Fluß nahe des Iran-Gebirges (Kalimantan Timur, Indonesien) in Borneo gemeldet. Dieser Nachweis erweitert die bekannte Verbreitung von *B. f. baluensis*, vormals als Endemit des Mt. Kinabalu im nördlichen Borneo betrachtet, um ca. 400 km von der Terra typica und ist der erste Beleg dieses Taxons für Indonesien.

## ABSTRACT

The Kinabalu Krait (*Bungarus flaviceps baluensis* LOVERIDGE, 1938) is recorded from the Bahau River near the Iran Mts. (Kalimantan Timur, Indonesia) in Borneo. This record extends the known range of *B. f. baluensis*, previously thought to be an endemic of Mt. Kinabalu in northern Borneo, about 400 km from the area of its type locality, and is the first record of this taxon for Indonesia.

## KEY WORDS

Squamata: Serpentes: Elapidae: *Bungarus flaviceps baluensis*; biogeography; geographical distribution; range extension; new country record; Bahau River, Iran Mts., Kalimantan Timur, Indonesia; Mt. Kinabalu, Mt. Trusmadi, Sabah, Malaysia; Borneo

The Kinabalu Krait (*Bungarus flaviceps baluensis*) was described by LOVERIDGE (1938) based on three specimens from Mt. Kinabalu in northern Borneo. Since then, published records have placed these attractively coloured but poorly known elapid snakes at altitudes between 1,000 - 1,400 m above sea level in the Mt. Kinabalu area in Sabah, Malaysia (LOVERIDGE 1938; JACOBSON 1986; VOGEL & HOFFMANN 1997). Consequently, this rare taxon has been regarded as a Mt. Kinabalu endemic (JACOBSON 1986; KUCH & SCHNEYER 1996; VOGEL & HOFFMANN 1997). Recently, KUCH & GÖTZKE (2000) reported on a field observation of two *B. f. baluensis* which was made at only 550 m above sea level near Poring Hot Springs, Mt. Kinabalu. These authors also mentioned having examined a specimen of *B. f. baluensis* (Sabah Museum A011885) collected by A. LO at Mt. Trus-

madi (Hutan Simpan, 1,550 m; Tambunan/Keningau District, Inner Regency, Sabah). Based on the latter record, which extended the known range of the Kinabalu Krait about 50 km south to the next mountain peak, and the low-altitude observation at Mt. Kinabalu, KUCH & GÖTZKE (2000) suggested that the range of *B. f. baluensis* might not be restricted to a disjunct distribution on a few peaks but rather comprise a much larger area than previously assumed. In particular, these authors expected *B. f. baluensis* to occur in nearby mountain ranges in Sabah such as the Crocker Range, and speculated that these snakes might actually be widely distributed in the central mountain biogeographic unit of Borneo (sensu MACKINNON & MACKINNON 1986). After the paper by KUCH & GÖTZKE (2000) had gone to press, I had the opportunity to examine a specimen of *B. f. baluensis* which lends support to this view.

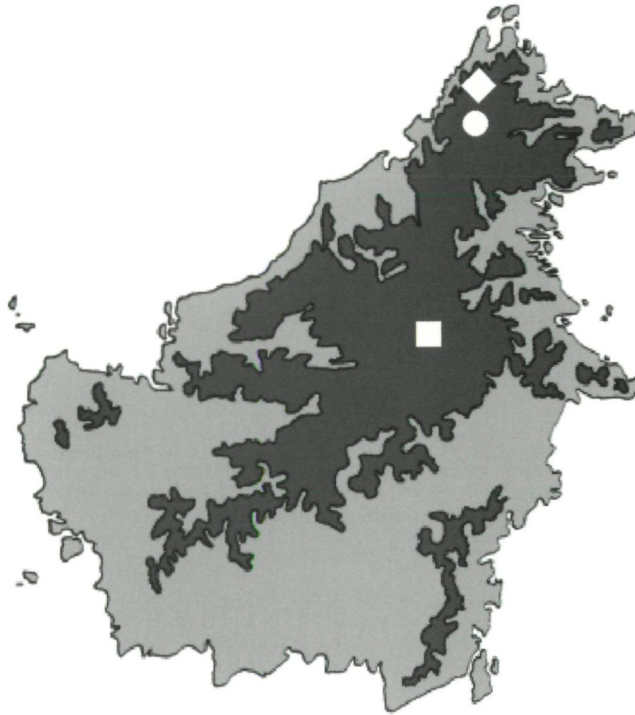


Fig. 1: Map of Borneo indicating main mountain ranges (dark) and collecting areas of *Bungarus flaviceps baluensis* LOVERIDGE, 1938.  $\diamond$  - Mt. Kinabalu,  $\circ$  - Mt. Trusmadi,  $\square$  - Bahau River near Iran Mountains.

Abb. 1: Karte von Borneo mit hauptsächlich Bergregionen (dunkel) und Fundgebieten von *Bungarus flaviceps baluensis* LOVERIDGE, 1938.  $\diamond$  - Mt. Kinabalu,  $\circ$  - Mt. Trusmadi,  $\square$  - Bahau-Fluß nahe Iran-Gebirge.

The snake in mention (Muséum National d'Histoire Naturelle, Paris 1957.816) was collected by P. PFEFFER in northeastern Borneo at the Bahau River near the Iran Mts. (Kalimantan Timur province, Indonesia), in December 1956. The altitude of the collecting locality is unknown. Mountain peaks surrounding the river valley range between 1,250 - 2,550 m. The present record extends the known range of *B. f. baluensis* about 350 km from Mt. Trusmadi and 400 km from the type locality at Mt. Kinabalu. It is the first record of the Kinabalu Krait for Indonesia. As noted previously (KUCH & GÖTZKE 2000), the discovery in other parts of Borneo of species formerly considered to be endemics of Mt. Kinabalu is not without precedence (LO 1993; INGER & TAN 1996) and likely to continue as biodiversity surveys are conducted in more poorly known regions of the island. At the same time, both

the specimen from Mt. Trusmadi and the one from the Bahau River indicate that the distinctive colouration which prompted LOVERIDGE (1938) to describe a new subspecies, is neither the result of individual variation nor the feature of a locally or regionally restricted phenotype. On the contrary, the characters which LOVERIDGE (1938) used to distinguish *B. f. baluensis* in the original description, and which caused BRONGERSMA (1948) to refer to this form as the only population of the variable *B. flaviceps* REINHARDT, 1843 that to him seemed to deserve recognition as a subspecies, are highly constant in all the specimens of *B. f. baluensis* I have so far examined (unpubl. data). Further morphological and molecular studies are hoped to elucidate the relationship between *B. f. baluensis* and *B. f. flaviceps*, which may approach parapatry or sympatry in parts of Borneo.

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