The first record of the Middle Back-stripe Bullfrog, *Kaloula mediolineata* (Anura: Microhylidae), from Phu Qui Island, Binh Thuan Province, southern Vietnam

Trung My Phung¹, Truong Quang Nguyen²,³, Anna Rauhaus⁴, Thomas Ziegler³,⁴,*

Abstract. The first record of *Kaloula mediolineata* (Smith, 1917) from Phu Qui Island, Binh Thuan Province, southern Vietnam, is provided based on photographs taken in June 2013 in primary coastal vegetation. This is the first island record and also the easternmost record of the species in Vietnam.

The Middle Back-stripe Bullfrog, *Kaloula mediolineata*, is known from mainland Thailand, adjoining southern Lao People’s Democratic Republic and Dak Lak Province in southwestern Vietnam (Taylor, 1962; Heyer, 1973; Stuart, 1999; Nutphund, 2001; Orlov et al., 2002; Chan-ard, 2003; Stuart et al. 2008). It presumably occurs more widely than current records suggest (van Dijk & Chan-ard, 2004; Stuart et al., 2008), probably also in Cambodia (Frost, 2013). This large microhylid (with a maximum SVL of 70 mm) is morphologically similar to *K. pulchra*, from which it can easily be distinguished by its white or yellow back stripe stretching from the center of the dorsum to the vent (Nutphund, 2001).

The Middle Back-stripe Bullfrog is a terrestrial species that lives in burrows and can be found in pools especially after rains (Nutphund, 2001; van Dijk & Chan-ard, 2004). It is known mostly from areas originally covered with deciduous dipterocarp forest, and has not been reported from agricultural landscapes (van Dijk & Chan-ard, 2004; Stuart et al., 2008). Breeding takes place in seasonal pools (Heyer, 1973). The lateral view of the larva is described by Chan-ard (2003). *K. mediolineata* is listed as Near Threatened in the IUCN Red List (IUCN, 2013) because this species is in significant decline as it is being over-harvested for food throughout its range; it also is suffering from habitat loss, thus making the species close to qualifying as Vulnerable (van Dijk & Chan-ard, 2004).

We herein provide the first provincial record of *K. mediolineata* from Phu Qui Island, a small island with an area of about 16 km², belonging to Binh Thuan Province, southern Vietnam, based on three individuals photographed on 3 June 2013 by TMP. Individuals were discovered in a rainy night, at about 8:00 pm, in primary coastal vegetation (10°31.600’N, 108°56.716’E), at an elevation slightly above sea level. The vegetation in the habitat had shrubs and small trees (Pandanaceae and Ebenaceae), interspersed with large volcanic rocks.

Specimens of the Middle Back-stripe Bullfrog (Vietnamese name “Enh uong vach”) from Phu Qui Island largely agree with the descriptions of the species provided by Bourret (1942), Taylor (1962), and Chan-ard et al. (2011). Characteristic features visible from the photographs were: plump body; body colouration brown-red; light coloured marking with black-brown border extending from above the eye to the groin; similar sized and coloured stripe with the same bordering colouration from middle of back to near vent; dorsal surface of the legs banded; ventral colouration yellow white; horizontal pupil; digits pointed at tips; toes about half webbed.

Merely the narrow brown transverse stripe on top of head is barely visible in the photographed specimens from Phu Qui Island and the median dorsal stripe ends T-

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¹ Dong Khoi 9A, Tam Hiep, Bien Hoa, Dong Nai Province, Vietnam.
² Institute of Ecology and Biological Resources, Vietnam Academy of Science and Technology, 18 Hoang Quoc Viet, Hanoi, Vietnam.
³ Zoological Institute, University of Cologne, Zülpicher Strasse 47b, D-50674 Cologne, Germany.
⁴ Cologne Zoo, Riehler Straße 173, D-50735, Cologne, Germany.
* corresponding author: e-mail: ziegler@koelnerzoo.de
to Y-shaped in one recorded Island specimen. However, with the current knowledge we regard these differences as minor deviations, in particular as Taylor (1962) has stated that shape and length of the dorsal / dorsolateral stripes may vary; here, only future molecular analyses together with detailed morphological examinations (we could not check further morphological diagnostic features on the island records such as, e.g., the presence of two large compressed metatarsal tubercles, with the outer one being smaller, see Taylor, 1962) must clarify whether these minor phenetical differences are in fact of taxonomic significance.

In Vietnam, *K. mediolineata* so far only has been reported from Dak Lak Province (Nguyen et al., 2009). Thus, our recent finding represents not only the first record for Binh Thuan Province and for Phu Qui Island in particular, but also the easternmost and the first island record of the species.

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References


Figure 2. Macro- and microhabitat of *Kaloula mediolineata* on Phu Qui Island, Binh Thuan Province, southern Vietnam. Photographs by T. M. Phung

Figure 3. Map showing the distribution of *Kaloula mediolineata* according to Chan-ard (2003) and Frost (2013), including our new record (marked by star) for Phu Qui Island, Binh Thuan Province, southern Vietnam.