

## SHORT COMMUNICATION

### NEW DISTRIBUTION RECORD OF *PELOPHRYNE API* DRING, 1983 (ANURA: BUFONIDAE) FROM SARAWAK, EAST MALAYSIA

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#### Photo Caption

Collared Kingfisher by Anuar Mc Afee.  
*Pelophyrne api* by Nooraina Atira Alaudin.  
Gomphidae by Wahizatul Afzam Azmi.

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**Abstract:** *Pelophyrne api* (Bufonidae), formerly only discovered at Mount Api, Mulu was recently found at the limestone of Bau, Kuching. Morphological observations of the two individuals of *P. api* discovered matched the original diagnosis description of the holotype species by Dring (1983). The habitats of the recently discovered individuals are closely similar to that of the holotype species as well, remarkably the leaves of low plants at limestone area. The recent collections of *P. api* leads to suggestion that this species may occur at other limestone areas in Borneo and further field survey at the Bornean limestone areas are needed.

Key words: *Pelophyrne api*, Mulu, Bau, Sarawak, limestone

#### Introduction

The first individual of *Pelophyrne api* was discovered at camp five, base of Mount Api, Gunung Mulu National Park in northern Sarawak and was described by Julian Dring (1983) as endemic to Borneo. This paper documents a new distribution record of *P. api* in Bau, Kuching. On 20 September 2016, at 2025 hour, two adult individuals of *P. api* (DKNP 005 (male) and DKNP 006 (female)) were encountered and collected from the trail of Simpang Kuda, in the Bau region of Kuching Division, Sarawak,

East Malaysia (N 01°24.109', E 110°10.767'). The individuals were collected under research permit no NCCD.907.4.4. (JLD 13) – 271. The toads were first photographed before being captured with bare hands. Both individuals were euthanized, before tissue samples were taken for molecular work. After the tissue isolation, the samples were fixed in 4% formalin (Zainudin *et al.*, 2010). Then, the samples were preserved in 70 % ethanol and kept at UNIMAS Museum, Kota Samarahan, Sarawak, Malaysia (Zainudin *et al.*, 2010).



Figure 1: Dorsolateral view of *Pelophyrne api*. Photo by Nooraina Atira Alaudin.

Abbreviations and conventions include BW = body weight (width at midbody); ED = eye diameter; HL= head length; HW= head width; SVL= snout-vein length; TBL= tibia length; EN= eye nostril length; IN= internarial length.

We identified both specimens as *P. api* following the original diagnosis description of the holotype species by Dring (1983): the dorsum largely black without the areas of pale pigmentation; snout truncate in dorsal view;

nostrils much closer to snout-tip than to eye; the canthus angular (curved), tympanum distinct. In addition, the individuals found also have slender fingers with bluntly rounded tips; fleshy palm web. Their dorsum are covered by small rounded tubercles (weakest in mid-dorsal region), throat wrinkled, no spinules on belly. When alive, their colours of dorsum were black with restricted pale areas; limbs with pale, broken cross bar dorsally.



Figure 2: Dorsolateral view of *P. api* (female). Photo by Nooraina Atira Alaudin.



Figure 3: Ventrolateral view of *P. api* (female). Photo by Nooraina Atira Alaudin.



Figure 4: Lateral view of *P. api* (male). Photo by Nooraina Atira Alaudin

### **Measurement**

Male (DKNP 006): SVL 16.35 mm; HL 4.49 mm; HW 4.09 mm; ED 2.36 mm; BW 6.06 mm; TBL 7.5 mm; EN 1.62 mm; IN: 1.84 mm.

Female (DKNP 005): SVL 17.69 mm; HL 4.15 mm; HW 4.18 mm; ED 2.04 mm; BW 8.04 mm; TBL 7.6 mm; EN 2.44 mm; IN: 1.88 mm.

### **Habitat**

The two individuals of toads were found at night on a leaf of a herbaceous plant at the

Trail Simpang Kuda, Dered Krian National Park. The height of the herbaceous plant was approximately 0.5 metres above ground. The distance from capture sites to the nearest water body was 1 metre. The vegetation comprised of a secondary forest, predominated by shrubs and limestone. The vertical and horizontal positions of these individuals are most similar to that as described by Dring (1983) which is on leaves from low plants at limestone area with deep holes transiently containing water.

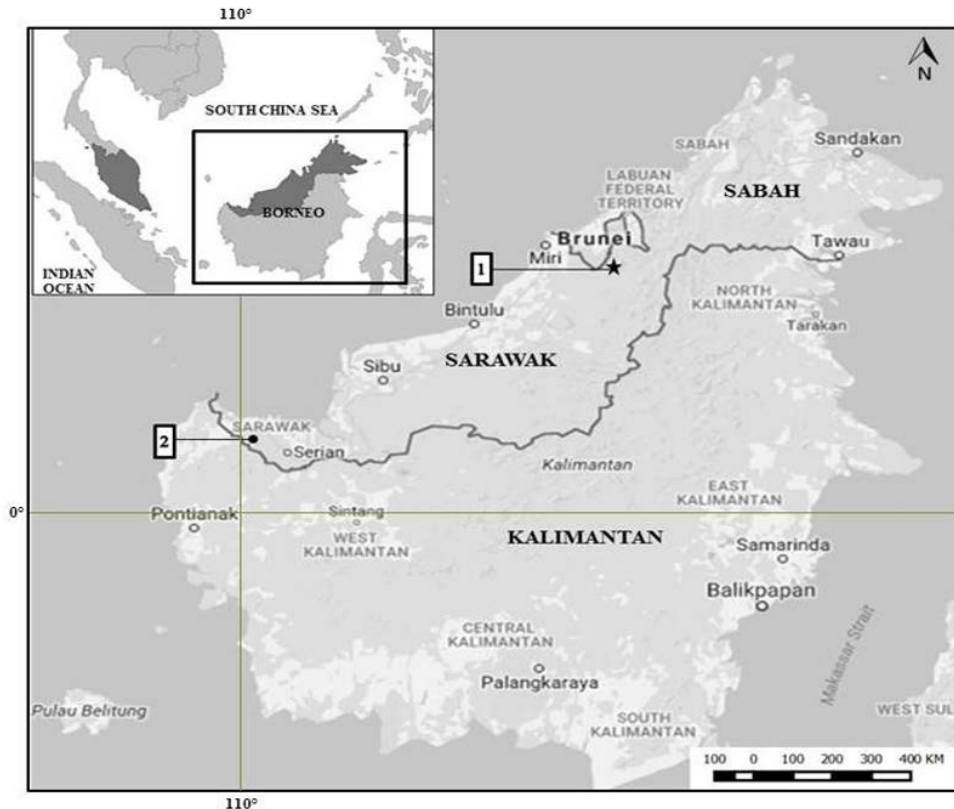


Figure 5: Geographic distribution of *Pelophryne api*. ★ = Previous record (1. Mulu National Park) and ● = current record (2. Dered Krian National Park, Bau).

The holotype species are known from Mount Api, a limestone mountain located in Gunung Mulu National Park which are 602.47km (374.36 mi) distant from the new records at Simpang Kuda, Dered Krian National Park, Bau. The knowledge of the distribution is limited and other information of this species are poorly studied. The distribution of this species might be wider at the limestone areas around Borneo. This species might be overlooked due to its minute size, sparse chorus and specific habitat. Therefore, further field survey at other Bornean limestone areas and more studies on this species are needed (Inger *et al.*, 2004).

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