On the definite occurrence of *Brachytarsophrys feae* (Boulenger, 1887) (Anura: Megophryidae) in Northern Thailand.

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The Kakhien Hills spadefoot toad (Brachytarsophrys feae) of the family Megophryidae was first described by George Boulenger in 1887 under the name Megalophrys feae. The female holotype was collected by M.L. Fea of the Genoa Civic Museum from Kakhien hills, east of Bhamo, Kakhyen Hills, Burma (= Myanmar). The original description stated as follow, Tongue broadly pyriform, feebly nicked posteriorly. Vomerine teeth in two small, widely separated groups behind the line of the choanae. Head enormous, nearly twice as broad as long, extremely depressed, regularly semicircular in outline; the length of the snout hardly equals the diameter of the eyes; nostril equally distant from the eye and from the middle of the upper lip, which does not project beyond the lower; inter-orbital space twice as broad as the upper eyelid, scarcely concave; loreal region concave, canthus rostralis feeble; temporal region very oblique; no distinct tympanum. The shape and proportions of the body and limbs resemble more those of a Pelobates than of a Megalophrys. Fingers rather short, first not extending beyond second. Toes short, with a very short web at base; no distinct subarticular tubercles; a very large, oval, flat inner

metatarsal tubercle. When the hind limb is pressed forwards against the body, the tibiotarsal articulation reaches the commissure of the jaws. Sides of body and upper surface of limbs with small warts; no longitudinal glandular folds; a fold from the eye to the commissure of the jaws; upper eyelid with small smooth warts and long conical tubercle or horn near its outer edge; a group of stellate bony deposits on each side of the parietal region; smaller dermal ossifications crowded on the anterior part of the back; lower part smooth. Olive-brown above, temporal region darker; lips, eyes, and some of the larger warts on the body, edged with black; a crossline between the orbits divides the head into a lighter anterior and a darker posterior portion; the warts on the upper surface of the tights whitish; lower surfaces dirty white, chin blackish. (Boulenger, 1887). Its generic name was sequentially changed from Megalophrys to Leptobrachium by Boulenger (1889),to Megophrys by Gee and Boring (1929) and lastly to Brachytarsophrys by Rao and Yang (1997). The last name was reasonable valid on the basis of the large and small chromosome numbers (6 + 7 type) (Rao and Yang, 1997).

This toad dwells exclusively in the high altitudinal regions (> 1,000 m msl.) of subtropical montane forest. Normally rarely found, except during the breeding season during heavy

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Fig.1 Specimens no. FMNH 20963 (collecting locality: Doi Ang- Ga = Doi Inthanon, Chiangmai)



Fig. 2 Photographs taken by K. Suwannapakdi (Aug., 2004) from Doi Inthanon, Chiangmai.





费氏短腿蟾蝌蚪(腹面)

Fig. 3 Tadpole from Doi Mae Tum, Chiang Rai.

Fig.4 Illustrations from Fei, 1999 (Feb., 2000)

rains (air temperature 13 °C and stream water temperature 14 °C), most individuals were encountered under overhanging rocks which forming shallow cavities in the middle part of shallow slow flowing streams (Wogan *et al.*, 2004)

The distribution of *Brachytarsophrys* feae is currently known from northern Myanmar (the type locality) through northern Thailand to northern Vietnam (Tam Dao) and into Sichuan and Yunnan provinces, China; expected to occur also in northern Laos (Bourret, 1937; Taylor, 1962; Ye and Fei, 1992). Concerning its geographical range in Thailand, Taylor (1962) doubted that it has been reported in Thailand, perhaps incorrectly, but it most probably occurs in the mountains of northern Thailand. T. Chanard had witnessed a specimen which is now deposited in the collection of the Field Museum of Natural History, Chicago, numbering FMNH 20963 (fig.1). From the still-intacted original label, it come from Doi Ang-Ga, Thailand, which is presently known as Doi Inthanon. We believed that this specimen was the one caught by C.R. Carpenter from the Museum of Comparative Zoology at Harward University who did his fieldwork on the gibbon of Doi Inthanon, before 1940 (Carpenter, 1940). Furthermore, one of us (K. Suwannapakdi) had found an individual of this species on the hilltribe trail on Doi Inthanon near the second checkpoint (~1,400 m msl.) in August, 2004 during a heavy rain. Though the actual toad was not collected but some photographs were taken of it (fig.2). These photographs clearly show the characters of the toad thus marking it identifiable as Brachytarsophrys feae. So we confirm that Brachytarsophrys feae does occurs in northern Thailand at Doi Inthanon, Chiangmai province.

Recently we also found two tadpoles with the total length of 45-50 mm in a small hill stream on Doi Mae Tum, Chiang Rai province in February, 2000; unfortunately the specimens are now missing. The photographs of a tadpole taken by us could show its main characters

obviously, as: oral disc terminal and funnel-shaped; head-body body dark brown, ellipsoidal in shape, about as long as wide; ventral with broad black cross bands; tail fin margins with dark spots; tail tapering gradually posteriorly with a round tail tip; (fig.3). These abovementioned characters, especially the ventral marking patterns, fit well with the illustration on page 105 of Fei 's guide book (Fei, 1999), shown as fig. 4. It surely indicates that the *Brachytarsophrys feae* dwelling at this particular site, and may be a denizen in other nearby localities in the northern montane forest of Thailand.

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