



Re-discovery and Re-description of *Ansonia penangensis* Stoliczka, 1870 (Anura: Bufonidae) from Penang Island, Malaysia

EVAN QUAH S.H.^{1,4}, L. LEE GRISMER², MOHD ABDUL MUIN³ & SHAHRUL ANUAR, M.S.¹

¹*School of Biological Sciences, Universiti Sains Malaysia, 11800, Penang, Malaysia. E-mail: evanquah@yahoo.com, sanuar@usm.my*

²*Department of Biology, La Sierra University, 4500 Riverwalk Parkway, Riverside, California, 92515-8247 USA.
E-mail: lgrismer@lasierra.edu*

³*Centre for Drug Research, Universiti Sains Malaysia, 11800, Penang, Malaysia. E-mail: mamuin@gmail.com*

⁴*Corresponding author*

Abstract

Ansonia penangensis Stoliczka 1870 is re-discovered from its type locality in Penang Hill from Penang Island, Malaysia after more than a century. The species was previously known only from the type series; two adults and a larval series collected in 1898, and had not been recorded since. An expanded description of this species is provided, based on four recently acquired specimens and corroborate the morphological differences between *Ansonia penangensis*, *A. malayana* and *A. jeetsukumarani*, with which *A. penangensis* has been confused.

Key words: Bufonidae, *Ansonia penangensis*, Penang Island, Malaysia, re-discovery

Introduction

The genus *Ansonia* consists of at least 26 species of small to medium sized, forest, stream-dwelling toads (Frost 2009). The common name of the genus, slender toads, arises from their slender appearance of the species (Inger & Tan 1996). *Ansonia* have long slender limbs with bulbous finger tips, adaptations for their scansorial lifestyle be it on rocks or vegetation. The genus *Ansonia* range from India and throughout Southeast Asia from north and central Thailand (Matsui *et al.* 1998; Matsui *et al.* 2005), southward through Peninsular Malaysia (Grismer 2006a,b; Wood *et al.* 2008), Borneo (Malkmus *et al.* 2002), Sumatra (Iskandar & Mumpuni 2004) and part of the Philippines (Alcala & Brown 1998). Seven species occur in Peninsular Malaysia i.e., *Ansonia endauensis*, *A. jeetsukumarani*, *A. latiffi*, *A. latirostra*, *A. malayana*, *A. penangensis* and *A. tiomanica* (Wood *et al.* 2008). Of these, *Ansonia penangensis* and *A. tiomanica* are endemic to Penang and Tioman Island respectively. The tadpoles of *Ansonia* are specially equipped with powerful oral suckers for clinging onto rocks in fast flowing water (Inger 1985; Inger 2005; Matsui *et al.* 2005; Matsui *et al.* 2007; Matsui *et al.* 2009; Van Bocxlaer *et al.* 2009)

Owing to their similar appearance, *Ansonia penangensis* has been confused with *A. malayana* and *A. jeetsukumarani*. *Ansonia penangensis* was reported from Fraser's Hill, Pahang by Smith (1922) and from Ulu Tahan, Pahang by Berry (1975) although these populations have been re-assigned to *A. jeetsukumarani* and *A. latiffi* respectively (Wood *et al.* 2008). Additionally, Dring (1979) remarked that *Ansonia penangensis* and *A. malayana* were similar in color-pattern, webbing and body ratios and went on to note that they differed only in body size. More recently, these species have been shown to be morphologically and genetically distinct from each other (Grismer 2006b; Matsui *et al.* 2009).

Penang Island is located off the northwest coast of Peninsular Malaysia. Two *Ansonia* species have been recorded from the island; *A. malayana* and *A. penangensis* (Boulenger 1912; Berry 1975). *Ansonia malayana* is widely distributed on the Malay Peninsula and Southern Thailand while *A. penangensis* is endemic to the island of Penang (Grismer 2006a,b; Wood *et al.* 2008; Matsui *et al.* 2009). *Ansonia penangensis* was described on the basis of four specimens collected from Penang Island (Stoliczka 1870), but, no metamorphosed adult specimens of the