

Notes on the Recorded Localities for *Lygosoma isodactylum* (Günther, 1864) (Squamata, Scincidae)

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ABSTRACT: The localities of the thirteen known specimens of *Lygosoma isodactylum* are listed, including two new records. Earlier records based on mistaken identity are discussed.

KEY WORDS: *Lygosoma isodactylum*, Lygosomine skink.

INTRODUCTION

In 1864 Günther first described *Lygosoma isodactylum* as *Eumeces isodactylus* from a single specimen collected by Mouhot in Cambodia. This species was not reported again for seventy-one years, until Smith (1914) found it in Lopburi, in Nakhon Sawan. Smith (1935) mentioned "from Ayutthaya to Paknam Po (Nakhon Sawan)" in distribution remarks with no specific locality for Ayutthaya. Taylor (1963) recorded a specimen in Saraburi, Thailand. For 49 years after Taylor (1963), no other specimens or localities have been reported.

Cox, *et al.* (1998) included *Lygosoma isodactylum* in their photographic guide; however, the picture included was not of *L. isodactylum*; it was of *L. corpulentum*. Nabhitabhata *et al.* (2000) and Nabhitabhata and Chan-ard (2005) gave localities for *L. isodactylum*; however, no photographs or voucher specimens exist

from these localities other than those of Günther (1864), Smith (1914) and Taylor (1963). Geissler *et al.* (2011) noted that their distribution includes southeast Thailand, but the only recorded locality appears to be of a specimen that was later identified as *Lygosoma angeli* (Cota *et al.*, 2011). There are no other localities reported in Thailand, except the aforementioned references, which are all in central Thailand.

During a review of lygosomine skinks conducted by Geissler *et al.* (2011), the Natural History Museum, National Science Museum, Thailand (THNHM) was asked for assistance in finding *Lygosoma isodactylum*. No specimens were found in the collection at that time. Later in the year, unfortunately, after the review was published, a specimen was found among other specimens of the *Lygosoma* genus. This specimen was from the same province, Saraburi, that Smith (1935) and Taylor (1963) had recorded this species. Later in the

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year, Thailand experienced flooding throughout the low lying northern and central regions of the country, that was more severe than been experienced in a century. Fossorial creatures that are rarely ever seen were not only forced to the surface, but they were forced to swim, where they were easily seen on the surface of the water. One specimen of

Lygosoma isodactylum was found in this manner in the province of Ayutthaya. The importance of these specimens acquired by the Natural History Museum, National Science Museum, Thailand, is that they represent only the fourth time this species has been recorded in the nearly 150 years this species has been known to science.

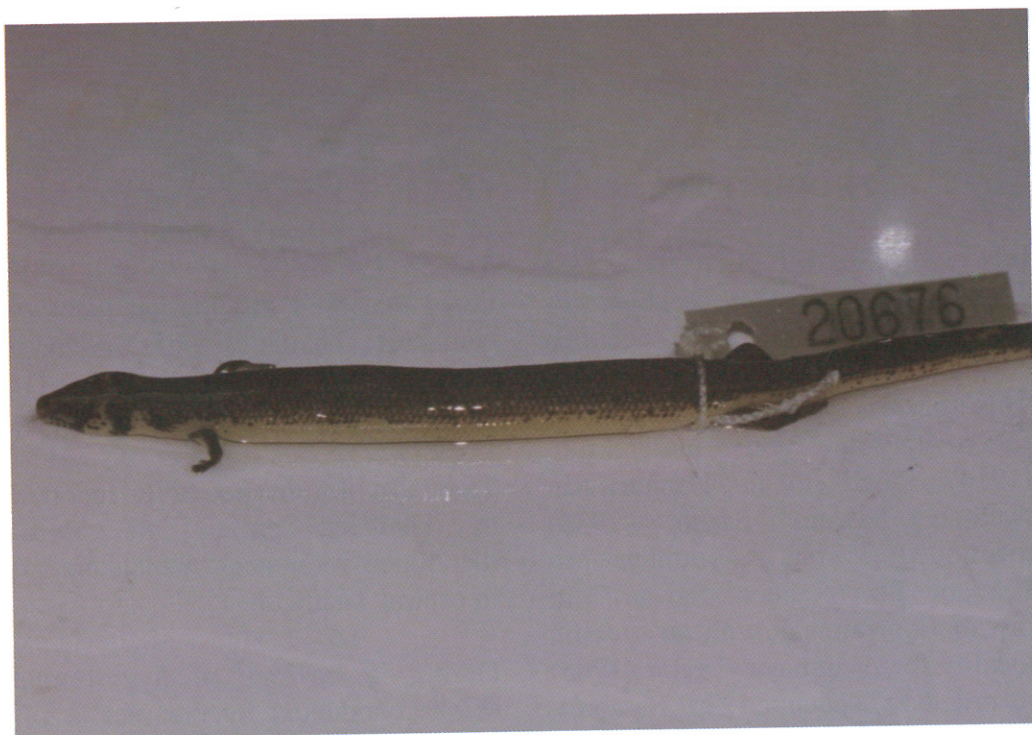


Figure 1. Dorsal-lateral view of *Lygosoma isodactylum* THNHM 20676 from Ayutthaya Province.



Figure 2. Frontal-lateral close up of *Lygosoma isodactylum* THNHM 20676 from Ayutthaya Province.

MATERIALS AND METHODS

The collection of the lygosomine skinks in the Natural History Museum, Thailand, National Science Museum was examined. It was determined that skinks previously identified as *Lygosoma isodactylum* were actually *L. angeli* THNHM 07070 as recorded in Cota, *et al.* (2011) or *L. khoratense* found in this study. A specimen labeled *L. khoratense* was found to be *L. isodactylum*. There are currently two specimens of *L. isodactylum*: THNHM 20676 from Racha Kram, Bangsai, Ayutthaya, collected on 9 October 2011 and THNHM 07412 from Nong Khae, Saraburi, collected by Wachiraphon Funan on 16 July 2005.

RESULTS AND DISCUSSION

The new locality in Ayutthaya appears to support the hypothesis of Bourret (2009), as stated by Geissler *et al.* (2011), which states that this species could be found in disturbed areas, such as agricultural areas.

Concerning the distribution of *L. isodactylum* in southeastern Thailand, as stated in Geissler *et al.* (2011). This was most likely in reference to Nabhitabhata *et al.* (2003) and Nabhitabhata and Chan-ard (2005), in which there was a voucher specimen THNHM 07070 labeled as *L. isodactylum*. If there was an assumption that *L. isodactylum* is in southeastern Thailand, it appears to be a logical assumption. The only

collected specimens on record are one specimen from Cambodia (Günther, 1864), nine from central Thailand (Smith, 1914) and the two from central Thailand, one from Taylor (1963) and two from this study, so the existence of localities

between two areas is highly probable, since there are no significant geographic features and apparent specific habitat or ecological requirements that would cause a separation or cause it only to exist in isolated populations.

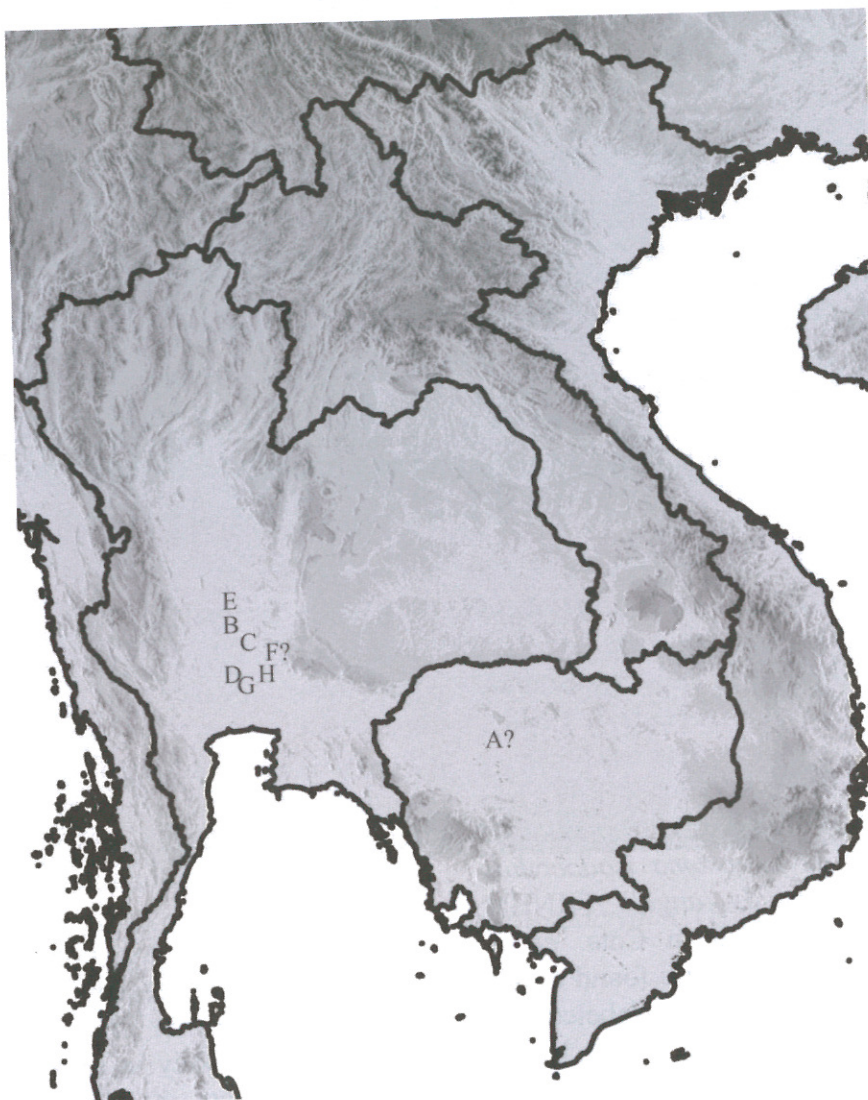


Figure 1. Localities of *Lygosoma isodactylum*: A? Cambodia (Günther, 1864), B. Sanam Cheng, Lopburi; C. Lopburi Train Station, Lopburi; D. Samkok, Nakhon Sawan; E. Chong Khae Train Station, Nakhon Sawan (Smith, 1914); F? Saraburi (Taylor, 1963); G. Nong Khae, Saraburi; H. Bangsai, Ayutthaya (this study).

In total, there are 14 specimens that have been recorded from 6 localities. The localities are in Cambodia (specific locality unknown)- 1 specimen (Günther, 1864), which is the holotype; Sanam Cheng, Lopburi- 2 specimens ; Lop Buri Train Station, Lopburi- 1 specimen; Samkok, Nakhon Sawan- 2 specimens; Chong Khae Train Station, Nakhon Sawan (Smith, 1914); Saraburi (specific locality unknown)- 2 specimens (Taylor, 1963); and Nong Khae, Saraburi- 1 specimen; and Bangsai, Ayutthaya- 1 specimen (this study). These localities are shown in Figure 1.

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