

## First record of *Argyrophis muelleri* (Schlegel, 1839) (Serpentes: Typhlopidae) from Pulau Langkawi, Malaysia

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**RESUMEN:** *Argyrophis muelleri* (Serpentes: Typhlopidae) es una serpiente ciega ampliamente distribuida en el sureste de la región Indomalaya. En esta nota reportamos esta especie en la isla de Pulau Langkawi, Malasia, donde solo se habían registrado otras dos especies de serpientes ciegas. Nuestro hallazgo eleva a tres el total de especies de la familia Typhlopidae en Pulau Langkawi.

The genus *Argyrophis* (Serpentes: Typhlopidae) comprises 12 species of blind snakes distributed over the Indomalayan region (Das,

2012; Pyron & Wallach, 2014). In Peninsular Malaysia only three species have been recorded: *Argyrophis diardii* Schlegel, 1839; *A. klemmeri* Taylor, 1962 and *A. muelleri* Schlegel, 1839 (Cox *et al.*, 1998; Das, 2012; Wallach *et al.*, 2014; Uetz, *et al.*, 2022).

*Argyrophis muelleri* is distributed in Brunei Darussalam, Cambodia, Indonesia (Sumatra, Bangka, Nias, Weh, Borneo, Kalimantan, Papua), Malaysia, Myanmar, Pulau Pinang, Singapore, Thailand and Vietnam (Wallach, 2001; Pauwels & Sumontha, 2003; Das, 2012; Baker & Bee Choo, 2014; Wallach *et al.*, 2014; Grismer *et al.*, 2017; Uetz, *et al.*, 2022), where it occurs from lowland to mountainous areas in a wide range of habitats, such as forests, forest plantations, and wet crops (David & Vogel, 1996). Despite its wide distribution, it is considered a relatively uncommon species, which is likely derived from its secretive behaviour: nocturnal and fossorial (David & Vogel, 1996; Grismer *et al.*, 2017).

During a field trip carried out across the island of Pulau Langkawi (Malaysia), on September 25<sup>th</sup>, 2017 at 20:00 h, a single specimen of *A. muelleri* (Figure 1) was observed in a forest of the Gunung Raya mountain (6°22'08.6"N / 99°49'17.5"E; 734 masl) (Figures 2 and 3).



**Figure 1:** Recorded specimen of *Argyrophis muelleri* from Gunung Raya, Pulau Langkawi Malaysia: a) General view; b) Detail of the head.

**Figura 1:** Especimen de *Argyrophis muelleri* en Gunung Raya, Pulau Langkawi Malasia: a) Vista general; b) Vista detallada de la cabeza.



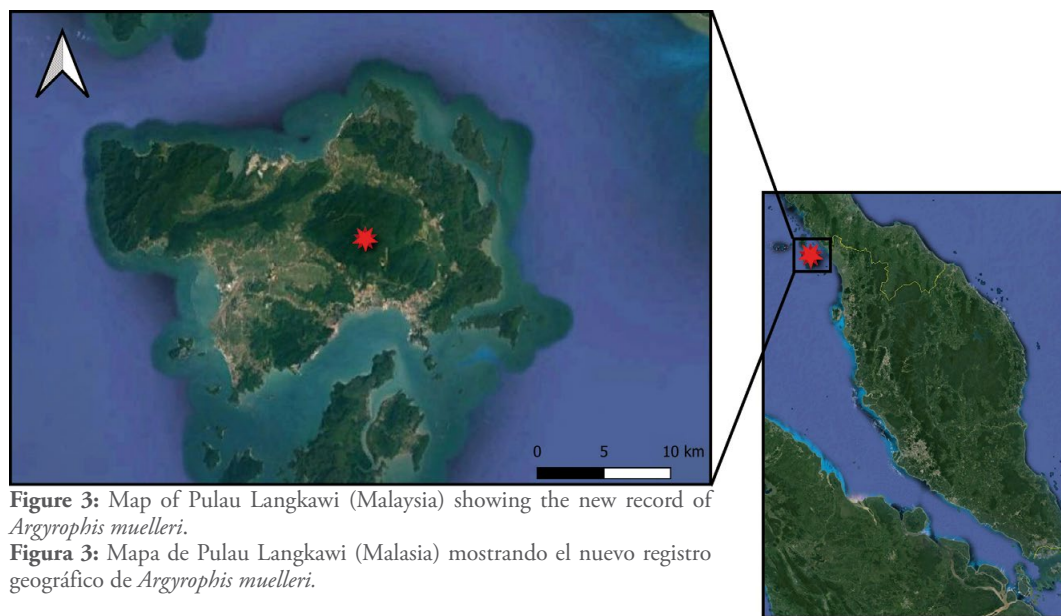
**Figure 2:** Habitat where the specimen of *Argyrophis muelleri* was found. Gunung Raya, Pulau Langkawi, Malaysia.  
**Figura 2:** Hábitat donde se encontró el ejemplar de *Argyrophis muelleri*. Gunung Raya, Pulau Langkawi, Malaysia.

The habitat, located in the Sunda Shelf bioregion (Wikramanayake *et al.*, 2002), was dominated by hardwood trees, such as *Gluta*, *Shorea*, *Ficus*, and *Diospyros* (Ehwan *et al.*, 2018) (Figure 2). This area is characterized by strongly seasonal climatic conditions, with a maximum tempe-

perature of 34.5°C, a minimum of 22.5°C, and a month mean precipitation that varies from 69 to 870 mm (Daucus *et al.*, 2006).

The specimen was found actively wandering on the ground, at 26°C of air temperature. The total length of the specimen was around 35 cm, and showed morphological features consistent with those described by Niyomwan *et al.* (2001), Wallach *et al.* (2014), and Hedges *et al.* (2014) for *A. muelleri*: scales on the head without marked depressions, with evident glands along the sutures; eyes visible; parietal scales at least twice as wide as deep; dorsal side blackish, and creamy whitish on the belly, with well-defined edges between the dorsal and ventral colour patterns. The combination of these traits unambiguously attributed the specimen reported here to *Argyrophis muelleri*.

The discovery of *A. muelleri* on Gunung Raya, Pulau Langkawi represents the first record of the genus *Argyrophis* in Pulau Langkawi, raising the total number of blind snakes in this Island to three, as only two



**Figure 3:** Map of Pulau Langkawi (Malaysia) showing the new record of *Argyrophis muelleri*.  
**Figura 3:** Mapa de Pulau Langkawi (Malasia) mostrando el nuevo registro geográfico de *Argyrophis muelleri*.

species of blind snakes were previously known from Pulau Langkawi: *Indotyphlops braminus* (Daudin, 1803) and *Ramphotyphlops lineatus* (Schlegel, 1839) (Grismer *et al.*, 2006; Ibrahim *et al.*, 2006; Ehwan *et al.*, 2016). This finding suggests that the true extent of the herpetofaunistic diversity in the Langkawi Archipelago, with its about 106 satellite islands, is still underestimated. We also highlight the need for additional field surveys across the Langkawi archipelago to improve the knowledge on the species composition and diversity

while promoting and ensuring the conservation of the region. The lack of biological data for *A. muelleri* from its distribution range highlights the need of future research to contribute to a better understanding of the natural history and conservation status of this enigmatic species, currently catalogued as “Least concern” in the IUCN Red List (Grismer *et al.*, 2017).

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