

## First Record of *Amblyomma helvolum* Koch (Ixodidae: Amblyomminae) Parasitism on *Diploderma swinhonis* (Günther) (Agamidae: Draconinae) on the Main Island of Taiwan

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**Abstract.** This article presents the first recorded instance of the reptile tick *Amblyomma helvolum* infesting Swinhoe's Japalure (*Diploderma swinhonis*) on the main island of Taiwan. Prior to this, the only published record of *A. helvolum* infestation on *D. swinhonis* was from Orchid Island.

**Key words:** ectoparasite, Ixodidae, new island record, Squamata.

*Diploderma swinhonis* (Günther) (Swinhoe's japalure), commonly known as Swinhoe's Japalure, is an endemic lizard species native to Taiwan and its adjacent islands, such as Orchid Island and Green Island (Ota 1991). Originally described in the genus *Japalura*, it was subsequently reclassified under the genus *Diploderma* (Wang et al. 2019). This diurnal species has a wide distribution, primarily found at elevations below 1,500 meters, spanning various habitat types (Ota 1991). Its diet primarily consists of small invertebrates (Norval et al. 1991). Additionally, *D. swinhonis* has been identified as a host for several parasitic invertebrate groups, including Ixodida, Nematoda, and Pentastomida (Norval et al. 2014; Amarga et al. 2023).

On July 13, 2023, an adult *D. swinhonis* was collected from Bitan (24°57'14.8" N, 121°31'59.0" E), Xindian District, New Taipei City, Taiwan. An engorged tick larva was found on the lizard's lateral torso (Fig. 1A) and was preserved in 95% ethanol. This larva was identified as *Amblyomma helvolum* Koch (Ixodida: Ixodidae: Amblyomminae) based on Kawk et al. (2023) (Fig. 1B). The species is widely distributed in the Oriental and Australasian regions and has been recorded in multiple countries, including Indonesia, Laos, Malaysia, the Philippines, Singapore, Taiwan, Timor Leste, and Vietnam (Robbins 2005; Petney et al. 2019; Amarga et al. 2022; Oda et al. 2022; Kwak et al. 2023). It primarily parasitizes Squamata but has been found on mammals and testudines in rare cases (Guglielmone et al. 2020; Oda et al. 2022). The Taiwanese records on reptiles were summarized in Amarga et al. (2023). The first documentation of *A. helvolum* parasitizing *D. swinhonis* was in 2021 on Orchid Island, southeast of Taiwan (Amarga et al. 2023). In addition, we hypothesize that *A. helvolum* may also infest other *Diploderma* species that coexist with *D. swinhonis* such as *D. brevipes* (Gressitt) and *D. polygonatum* Hallowell.

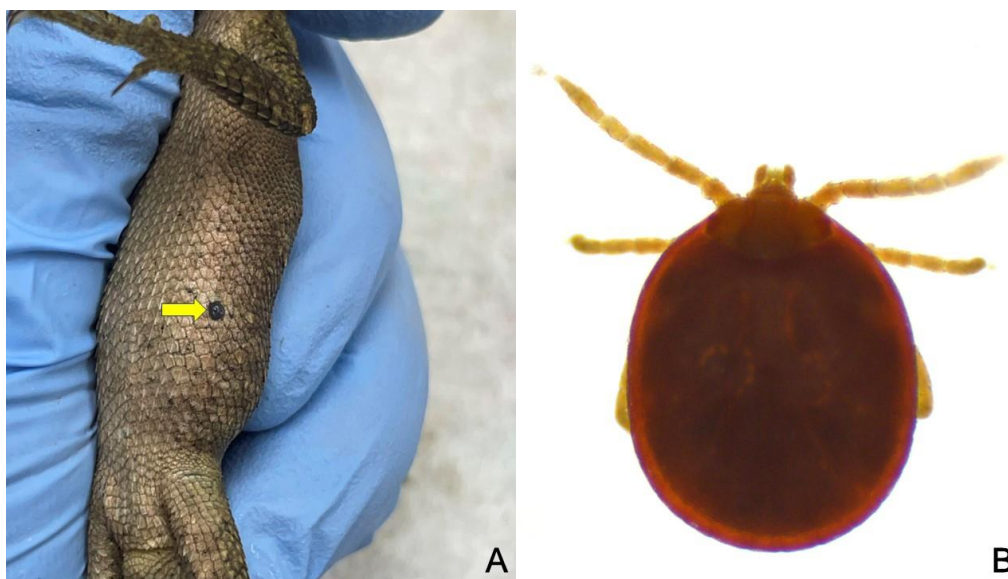


Figure 1. *Amblyomma helvolum* larva on *Diploderma swinhonis*: (A) attachment site on the lower torso (yellow arrow); (B) dorsal habitus of the specimen.

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## 臺灣本島首次記錄南蛇花蜱（硬蜱科：花蜱亞科）寄生於斯文豪氏攀蜥（飛蜥科：飛蜥亞科）

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**摘要：**本文報導臺灣本島的南蛇花蜱 (*Amblyomma helvolum*) 寄生於斯文豪氏攀蜥 (*Diploderma swinhonis*) 的首次紀錄。在本文發表之前，臺灣唯一的南蛇花蜱寄生於斯文霍氏攀蜥的紀錄來自蘭嶼。

**關鍵字：**體表寄生生物、硬蜱科、島嶼新紀錄、有鱗目