

## First distribution record of *Schildia* Aldrich, 1923 (Insecta: Diptera: Asilidae: Leptogastrinae) for Colombia

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**ABSTRACT:** The presence of the genus *Schildia* Aldrich, 1923 is reported for the first time in Colombia. A female specimen of *S. microthorax* Aldrich, 1923 was discovered in the Museo de Entomología de la Universidad del Valle (MUSENUV), collected on the university campus. A complete photographic record of the reviewed specimen is provided.

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Asilidae is one of the most speciose lineages among Diptera (Artigas and Hengst 1999) and is in fact the third most speciose family of Diptera (Pape et al. 2011). Hull (1962) mentions that 4566 species have been described, grouped in 409 genera. However, recently Geller-Grimm (2004) in a family catalogue, reported 7003 described species, grouped in 528 genera and Pape et al. (2011) report 7,531 species in 555 genera. Asilidae are found throughout the world with high species numbers registered in both tropical rainforests as well as dry environments. Historically, the number of subfamilies varied depending on the author and until recently, eleven subfamilies had been accepted: Apocleinae, Asilinae, Dasypogoninae, Dioctriinae, Laphriinae, Laphystiinae, Leptogastrinae, Ommatiinae, Stichopogoninae, Stenopogoninae and Trigonomiminae (Papavero 1973; Artigas and Papavero 1988; Lehr 2002; Dikow 2004). However, in the most comprehensive phylogenetic analysis of Asilidae to date, Dikow (2009), using morphological characters, recognizes 14 taxa. While Laphystiinae are included in Laphriinae and Apocleinae in Asilinae five taxa were elevated to subfamily status, i.e., Bathypogoninae, Brachyrhopalinae, Phellinae, Tillobromatinae and Willistonininae.

The genus *Schildia* Aldrich, 1923 is placed in the Leptogastrinae, but differs from other leptogastrine Asilidae by its wings with trichoid spicules (similar to erect setae) on veins R and M, tarsi with the outer claw distinctly longer than the inner one, and the scutum with several pairs of setae (presutural and postsutural dorsocentral, notopleural and supraalar) (Dikow and Bayless 2009; Fisher 2009). Currently, there are ten recognized species of *Schildia* reported from the Afrotropical, Neotropical and Oriental regions. Its center of diversity is found in the Neotropical Region with seven species distributed

from Guatemala to Brazil and Jamaica, a extinct species preserved in Dominican amber from the Miocene has recently been described from Hispaniola island by Dikow & Bayless (2009). In the Afrotropical Region only one species is known from Madagascar and one from the Oriental Region on the Malaysian Peninsula (Dikow and Bayless 2009).

*Schildia microthorax* is the type species, which was described by Aldrich in 1923 from Costa Rica. This species is distinguished from others by the medially very narrow face, as narrow as the width of an adjacent ommatidium (Figure 1), R1 reaching C more distally than R5 (Figure 2) and uniformly brown metathoracic tibia (Figure 3) (Aldrich 1923; Dikow and Bayless 2009). This species is widespread in the Neotropical Region being found in Brazil, Costa Rica, Panama, Peru, Trinidad and Tobago, and Venezuela (Dikow and Bayless 2009). Dikow and Bayless (2009) mention that *Schildia* may be present in Colombia based on the known distribution, but extant specimens had not been examined at the time.

We found a female of *S. microthorax* deposited in the Museo de Entomología de la Universidad del Valle (MUSENUV). Collected in the department of Valle del Cauca, municipality of Santiago de Cali, campus of the Universidad del Valle, 3°22' N, 76°32' W, 1000 m, caught with handnetted on April 18, 1994 by E. Trochez. MUSENUV-18001. It is noteworthy that on the university campus can be found vegetation corresponding to life zone of tropical dry forest. The determination of the specimen was completed using the key provided by Dikow and Bayless (2009). This finding is the first record of the genus and *S. microthorax* from Colombia and therefore extends the distribution of both the genus and the species to include this biodiversityrich country.



FIGURES 1-3. Adult female of Schildia microthorax. 1, head; 2, wing; 3, lateral view.

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