

# Araneidae: *Eustala*

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*Eustala* is a New World araneid genus, which seems to be extremely diverse on the mainland Americas, and poorly known from the Caribbean (Fig. 1). Its taxonomy is unresolved and its monophyly untested, but it can easily be diagnosed from other araneids, albeit only by genitalic characters (Fig. 2). Levi did not revise this genus, hence the diversity here is only estimated, but it is likely that *Eustala* may represent the species richest Neotropical araneid genus (see Kuntner and Levi, 2007). Hence, the Caribbean diversity and endemism may be grossly underestimated.



Fig. 1. Distribution of likely *Eustala* species, based on real diversity (90+) listed in Platnick (2011) and additional unknown diversity (estimation).

**Monophyly.** Likely, though untested.

**Amber species.** None (Platnick, 2011).

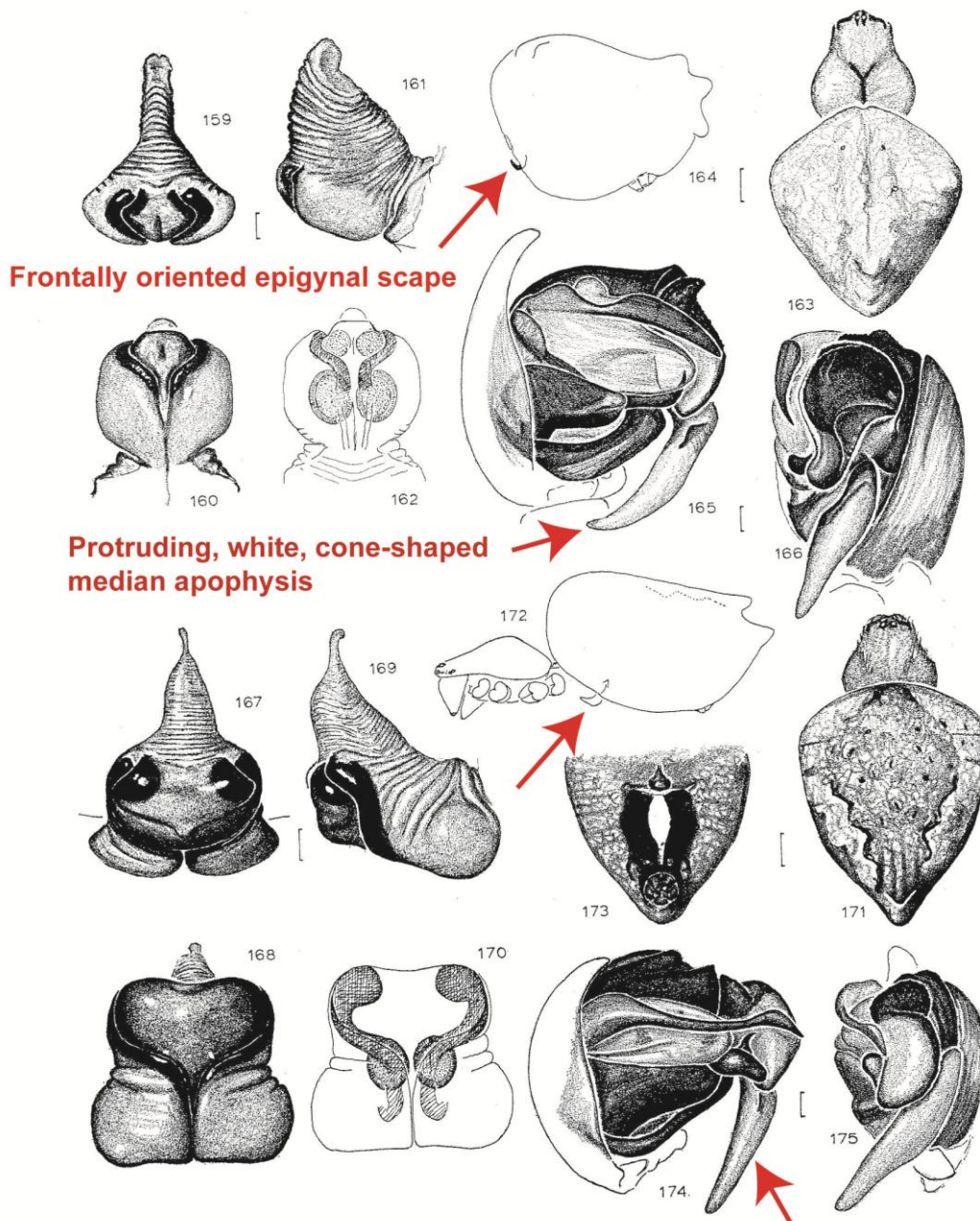
**Dispersal.** *Eustala* are thought to be intermediate dispersers.

**Search strategy.** *Eustala* species make orb webs in vegetation, and are easily spotted due to their conspicuous size (females 3.5 - 12 mm, males 2.5 - 7 mm). The best strategy is to search visually at night, when they sit at the hub of their webs.

**Similar genera.** Many other medium sized araneids may have similar webs occupying the same niche. *Metazygia*, *Araneus*, *Larinia*, and *Eriophora* may resemble *Eustala*. Thus, it may be challenging for the non-specialist to recognize immature *Eustala*. Best to collect all araneids.

**Needed collecting.** All areas are in need of new collecting, especially for DNA-ready material.

FROM: Levi, H.W. 1977. The American orb-weaver genera *Cyclosa*, *Metazygia* and *Eustala* north of Mexico (Araneae, Araneidae). Bulletin of the Museum of Comparative Zoology 148:61–127.



Figures 167–175. *Eustala bifida* F.P.–Cambridge: 167–170. Epigynum: 167. Ventral. 168. Posterior. 169. Lateral. 170. Posterior, cleared. 171. Female carapace and abdomen. 172. Female, legs removed, lateral. 173. Female abdomen, ventral. 174, 175. Male palpus: 174. Mesal. 175. Ventral.  
Scale lines. 0.1 mm except Figs. 163, 164, 171–173, 1.0 mm.

Fig. 2. Although species of *Eustala* show various forms of habitus, they may easily be diagnosed by genitalic characters: the frontally oriented epigynal scape in females and the protruding, white, cone-shaped median apophysis in males (Levi, 1977; Kuntner and Levi, 2007).

## References

- Kuntner, M. & H. W. Levi. 2007. *Nephila hirta*, a new synonym of *Eustala fuscovittata* (Araneae, Araneidae). *J. Arachnol.* **34**: 444–447.
- Levi, H. W. 1977. The American orb-weaver genera *Cyclosa*, *Metazygia* and *Eustala* north of Mexico (Araneae, Araneidae). *Bull. Mus. comp. Zool. Harv.* **148**: 61–127.
- Platnick, N. I. 2011. The world spider catalog, version 11.5. American Museum of Natural History, online

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