Salticidae: Corythalia/Anasaitis

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Both are New World salticid genera belonging to the subfamily Euophryinae. They are small to medium spiders usually with iridescent scales. *Corythalia* is very speciose, with 70 extant species and three fossil species. Probably many more remain undescribed. Most species are distributed in Central and South America, but a few species are endemic to Caribbean. *Anasaitis* is the sister group of *Corythalia*, but less speciose. So far, 21 extant species are known with most endemic to Caribbean and a few reported from Central and North America.



Fig. 1. Distribution of Corythalia/Anasaitis, from Platnick (2011) and Zhang (PhD thesis, in prep.).

Monophyly. The monophyly of the group with *Corythalia* and *Anasaitis* is well supported by the molecular phylogeny, and they both are monophyletic groups (J. Zhang, PhD thesis, in prep.).

Amber species. Three *Corythalia* species are reported from Dominican amber. However, we haven't examined the type materials yet, so whether they are *Corythalia* is still uncertain.

Dispersal. Corythalia/Anasaitis are probably intermediate dispersers. Their distribution pattern in Caribbean Islands is unclear. Extensive collecting may find many more species from the Caribbean than we currently know.

Search strategy. Most of them are ground dwellers and can be found on leaf litter or on rock. Some can be found by beating foliage and a few species are associated with bromeliads.

Similar genera. *Corythalia* and *Anasaitis* are usually easy to distinguish from other jumping spiders in the Caribbean. It is sometimes hard to tell them apart in the field. But they are usually distinguishable by examining the genitalia: *Corythalia* has long and coiled embolus in male and obvious epigynal window in female; whereas *Anasaitis* usually has very short and non-coiled embolus in male, and no obvious window structure in the epigynum of female (see Fig. 2, 3).

Needed collecting. Materials from almost all areas in Caribbean are needed, especially for the DNA work. More sampling of *Corythalia* species from Central and South America will also be useful.



Fig.2. A-H, some species of *Corythalia* (A, C, F, H are females); I-M, male palp and female epigyne; N-O, male carapace; P, chelicera.



Fig.3. A-J, some species of *Anasaitis* (C, E, F, I are females); K-P, male palpi and female epigyne.

References

Platnick, N. I. 2011. The world spider catalog, version 11.5. American Museum of Natural History, online at http://research.amnh.org/entomology/spiders/catalog/index.html

Zhang, J. X. 2011. PhD Thesis: The phylogeny and temporal divergence of Euophryinae (Araneae: Salticidae), with implication on historical biogeography and genitalic evolution. (in prep.)