

# Theridiidae: Argyrodinae (*Argyrodes*, *Faiditus*)

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Argyrodine theridiids are found worldwide and are quite species rich in Central and S. America but poorly known from the Caribbean. The genera, in the Americas, currently count about 60 extant species plus 3 in Dominican amber. Both genera were revised by Exline and Levi, however, Levi had a tendency to lump and underestimated species richness, which is surely above 100 in the Americas. Of *Argyrodes* only 5 known species are in the Americas, 3 of these occur throughout the Americas including the Caribbean. Widespread species show lots of variation, hinting at undocumented diversity. Of *Faiditus* about 55 extant species occur in the Americas, thereof 7-8 endemic to the Caribbean. At least 4 additional widespread 'species' occur in the Caribbean. No Caribbean island has been well sampled, such that I cannot begin to estimate the number of undocumented species.



Fig. 1. Distribution of the Argyrodines *Argyrodes* and *Faiditus*, extracted from Platnick (2011). Widespread species may represent either species complexes or superb dispersers.

**Monophyly.** The two genera are likely each monophyletic, supported by dramatic modifications of the clypeus, however they do not form a clade (they are not sister genera). No molecular tests of Levi's species concepts have been attempted, high variation in widespread 'species' is of interest.

**Amber species.** Two *Argyrodes* and one *Faiditus* are known from Dominican amber. I have not examined these fossils and do not know if they are close to extant species.

**Dispersal.** Argyrodines are found on most islands worldwide indicating excellent dispersal ability. The many widespread species found in the Caribbean suggest the same, however, species limits remain to be tested. Given good dispersal abilities I expect to find these on virtually all islands visited by the project

**Search strategy.** Most species are fairly small (2-8 mm body length) but very readily found and collected as they live exclusively as kleptoparasites in webs of large orbweavers. Most webs of *Nephila* (widespread in the Caribbean) contain argyrodines. Also common in webs of *Cyrtophora*, and other long lasting non-orb webs. **VISUAL SEARCH, LARGE ORBWEBS**

**Similar genera.** Difficult to confuse with anything, but best to collect all kleptoparasites.

**Needed collecting.** All areas are in need of new collecting, especially for DNA-ready material. Collections from Florida, Mexico, C. America and northern S. America will be particularly important to

test species limits in 'widespread species'. Galapagos would be a bonus.

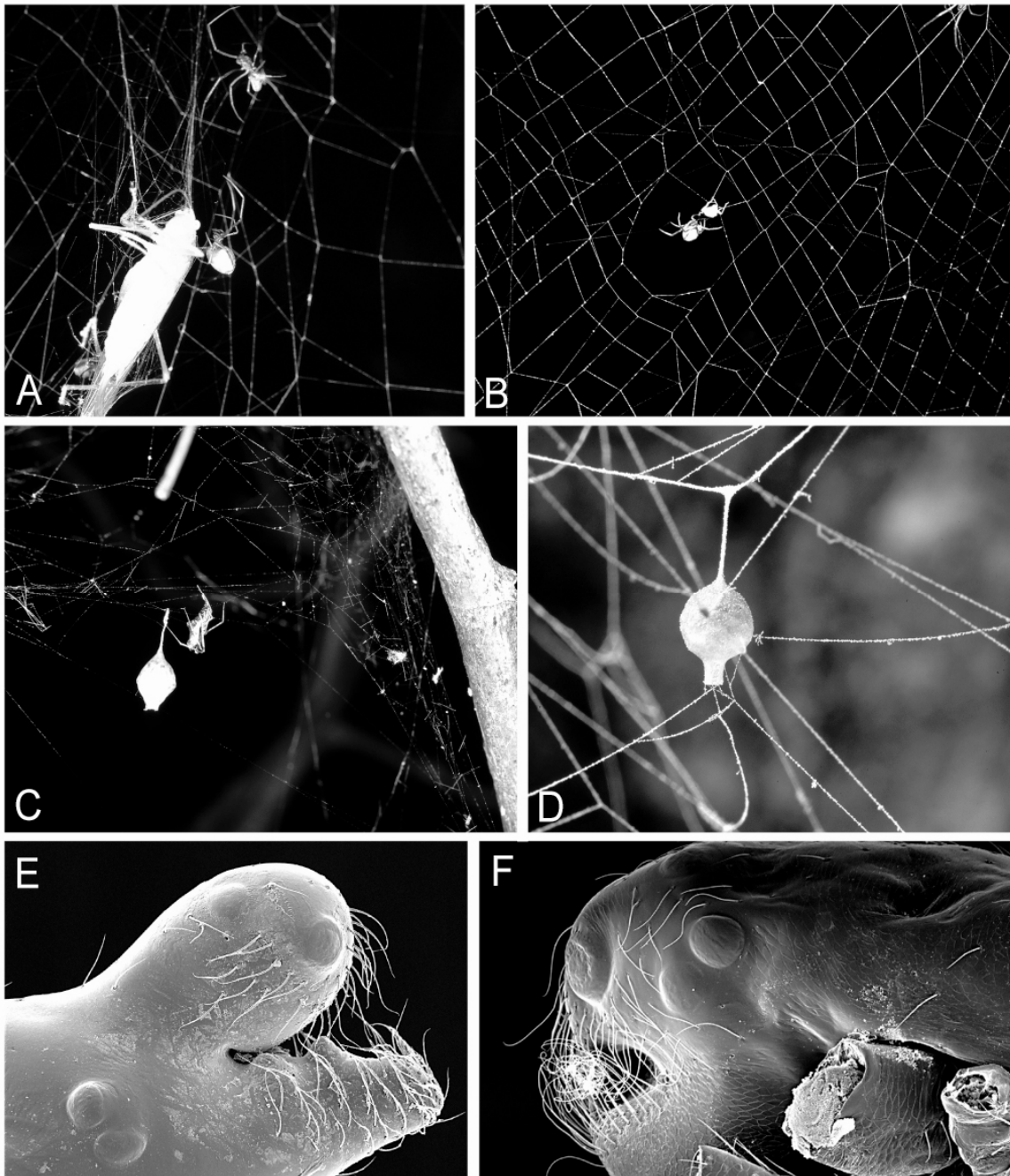


Fig. 2. A-D argyrodines in *Nephila* webs, C-D display egg sacs that are characteristic for the genera. E-F show clypeal modifications of male *Argyrodes* (E) and *Faiditus* (F). Some argyrodines have bright silvery abdomens and are very readily recognized.

#### References

- Exline H, Levi HW. 1962. American spiders of the genus *Argyrodes* (Araneae, Theridiidae). *Bulletin of the Museum of Comparative Zoology at Harvard College* 127: 75–204.
- Agnarsson I. 2004. Morphological phylogeny of cobweb spiders and their relatives (Araneae, Araneoidea, Theridiidae). *Zoological Journal of the Linnean Society* 141: 447-626.