

Linyphiidae: *Dubiaranea*, *Notiohyphantes*, *Lomaita* and relatives

J. Miller, March 2011

Dubiaranea, *Notiohyphantes* and *Lomaita* are endemic to the Neotropics. These are many relatively large linyphiids with large posterior median eyes on small dark tubercles. They typically build webs up in the vegetation although some species dwell in leaf litter. Many species have been described from South America, but they are underreported from Caribbean islands and possibly also Central America. The monotypic genus *Lomaita*, endemic to Hispaniola but known only from the type specimen, appears to be at least a close relative of *Dubiaranea*.



Fig 1. Distribution of *Dubiaranea*, *Notiohyphantes*, and *Lomaita* (based mostly on Platnick).

Monophyly. There is a distinct lineage here that is at least dominated by *Dubiaranea*, but the exact limits have not been adequately investigated. Most of the diversity is in South America but Caribbean and possibly Central American diversity is underreported. The question of relationships to *Lomaita*, *Florinda*, and others remains open.

Fossils. No fossil record.

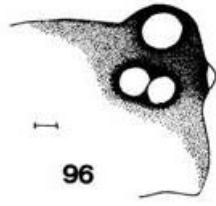
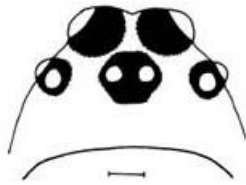
Search strategy. Mostly large for linyphiids (2-5 mm body length), some build fairly conspicuous webs in vegetation, others live in moss and leaf litter. Searching at night and beating vegetation is the most productive technique, supplemented by leaf litter samples.

Recognizing the group. PME large, on shallow black tubercles. Femora with dorsal macrosetae, femur I also with prolateral macroseta; tibiae and metatarsi with two dorsal macrosetae plus variable prolateral, retrolateral, and ventral macrosetae. Abdomen usually with a pattern. *Male pedipalp:* Paracymbium a slender u-shape. Embolus typically moderately long, associated distally with a membrane. *Epigynum:* variable, typically with paired atria and a scape or socket.

Similar taxa. Similar to other large-bodied, predominantly vegetation-dwelling linyphiids such as *Neriene* in North America, although phylogenetic analysis indicates that *Dubiaranea* and *Neriene* are not particularly closely related. Also similar to the monotypic genus *Florinda* from the southeastern US, which also has large posterior median eyes on a tubercle.

Needed collecting. All areas, especially Caribbean and Central America.

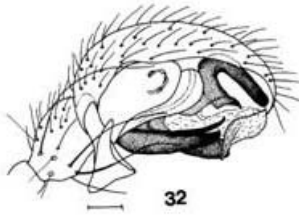
Dubiaranea



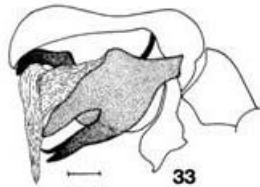
96



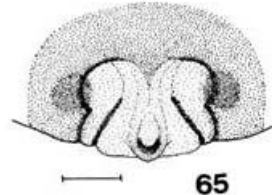
Florinda



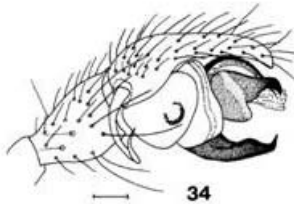
32



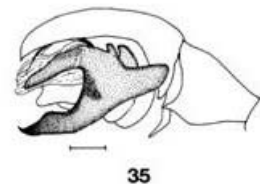
33



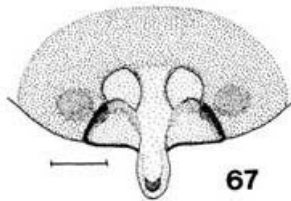
65



34

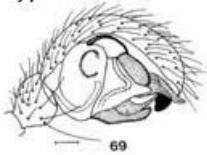


35

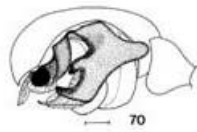


67

Notiohyphantes



69



70

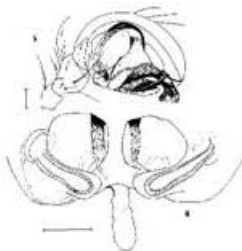
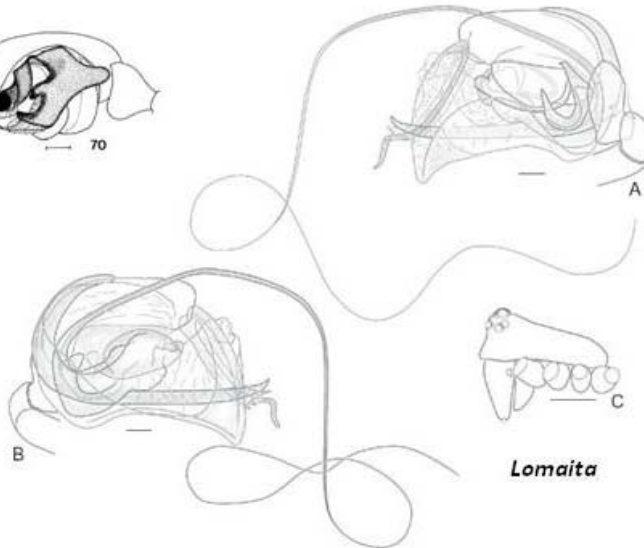


Fig. 14. *Notiohyphantes exordii* (Saywerling, 1992). ♂ Male (left) and ♀ Female (right) views. Scale bars = 0.1 mm.



Lomaita

References

- Arnedo, M. A., G. Hormiga and N. Scharff. 2009. Higher-level phylogenetics of linyphiid spiders (Araneae, Linyphiidae) based on morphological and molecular evidence. *Cladistics* 25: 231-262.
- Baert, L. L. 1990. Spiders of the Galápagos. Part V. Linyphiidae. *Bull. Br. arachnol. Soc.* 8: 129-138.
- Miller, J. A. 2007. Review of erigonine spider genera in the Neotropics (Araneae: Linyphiidae, Erigoninae). *Zool. J. Linn. Soc.* 149(Suppl. 1): 1-263.
- Millidge, A. F. 1985. Some linyphiid spiders from South America (Araneae, Linyphiidae). *Am. Mus. Novit.* 2836: 1-78. (herein *Dubiaranea* is called by junior synonym *Horembolus*)
- Millidge, A. F. 1991. Further linyphiid spiders (Araneae) from South America. *Bull. Am. Mus. nat. Hist.* 205: 1-199.
- Penney, D. 2008. Dominican amber spiders: A comparative palaeontological-neontological approach to identification, faunistics, ecology and biogeography. Siri Scientific Press, 176 pp.