

Florida Department of Agriculture and Consumer Services Division of Plant Industry

Chilean Recluse, *Loxosceles laeta* (Nicolet) (Araneae: Sicariidae) in Florida

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INTRODUCTION: On 7 July 2002, an infestation of the Chilean recluse, *Loxosceles laeta* (Nicolet), was discovered in a residence in Winter Haven, Polk County, Florida. Recluse spiders are rare in Florida: the native brown recluse, *Loxosceles reclusa* Gertsch and Mulaik, is known from a few scattered localities in five northern Florida counties; and the Mediterranean recluse, *Loxosceles rufescens* (Dufour), has been recorded from four counties in central and southern Florida, but has apparently been eradicated. See <u>Entomology Circular No. 406</u> and Venomous Spiders in Florida (<u>http://www.freshfromflorida.com/Divisions-Offices/Plant-Industry/Plant-Industry-Publications/Pest-Alerts/Venomous-Spiders-in-Florida</u>) for more information on these recluses in Florida. The current infestation of the Chilean recluse has been treated. But the fact remains that this spider, a world traveler, has made it here once and may turn up again.

DESCRIPTION: While similar in appearance to other recluse spiders, the Chilean recluse is larger with a body length up to 15 mm (5/8 in.). They are pale yellow to reddish brown. The carapace (head region) usually has a dark violin-shaped marking which is often difficult to see. This mark cannot be used reliably to identify recluses, as some harmless Florida spiders have similar markings. See our Entomology Circular No. 406 for more information on how to distinguish our native spiders from recluse spiders.

BIOLOGY: Members of the genus *Loxosceles* are nocturnal and not aggressive to people. In nature, they live under rocks, inside logs or in any place that may serve as a shelter. They also live in dark, undisturbed places in houses (Gertsch 1967, Gertsch and Ennik 1983). The female, who can reproduce up to five times a year, lays about 50 eggs per sac. It takes 9-12 months for a spider to mature and it can live up to 7 years (Gonçalves de Andrade *et al* 2000).

DISTRIBUTION: *Loxosceles laeta* is native to Ecuador, Peru, Chile, Argentina, Uruguay, and southern and eastern Brazil. It has been introduced into Belize, Guatemala, Finland, and the United States (several records from Los Angeles, California; one record from Kansas; and a population in one building at Harvard University, Cambridge, Massachusetts).

MEDICAL IMPORTANCE: The Chilean recluse is reputedly the most toxic species of *Loxosceles*, which have necrotizing venom, and it has been implicated in a few deaths in South America. The spider and its venom are under study at the Instituto Butantan in São Paulo, Brazil.

SUSPECTED RECLUSE? Homeowners should keep in mind that many common, harmless spiders look similar to the Chilean recluse, and that thus far it is only known from one home in Florida. Nevertheless, if presence of the Chilean recluse is strongly suspected, specimens should be submitted to the Department of Agriculture's Division of Plant Industry for confirmation. To send a specimen for identification, the spider should first be killed with a household pesticide labeled for use on spiders. **DO NOT HANDLE THE SPIDER AND DO NOT SQUASH IT.** Once certain the spider is dead, using tweezers, place it in a tightly-sealed leakproof container (such as a 35mm film canister) along with a cotton ball soaked in some regular rubbing alcohol, and mail (along with complete contact information where you may be reached if your specimen is positively identified as a Chilean recluse) in a small, padded box or envelope to Entomology, Division of Plant Industry, PO Box 147100, Gainesville, FL 32614-7100.

OTHER SITES: There are many Web sites devoted to recluse spiders. A few are listed here:



Florida Department of Agriculture and Consumer Services Adam H. Putnam, Commissioner Florida Dept. Agric. & Cons. Serv., Division of Plant Industry, <u>Entomology Circular No. 406</u> FDACS, Division of Plant Industry, Venomous Spiders in Florida (<u>http://www.freshfromflorida.com/Divisions-Offices/Plant-Industry/Plant-Industry-Publications/Pest-Alerts/</u> Venomous-Spiders-in-Florida)

- University of California, Insect Information, Myths of the Brown Recluse (http://spiders.ucr.edu/myth.html)
- University of California, Pest Management Guidelines, Recluse spiders (http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7468.html)

University of California, Pest Management Guidelines, Spiders (http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7442.html)

REFERENCES:

- Gertsch, W. J. 1967. The spider genus Loxosceles in South America (Aranaea: Scytodidae). Bulletin of the American Museum of Natural History 136: 119-183.
- Gertsch, W. J., and F. Ennik. 1983. The spider genus Loxosceles in North America, Central America and the West Indies (Araneae: Loxoscelidae). Bulletin of the American Museum of Natural History 175: 263-360.
- Goncalves de Andrade, R. M., W. R. Lourenco, and D. V. Tambourgi. 2000. Research Note. Comparison of the fertility between Loxosceles intermedia and Loxosceles laeta spiders (Araneae, Sicariidae). Journal of Arachnology 28: 245-247.



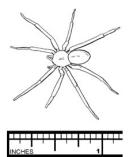
Chilean recluse, female Photo credit: G. B. Edwards, FDACS/DPI



Chilean recluse, male Photo credit: G. B. Edwards, FDACS/DPI



Chilean recluse Photo credit: G. B. Edwards, FDACS/DPI



Actual size