

Cyrtophora citricola

Introduction

Cyrtophora citricola Forskål, also called the tropical tentweb orbweaver (It does not build orb webs but a dome web), it is present throughout Africa, Asia and southern parts of Europe and more recently in Hispaniola, Brazil and Colombia.. It was discovered in Miami-Dade County in April 2000 and it appears to be spreading (Mannion *et al*). The unusual thing about this spider is that it is linked with branch dieback and sometimes plant death. It is unknown if the spider itself causes plant damage or that the plant is affected by the presence of the dense web.

Identity

Authority	: Forskål
Classification	
Kingdom	: Animalia
Phylum	: Arachnida
Family	: Araneidae
Genus	: <i>Cyrtophora</i>
Species	: <i>citricola</i>
Synonyms	:
Common names	: Tent spider, tentweb orb weaver
Role	:

Sign & Symptoms

The tent web spider produces a web that is unique among orb- weaving spiders. The web consists of a horizontal orb formed by non-sticky threads with an irregular thread barrier under & below the horizontal orb-web (Lubin, 1980). The spiral is formed by, many radial thread which originate at the webs centre & by a spiral thread that do not have the sticky drops commonly found in the spiral threads of other araneid spiders.

Morphology



Cephalothorax brownish with yellowish patches. Very broad posteriorly. Pubescent grey thoracic region with fovea bifid posteriorly. Both eye rows

recurved; anterior medians larger than posterior medians: laterals situated on prominent tubercles. Sternum triangular. Legs short, stout, brownish with yellowish patches; pubescent, hairy, and spiny: coxae light yellowish-orange. Abdomen greyish with yellow and brown patches, pubescent, hairy; one pair of shoulder humps, one pair of lateral and one pair of bifid caudal humps on dorsum with broad, grayish brown band running all along its length; five pairs of distinct sigilla present mid-longitudinally. The male has a body length (2.5mm) about 30% of the female length (8.8 – 15.2mm).

Biology & Ecology

Mannion *et al* 2001

If you take an early morning drive on a misty day, the presence of this spider will be evident. Dew-covered webs are easily seen on fences, ornamental plants, and fruit trees. The tightly spun webs are horizontal in shape and can cover large areas. The adult spiders and spiderlings generally stay within the web but may drop when disturbed. The spiders can change color from light to dark brown in response to their environment. The female spiders are considerably larger than the male, so mostly the large female spiders and juveniles are seen. The female will lay up to ten eggsacs, also called cocoons, which hang like large beads within the web. Each cocoon may contain 100-150 spider eggs. There is evidence this spider builds its web in areas of high insect abundance. Fences provide excellent support structure for their webs. Fences with the most webs are generally beside orchards or extensive landscape plantings that likely provide an abundance of insects for food. Bridges over canals may also be heavily infested with webs.

Dispersal & vectors

This spider is spread via human endeavour- commerce, plant cutting imported from countries where this species is found.

Management

Mannion *et al* 2001

The major concern for this spider is whether it actually causes plant damage. Young or small trees and shrubs have been completely covered with the web and have ultimately died. Some trees with webs have suffered branch dieback. It is unlikely that direct contact from the spider is causing the damage and more likely that the thick web is affecting the plant. Tests will be conducted to investigate this issue.

Tests are under way to determine what insecticides may be used to manage this spider. Numerous commercial and homeowner products are labeled for use against spiders, but at this time, the most effective products have not been determined. Any chemical control of this spider will need to be done very carefully so that other spiders or beneficial insects are not disrupted or killed.

Before any control measure is used, it is very important to have the spider identified, so other spiders are not affected. Removing the webs will not work, because if the spider is not killed, it will rebuild the web.

Host notes

The spider builds nests on thorny bushes in gardens and road side bushes fences etc.

Distribution

C. citricola is present throughout Africa, Southern Asia, Southern part of Europe; South America- Colombia, Brazil; USA- Florida; Hispaniola.

Bibliography

ALVES-COSTA, C.P. & M.O. GONZAGA. 2001. Prey capture and spatial distribution of *Philoponella vittata* (Araneidae, Uloboridae) in host webs. **Ethology Ecology & Evolution**, Firenze, **13**: 239-246.

FOELIX, R.F. 1996. **Biology of Spiders**. New York, Oxford University Press, 2nd ed., 330p.

LEVI, H.W. 1995. Orb-weaving spiders *Actinosoma*, *Spilasma*, *Micrepeira*, *Pronous*, and four new genera (Araneae: Araneidae). **Bulletin of the Museum of Comparative Zoology**, Harvard, **154**: 153-213.

_____. 1997. The American orb weavers of the genera *Mecynogea*, *Manogea*, *Kapogea* and *Cyrtophora* (Araneae: Araneidae). **Bulletin of the Museum of Comparative Zoology**, Harvard, **155** (5): 215-255.

_____. LUBIN, Y.D. 1980. The predatory behaviour of *Cyrtophora* (Araneae: Araneidae). **Journal of Arachnology**, Lubbock, **8**: 159-185.

Mannion, C. Amalin, D. Peña, J. and G.B Edwards 2001. A new spider in Miami. Dade county-Cyrtophora citricola. Hort. Newsletter Vol. 2 No. 2. Published by University of Florida, IFAS coop. Ext. Service.

PLATNICK, N.I. 2004. **The world spider catalog, version 4.0**. New York, American Museum of Natural History, on line at <http://research.amnh.org/entomology/spiders/catalog81-87/index.html>.

Acknowledgements

University of Florida, IFAS, Cooperative Extension Service;
Tropical Research and Education Center