

Insec(tc)ure*:

Are you insecure about your insect cures?

A UT Urban IPM Lab Newsletter for the Pest Management Industry

The Joro Spider, Coming to an Account Near You?

Karen Vail, UT Entomology & Plant Pathology

You may have noticed my November 10 Facebook post (<https://www.facebook.com/UrbanIPMTN>) about the Joro spider when I warned Tennesseans to watch out for this spider. It had been found in northern Georgia and now South Carolina, and it wouldn't be long before it was found in Tennessee. Well, according to iNaturalist (<https://www.inaturalist.org/taxa/904334-Trichonephila-clavata>), it's already here. Two sightings have been reported from Hamilton County (near Lookout Mountain and Collegedale) and one from Bradley County.



Figure 1. A female Joro spider, *Trichonephila clavata* on the hand of a female Georgia Extension Specialist. Note the size of the spider and its golden web. Credit: Carly Mirabile, University of Georgia College of Agricultural and Environmental Sciences

Unusual characteristics of the Joro spider, *Trichonephila clavata* L. Koch:

1. It's huge. The female's body is about 1 inch long. Including its outstretched legs, the spider can cover a diameter of 3 inches or about the size of your palm. Males are smaller with bodies 0.25 to 0.4 inches long and are found on the web in autumn waiting to mate.
2. The female is quite colorful – her cephalothorax is white, the abdomen is yellow with blue or grey stripes on the dorsal surface and with some red on the ventral surface. The legs are banded black and yellow.
3. The strands of the web appear gold when struck by sunlight.
4. The web is huge too and can be several meters wide. In the center of the web are concentric circles typical of orbweavers.
5. Webs throughout the landscape create a very messy look.

A native to Japan, Korea, China, and Taiwan, the Joro spider was first confirmed in Georgia, USA in 2014 after its discovery near Braselton. Although it's named for the Jorōgumo, a spider creature from Japanese folklore that changes her form to a woman to seduce, wrap in silk and devour men, this spider is not aggressive and should not be considered life-threatening to humans. *Trichonephila clavata* has since spread to 25 mostly northern Georgia counties and is found in upstate or western South Carolina from Calhoun Falls to Six Mile. Three Tennessee Joro spider observations near the Georgia line have been reported in iNaturalist and we expect this distribution to increase next year. The spider's long-distance dispersal is presumably by hitchhiking on vehicles and local distribution through ballooning of the newly hatched spiders. The adult spiders die when the cold weather hits, but this species overwinters in egg sacs which may contain up to 1500 eggs.

The Joro spider is beneficial since its webs trap the brown marmorated stink bug and other flying insect pests. Recommendations include leaving the spider alone because of its practical aspects and the free Halloween landscape decorations. However, if the webbing is too messy or the spiders too scary, the female can be wrapped in her web using a stick or rake and then stomped. An insecticide sprayed directly on the spider can also work. Unfortunately, soon after arriving in an area, the spiders become very abundant, and eradication is impossible.

Source: Hatcher, M. 2021. Joro spiders cloak north Georgia in their webs. CAES news.

[https://newswire.caes.uga.edu/story/8746/spiders-spiders-](https://newswire.caes.uga.edu/story/8746/spiders-spiders-everywhere.html)

[everywhere.html](https://newswire.caes.uga.edu/story/8746/spiders-spiders-everywhere.html)Watch?fbclid=IwAR1ZmVjOMdRMcm5c3RI1ko7YXogLGQYVIC-d0fV6zqrLNuuvAivsmhg0-xY

Wikipedia. 2021. *Trichonephila clavate* https://en.wikipedia.org/wiki/Trichonephila_clavata

Insec(tc)ure is produced by:
Karen Vail, Ph.D., Professor,
Extension Urban Entomologist
Entomology and Plant Pathology
370 Plant Biotechnology Bldg.
2505 E J Chapman Drive
Knoxville, TN 37996-4560
ph: (865) 974-7138
email: kvail@utk.edu
web: <http://epp.tennessee.edu/people/directory/dr-karen-vail/>

Insec(tc)ure is edited by Jennifer Chandler and Pat Parkman and archived online at
<https://epp.tennessee.edu/urban-ipm-new/>

Follow us on
Facebook at



<https://www.facebook.com/UrbanIPMTN/>

Precautionary Statement

To protect people and the environment, pesticides should be used safely. This is everyone's responsibility, especially the user. Read and follow label directions carefully before you buy, mix, apply, store or dispose of a pesticide. According to laws regulating pesticides, they must be used only as directed by the label and registered for use in your state.

Disclaimer

This publication contains pesticide recommendations that are subject to change at any time. The recommendations in this publication are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. The label always takes precedence over the recommendations found in this publication.

Use of trade or brand names in this publication is for clarity and information; it does not imply approval of the product to the exclusion of others that may be of similar, suitable composition, nor does it guarantee or warrant the standard of the product. The author(s), the University of Tennessee Institute of Agriculture and University of

Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development. University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating. UT Extension provides equal opportunities in programs and employment.