



Pests and Pesticides in Child-serving Facilities: An IPM Newsletter

"Investigation Finds School District Recklessly Used Pesticide"

Karen M. Vail

I've spent the last 25 years trying to avoid a headline like that referring to pest management practices in Tennessee. Although this refers to a school in Oregon, not Tennessee, it could have occurred here. Oregon has more detailed school pest management laws (https://www.oregonlegislature.gov/bills_laws/ors/ors634.html, <https://www.oregon.gov/oda/shared/Documents/Publications/PesticidesPARC/IPMschoolsCPA.pdf>) than we do. In Tennessee, we promote voluntary adoption of school IPM (<https://schoolipm.tennessee.edu/>, https://schoolipm.tennessee.edu/wp-content/uploads/sites/207/2021/03/ipm_SCHOOLSmanual_pb1603.pdf) and have a law that requires pesticide applications in schools to be performed under the supervision of a licensed operator ([TCA 62-21-124](#)).

My understanding of the Portland situation was that a commercial applicator used Fumitoxin, a fumigant and restricted-use product with a *Danger* signal word, to treat rodent burrows on school grounds. [Fumitoxin](#) is allowed on athletic fields but can't be applied within 100 ft of a building, including schools. If you read through the Oregon laws, you'd note that applicators must use pesticides on a low-impact list (http://osu-wams-blogs-uploads.s3.amazonaws.com/blogs.dir/2946/files/Low_Impact_Pesticide_List.pdf). To use any other pesticide requires a pest emergency to be declared (<https://www.oregon.gov/oda/shared/Documents/Publications/PesticidesPARC/SchoolIPMPestEmergency.pdf>).

ORS 634.700 (6) states:

"Pest emergency" means an urgent need to eliminate or mitigate a pest situation that threatens:

(a) *The health or safety of students, staff, faculty members or members of the public using the campus;*

or

(b) *The structural integrity of campus facilities.*

They failed to have a pest emergency declared and approved. Further inspection of the pesticide applicators records found that pesticides were misapplied multiple times when another product labeled for indoor use was used outdoors.

Special Points of Interest

There's still time to reply to the U.S. Green Building Council Center for Green Schools and ASHRAE (American Society of Heating, Refrigerating and Air Conditioning Engineers) questionnaire on [Air Quality Measures in K-12 Schools During COVID-19!](#) You can respond until **December 17, 2021.**

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Fumigants work in the gaseous stage, are highly toxic and thus are very dangerous to use. Using fumigants is not something a trained professional takes lightly. Manufacturers often require additional training to use their fumigants and provide extensive manuals to supplement the product label with detailed product use. In addition, regulatory entities often require separate licensing exams to be passed before fumigants can be used. Of the utmost importance is ensuring the pesticide applicators are protected during the application, i.e., wearing the proper PPE, and that others are prevented from exposure to the fumigant before it is cleared from the area.

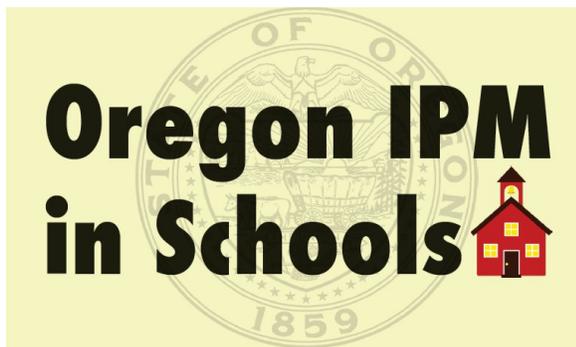
Fortunately, no one was harmed during the fumigant use on the Oregon school grounds. Although, deaths have occurred elsewhere when Fumitoxin was misapplied (<https://www.gilmanbedigian.com/four-texas-children-die-after-exposure-to-deadly-pesticide/>). The incident has caused schools to look closer at their pest management plans, for more educational meetings to occur and education materials to be produced to answer stakeholders' questions. Folks are now more aware of pest management requirements in and around schools so this incident should benefit many others in the future.

Sources:

Lubach, D. 2021. Investigation Finds School District Recklessly Used Pesticides. [Facility Manager Cost Saving/ Best Practice Quick Reads](https://www.facilitiesnet.com/groundsmangement/tip/Investigation-Finds-School-District-Recklessly-Used-Pesticides--49023) <https://www.facilitiesnet.com/groundsmangement/tip/Investigation-Finds-School-District-Recklessly-Used-Pesticides--49023> . Nov. 3, 2021.

Emily Scott. 2021. Wrongful Pesticide Use on OR School Grounds Worries Public-Health Advocates. Public News Service. <https://www.publicnewsservice.org/2021-10-25/childrens/wrongful-pesticide-use-on-or-school-grounds-worries-public-health-advocates/a76219-1>

National School IPM Working Group Discussions



A CHECKLIST FOR COMMERCIAL PESTICIDE APPLICATORS

Children are more sensitive than adults to the potential toxic effects of pesticides. To protect our children, Oregon law requires additional measures and restrictions when pesticides are used on a school campus (Oregon Revised Statutes Chapter 634.700-634.750).

Are You Using a Pesticide on the School's Required "Low-Impact" List?

If unsure, contact the school IPM coordinator or governing body: _____.

The Joro Spider, Coming to a School Near You?

Karen M. Vail

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.



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

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.

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

- 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.
- 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.
- The strands of the web appear gold when struck by sunlight.
- The web is huge too and can be several meters wide. In the center of the web are concentric circles typical of orbweavers.

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 not possible.

I foresee some interesting science activities involving these spiders.

Modified slightly from Vail, K. 2021. The Joro Spider, Coming to an Account Near You? Insec(tc)ure*: Are you insecure about your insect cures? A UT Urban IPM Lab Newsletter for the Pest Management Industry. EPP Infor 841, Vol 2(11): 1-2. <https://epp.tennessee.edu/wp-content/uploads/2021/12/2021-11JoroSpider.pdf>

USGBC and ASHRAE Questionnaire on Air Quality Measures in K-12 Schools During COVID-19

Partner Information Bulletin

There's still time to reply to the U.S. Green Building Council Center for Green Schools and ASHRAE (American Society of Heating, Refrigerating and Air Conditioning Engineers) questionnaire on [Air Quality Measures in K-12 Schools During COVID-19](#)! You can respond until **December 17, 2021**.

This voluntary questionnaire is being distributed by the Center for Green Schools to understand the implementation of ventilation, filtration, and other building control measures by schools in response to the COVID-19 pandemic. Please consider responding to this voluntary questionnaire.

Who Should Participate?

The short, 20-minute questionnaire may be taken by a school district facilities manager or someone closely familiar with school district facility management. The Center for Green Schools is seeking one response per public K-12 school district.

Why Participate?

While voluntary, your responses will add to national data about the implementation of IAQ measures, resources, and support for schools. Your responses will be anonymized and will inform a national report that will:

Contribute to a national understanding of IAQ implementation in schools;

Help local, state, and federal policymakers understand what is needed on the ground; and

Give NGOs, researchers, and government officials an understanding of the decision-making process that school districts are going through related to IAQ, COVID relief funding, and facilities upgrades.

Want More Resources?

The Center for Green Schools has also developed a [series of fact sheets about IAQ](#) designed to give a foundation on topics such as ventilation, HVAC filtration, and in-room air cleaners to help people without a technical background understand some of the more complicated IAQ issues.

For more information on this voluntary questionnaire or these factsheets, please contact the Center for Green Schools at schools@usgbc.org.

Note: This message is sent as a service to our school stakeholders. EPA is not a funder of this project and participation is voluntary. Source: EPA Schools IAQ Connector email.

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For more information about IPM in Tennessee schools and other facilities, or to view past issues of *Pests and Pesticides in Child-serving Facilities*, please visit <http://schoolipm.tennessee.edu>

NATIONAL IPM INFORMATION

eXtension's Pests in the Home
<https://pestsinthehome.extension.org/>

National School IPM
schoolipm.ifas.ufl.edu/

IPM in Schools Texas
<http://schoolipm.tamu.edu/>

IPM Institute of North America
www.ipminstitute.org/

School IPM PMSP—all schools IPM by 2020 [https://
 ipminstitute.org/projects/school-ipm-2020/](https://ipminstitute.org/projects/school-ipm-2020/)

EPA schools
<http://www2.epa.gov/managing-pests-schools>

For further information about the IPM program at your school or in your county, contact your county Extension Agent or the school IPM Coordinator. For county agent contact information, please visit <https://utextension.tennessee.edu/office-locations-departments-centers/>

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.

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 Tennessee Extension assume no liability resulting from the use of these recommendations.

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