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Online Training Available

<https://pmu.ifas.ufl.edu/>

Additional Resources

University of Florida
Extension Publications

<http://edis.ifas.ufl.edu/>

Pest Management in and
Around Structures

<http://www.eXtension.org/>

PMU Focus- Bringing Nature into the Living Room – The Holiday Season is Almost Upon Us

By Adam Dale, agdale@ufl.edu

Every year at the end of November, millions of people in the U.S. purchase a live Christmas tree, bring it into their home, and dress it up with festive decorations. I find it amazing how many people do this, yet how few people recognize where this tree came from and that it has been growing outdoors, exposed to all aspects of nature for the past 6-8 years. Despite this, people are frequently outraged or disgusted when they find a living insect on a tree that they have brought into their home. It is important to recognize that there may be insects on a live Christmas tree, but very rarely are they of concern. This article will discuss the insects you or a customer may come across on a Christmas tree and what, if anything, should be done.



Photo illustrating the magnitude and timescale at which Fraser fir Christmas trees are produced prior to being harvested and shipped to your local tree stand or box store. Location: Tree farm in Ashe County, NC.

Photo: Adam Dale



Florida Christmas tree farm producing alternative species to Fraser Fir. Species primarily include red cedar, Virginia pine, sand pine, spruce pine, and Leyland cypress. Location: Santa's Christmas Tree Forest, Eustis, FL. Photo: Adam Dale

Common insects on Christmas trees

No matter which species of tree you have (unless it is of the plastic variety), there is a chance you will find an insect living on it. Remember, these trees have been living outside for the latter part of a decade. Of the insects that may show up on a live Christmas tree, there are a handful of common culprits to expect, and none of them are dangerous. However, some can be annoying or startling, and one or two may require control.

Insects and other arthropods you may find:

- Aphids
- Adelgids
- Mites
- Praying mantids
- Psocids
- Scale Insects
- Spiders

Of the above-listed organisms, aphids are the most likely to require action. Aphids are sap-feeding insects that consume high amounts of sugars from within plant tissue. In result, they excrete a lot of sugary waste, which coats surfaces beneath them with a sticky substance and promotes the growth of a black fungus (called sooty mold). Aphids are rarely abundant enough on sold trees to cause problems, however, it is important to scout for them to be certain. Also, one of the most common aphids, called the Cinara aphid (images below), is frequently mistaken as a spider, which causes a scare for many homeowners. To be sure, count the number of legs: 8=spider, 6=aphid.

If you or a customer have purchased a heavily aphid-infested tree, there are a few options: 1) prune off the infested branches and dispose of them; 2) prune off heavily-infested branches, remove all decorations, take the tree outdoors, and spray foliage with an insecticidal soap ([link to guide below](#)); or 3) return the tree to where it was purchased and ask for a refund or replacement. Leaving a heavily infested tree in a home will

result in sticky (and potentially black) surfaces on and beneath the tree, aphids flying around the home, and a shortened tree life.



Giant conifer aphids (Cinara aphids). Photo on the left is a wingless form and one on the right is a winged form. Notice that each have six legs. Photo credit: Tom Murray, Bugguide.net

Scale insects (pictured below) can also reduce the life and appearance of Christmas trees and should be scouted for. The most common scale insects on Christmas trees are elongate hemlock scale (on Fraser fir) and pine needle scale (on Florida-grown trees), both are armored scale insects. In high numbers, these pests can cause needles to yellow and drop prematurely. If that is happening, look closely at the underside of the needles for elongated scale insect coverings. Although scale insects are relatively immobile, warmer temperatures within the home may cause eggs to hatch and mobile immatures (crawlers) to emerge and fall or crawl onto nearby surfaces. Deal with these similarly to aphids. However, insecticidal soaps will be less effective.



(left) Elongate hemlock scale infesting the underside of Fraser fir needles. (right) Pine needle scale infesting underside of pine needles. Photo: Adam Dale

Other organisms listed above, like praying mantids or spiders, may be startling because they are relatively large and fast. However, these are harmless. Both are beneficial in natural areas because they eat many plant pests. Once in the home, they will likely not live long. If one hitchhikes a ride into the home, simply knock it into a cup or plastic container and release it outside. Other insects or spiders that hitch a ride can easily be vacuumed up and disposed of.

This holiday season, remember that Christmas trees are likely to have an insect or spider on them. Most of the time, they are not a concern and can be easily removed or vacuumed away. The challenge with heavy infestations is they cannot and should not be treated with an insecticide after they have been cut from the field, especially once in the home. Therefore, any customers who have severe infestations of aphids, scale insects, or mites should remove the tree from their home and return it to where it was purchased. It's great to bring nature into the living room, but not when aphids are pooping on the presents.

Helpful resources:

For reliable and accurate information regarding insects on Christmas trees, use resources from University Extension publications or webpages (that end with ".edu"), the National Christmas Tree Association (<http://www.realchristmastrees.org>), or the US Christmas Tree Promotion Board (<https://www.christmastreepromotionboard.org>).

- Natural products for managing landscape and garden pests in Florida: <http://edis.ifas.ufl.edu/in197>
- Identification and management of scale insects: <http://edis.ifas.ufl.edu/mg005>
- Helpful, Harmful, Harmless - Insects and Other Organisms of Florida Landscapes: <http://ifasbooks.ifas.ufl.edu/p-153-helpful-harmful-harmless.aspx>

For updates on turf and ornamental entomology research and Extension programs from the University of Florida Dale Lab, follow them on Twitter (@adamGdale) or on the web at <https://dalelab.org>.

Upcoming Training Opportunities:



HOLD THE DATE! The [Florida Mosquito Control Association](#) is giving you advanced notice of their [2019 DODD short courses](#)! Over 30 courses will be offered

New Venue: [Hilton UF Conference Center--](#)

[Gainesville](#); group code FMC219

Date: Between Feb 3-8, 2019, depending on course

Cost: \$60 to \$305 for varying numbers of CEUs.

Early registration deadline: January 4, 2019



This is our last set of **fall courses for 2018:**
<http://pmu.ifas.ufl.edu/courses>

We will have to raise our fees in 2019 to \$395 for 2.5 day classes, so register now!

Taking the state exam with PMU? To qualify, you must:

1. Take the Foundations **and** Masters courses for GHP, WDO, or L&O
 - a. Fill out an application package for the certified operator exam [online](#) at least one week before the exam

Please refer to the [FDACS website](#) for reference study materials.

Materials produced by UF/IFAS can be found at the [IFAS Bookstore website](#).

NOVEMBER COURSES

Foundations of Lawn and Ornamentals Pest Management 101

Date: [November 7-9, 2018 moved to January 9-11, 2019](#)

Place: UF/IFAS Apopka MREC

Time: 8 AM-5 PM (W, TH); 8 AM-12 PM (F)

Registration fee: \$385

- Learn about the general Florida licensing requirements for technicians and sales staff.
- Be able to pass DACS vehicle inspections, practice doing a spill drill, and learn the best ways to minimize risks before, during, and after an application.
- Learn to identify diseases, insects, and weeds in lawns and ornamentals and best management practices for their control.
- Gain hands on experience reading and understanding pesticide labels, calculating treatment areas, and calibrating application equipment for lawns, shrubs, and other ornamental plants.

[Register here](#)

Foundations of General Pest Management 101
(4 seats remaining).

Date: November 14-16, 2018

Time: 8 AM-5 PM (W, TH); 8 AM-12 PM (F)

Place: UF/IFAS Apopka MREC, 2725 S. Binion Rd,
Apopka, FL 32703-8504

Registration fee: \$385

Pest control matters. Cockroach allergen mitigation can be achieved with IPM.

- Study domestic and peridomestic cockroach species and how to control them as well as rodent, small fly, filth fly, mosquitoes, occasional invaders, fire ant, and nuisance ant management.
- Review the labels of commonly used GHP products, practice pest inspections at PMU's house and develop treatment strategies focused on IPM.

- Do a vehicle inspection and spill drill with Paul Mitola from FDACS.

[Register here](#)

Learn more from IFAS



- UF/IFAS has Extension Offices in each of Florida's sixty-seven counties. We also have twelve Research and Education Centers (RECs) and Research and Demonstration Sites (RDSs).
- To find an office near you please visit:
<http://solutionsforyourlife.ufl.edu/map/>