



Pest e-alerts



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Plant Disease Corner

Jen Olson, Plant Disease Diagnostician

Rainy weather continues and diseased samples continue to roll into the Plant Disease and Insect Diagnostic Laboratory. We have received more than a dozen samples of suspected *Biscogniauxia* (*Hypoxylon*) canker over the past six months. Dr. Damon Smith and I have updated the fact sheet (EPP-7620) on this disease and we encourage you to take a look. Here is a link to the updated fact sheet: <http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-2312/EPP-7620web%20color.pdf>. We continue to receive images and samples of this disease on oak as shown in Figs 1-2.



Fig 1. Shumard oak branch with *Biscogniauxia* (*Hypoxylon*) canker. The brown stroma is dry and dusty so that spores are readily blown to nearby trees.



Fig 2. Another oak exhibiting the stroma of *Biscogniauxia* (*Hypoxylon*) canker.



Fig 3. Bradford pear with fire blight on one of the shoots.

Fire blight is a bacterial disease that shows up every spring in Oklahoma. We have received several samples and inquiries about Bradford pear trees with blighted shoots. Although Bradford pear trees are tolerant to fire blight, they are not immune. In rainy springs (like this one!), many shoots will show the blight although the entire tree is generally not affected (Figs 3-4). Other trees including apple, crabapple and hawthorn are susceptible to *Erwinia amylovora*, the bacterium that causes fire blight. The recommendation is to remove the affected shoots at least 1 foot below

visible discoloration on the twig. Plants should be pruned during dry weather periods and pruning tools should be disinfested in between each cut. To disinfest, the tools can be dipped in a bleach solution (1 part household bleach, 9 parts water) or sprayed with a disinfectant such as Lysol.



Fig 4. Bradford pear tree with several blighted shoots.

Home gardeners love their veggies and we have had several samples submitted which appear to have chemical injury. In most cases, the injury can be associated with herbicide applications to lawns and pastures. The products have drifted on wind currents or volatilized. The result is gnarly tomatoes such as those shown in Fig 5. Tomatoes are the most sensitive garden vegetable to chemical injury, but other plants can also show damage (Fig 6).



Fig 5. Tomato leaves with significant curling and distortion due to chemical injury.



Fig 6. Sometimes chemical injury is observed on other garden plants including cucurbits.

At the PDIDL, we cannot test specifically for chemical damage. We will examine the plants and test for pathogens that cause similar symptoms such as cucumber mosaic virus. Our report will reflect the absence of plant pathogens and insects, and that we suspect chemical injury.

If your client has a complaint about suspected chemical injury, they should contact the Oklahoma Department of Food and Forestry Consumer Protection Services (<http://www.oda.state.ok.us/cps-pesticide.htm>).

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Pecan nut casebearer earlier than normal in 2012

Phil Mulder, Dept. Head and Extension Entomologist



Reports about earlier and greater numbers of pecan nut casebearer (PNC) have already surfaced across the state with little to no differences in arrival times North to South. Higher than normal temperatures this winter and spring, accompanied by the earlier drought conditions, has led to the perfect storm for significant pest populations. In particular, some of those pests, we often tend to ignore, like PNC. Plant phenology (timing of biological events) and accompanying insect activity throughout the state on several commodities is anywhere from 2-4 weeks ahead of schedule. Growers should make an assessment

of their potential crop and be prepared to treat for this pest.

Locations on the IPM website at <http://pecan.ipmpipe.org/> indicate from South to North the progression of pecan nut casebearer moth captures as they move northward. At the time of this writing the PNC trap captures have been recorded at every location where we have traps set out. With PNC activity being dependent on temperature and with spring temperatures higher than normal across the state, we did not see as much difference in activity from south to north. PNC pheromone traps provide real time information on activity for individual orchards. Information on this activity across the pecan belt is posted at the ipmPIPE website, so please follow and even contribute to the progression of PNC at this site. The black and white flags are locations of volunteer producers that are trapping for PNC. When trap captures are received the marker turns green. When the decision window opens, which is the time when a producer can go to the orchard, sample clusters, and make a decision on whether to apply a treatment or not, the marker turns yellow. When the decision window closes, the marker turns red. For producers that are running their own traps you can make a prediction on egg lay for your orchard from your trap catch data at two different websites.

At <http://pecan.ipmpipe.org/> go to maps and PNC forecast. Click on the warning then place a marker on your orchard site with a right click of the mouse. Next, enter the date of your first significant moth catch (first date of two consecutive collection nights). The program then provides you with a table and a graph of predicted percent completion of oviposition. It is best to start scouting during the time when 25% oviposition is predicted. Producers should examine 310 pecan clusters for the presence of PNC eggs or damage and continue to scout similarly for



the critical four day window (12-16 days after first capture of adult moths). At this time, also estimate crop load to determine the need for treatment and to justify the expense.

Products recommended for PNC include the softer products (Intrepid, Confirm, B.t.) that are gentler on beneficial organisms and safer for the environment. At the website <http://pecan.ipmpipe.org/> there is a searchable insecticide data base (and fungicide data base) in the "Tool Box" link on the left of the home page. The site allows growers to search by active ingredient, pest, company, organic certification, or you can look at the entire list of labeled pecan insecticides for any and all pests.

Once again, I want to warn pecan growers across the state that 2012 could be the perfect storm for potential insect and perhaps disease problems, so be diligent in monitoring for and treating significant pest problems. We could potentially exceed our record-breaking crop of 1999, 63 million pounds statewide.

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