



PST e-alerts



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Pecan IPM – PIPE: An update and encouragement to scout

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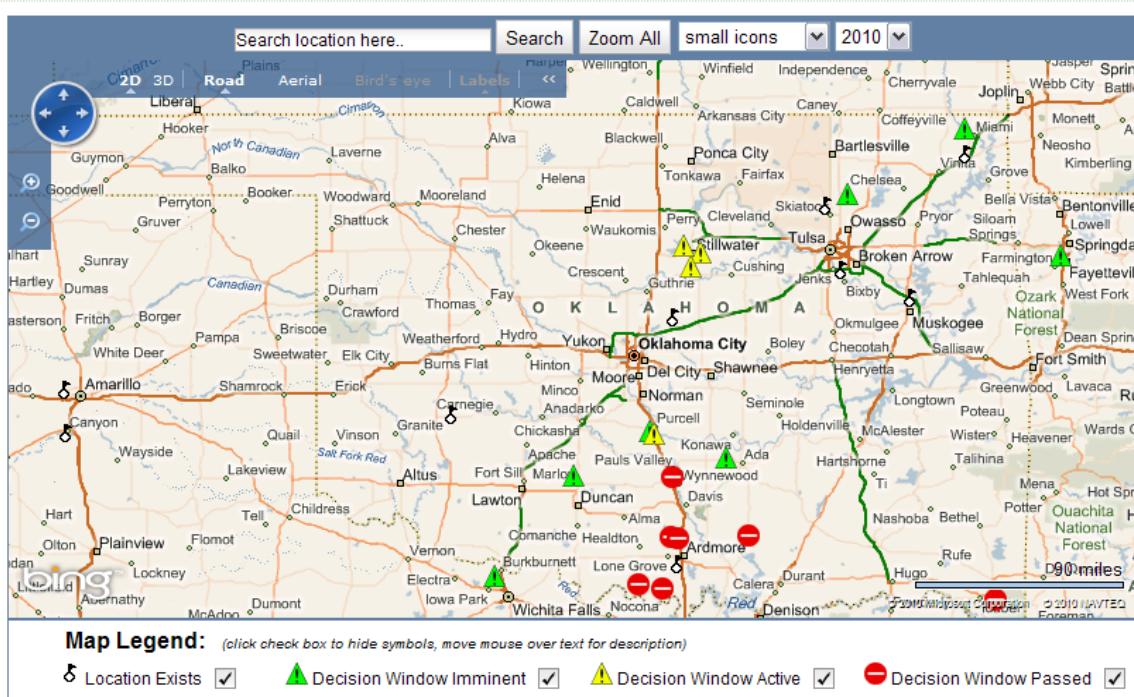


For the second year in a row, pecan producers can track the progress of pecan nut casebearer (PNC) across the pecan belt using the prediction map located at <http://pecan.ipmpipe.org>. This system continues to provide anyone with a computer and access to the Internet a tracking mechanism to see in real-time when PNC populations are approaching their orchard vicinity. A primary component of such a system is to know when to be in the orchard at the right time to effectively scout for larval activity and evaluate crop load. The information obtained at this site represents a cooperative effort between several state research and extension programs as well as several volunteer growers that regularly monitor and report on adult PNC activity in their area. In Oklahoma for 2010 we currently have 20 grower cooperators monitoring for PNC activity and the first flight is clearly underway. In fact, we are quickly approaching treatment time during the next two weeks.



When you access the website you will see that it has two basic components; a PNC prediction map and an IPM Tool box. Both of these components are undergoing constant updates. The component that contains the map has flags that designate locations where volunteer producers are monitoring PNC traps. Before PNC are captured at each site, the flags are white in color; however, they will transition from white, to green (decision window is imminent), to yellow (eggs may be found and a management decision should be made). Once that final decision window has passed, the flag will turn red and nut entry is possibly occurring. Decisions to treat should be based on first observation of egg hatch and/or early larval entry. Historically, many growers have reported no necessity

Pecan Nut Casebearer Risk Map



WHAT IS IPM? IPM GLOSSARY ACRONYMS GLOSSARY NAL THESAURUS / GLOSSARY AGRICOLA SEARCH

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Pecan IPM Toolbox

The toolbox interface features a grid of twelve blue buttons, each containing a link to a specific resource:

- Introduction
- Pecan Basics
- Horticultural Practices
- Disease Prevention
- Insect Monitoring & Control
- Pest Profiles
- Equipment for Pecan IPM
- Orchard Monitoring Schedule
- Vertebrate Management
- Cultural Use Records
- Pest Management Records
- Pesticide Suggestions
- Pesticide List
- Library

in treating for PNC based on a heavy crop load; however, this decision may be put an orchard at risk later in the season. Growers who anticipate a 5 -15% loss from 1st generation PNC may actually experience greater losses and subsequent generations of PNC, if left uncontrolled, may provide another 15 – 30% loss. While we don't suggest prophylactic treatment of an orchard, a decision to leave a site untreated should involve careful consideration of crop load and diligence in continuing to monitor the crop for damage by 2nd or even 3rd generation PNC.



Since 1996, pecan producers have been able to use pheromone traps and the PNC female pheromone to attract and capture male moths. Up until now the utility of these traps has been somewhat questionable. They can be used to tell growers when PNC first arrive into an area and give them some appreciation for relative adult populations; however, historically they have not been used as a guideline for treatment times. Now, based on several years of studies using these traps and monitoring PNC populations

throughout Oklahoma and Texas, we feel confident that once we detect PNC adult populations in an area, we can effectively anticipate the correct timing for scouting and perhaps even subsequent treatment. Ultimately, the utility of the traps, the IPM Tool box and prediction maps are defined by observations of the grower and how their management scheme fits with the tools that are available. Many of the newer chemistries that are commonly used for PNC control across the pecan belt are very forgiving in terms of timing of application. Intrepid® and Confirm®, when mixed with a spreader/sticker can provide an incredible residual for controlling PNC larvae. Spintor, which is more expensive than the previous two materials, has ovicidal (kills eggs) activity. This flexibility in timing may be offset by rain or other factors that can cause rapid degradation of active ingredients.

University experiment stations and extension services will likely not be able to afford to continue running the trapping and computer entry program; however, once the mechanism is in place a grower based program that provides this and other information may lead to an association sponsored site for PNC as well as other potential pest problems (e.g. – pecan scab, soil penetration index for predicting weevil emergence, etc.). We anticipate at least two years of funding for the present program and continue to explore ways to transition the site over to grower groups for management.

One component that has expanded tremendously this year is the “set your own biofix” portion of the map. Any grower using PNC traps may simply set his personal biofix (first PNC capture date) and the website will generate a graph that depicts the confidence intervals for best treatment timing. It will calculate, based on first capture, when 10% to 90% oviposition (egg laying) should occur and provide each entry with a recommendation for treatment timing. It is, however, only one tool that can help growers make an informed decision. It should not replace thorough scouting, crop load assessment or just plain common sense.

Another component that I am very excited about is the IPM toolbox. Last year, this portion was only a shell with no or little input. This year it is a veritable cornucopia of pecan information on everything from cultural practices, horticultural practices, disease prevention, insect monitoring and control, equipment, orchard monitoring schedule, vertebrate management, pesticide suggestions and more. If a grower has a question on almost anything, he can get a detailed answer at his fingertips. There are also pest profiles with a plethora of pictures (that's a tongue twister) and a tremendous pesticide database that gives you critical label information instantly. Finally, there is a pecan IPM stakeholder networking site where growers can connect with one another about experiences and ideas related to pecan IPM.

I want to blatantly encourage all pecan growers with access to a computer to go to the website and take it for a spin. I think you will be thoroughly impressed with the power under the hood of this information engine.

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