



Pest e-alerts



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To Spray or not to Spray: Managing & Monitoring Pecan Nut Casebearer (PNC)

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Pecan nut casebearer larvae can tunnel into nutlets shortly after pollination and can potentially destroy all nutlets in a cluster. The most effective control method is a well-timed insecticide spray. The insecticide must be applied after egg hatch but before the larvae tunnel into the nutlets. Insecticides should only be applied if the nut load and infestation level warrants a treatment. Monitoring should begin in early to mid-May to prepare for the flight in late May/early June.

To detect PNC you can use a pheromone trap baited with a lure. The lure will attract male moths to the trap (Fig 1). There are many different types of traps available: Pherocon VI, Pherocon 1C wing trap, Intercept-A trap, etc. The Pherocon IV and Intercept-A traps have removable liners that make them easier to use than the wing traps. Remember to keep lures frozen until use. The lures should be replaced every 6 weeks. Place 3 traps in different locations in the orchard placed in the lower canopy of trees. Monitor these traps every few days, at least three times a week. Replace the liners when the sticky material has been covered with debris.

Begin looking for PNC eggs 7-10 days after the first PNC moth catch in your trap. PNC eggs can be found at the tip of the nutlet (figure 2). You will need a good hand lens to see them. Also look for hatched eggs, larvae, and larval entry in the nutlet. Examine 10 nut clusters per tree. If

you find two or more infested clusters before 310 clusters are sampled, the PNC population is large enough to damage greater than 5% of the harvest. Apply a labeled insecticide in the next few days. If you do not find an infestation, repeat scouting in 2-3 days. OSU has an in depth fact sheet on PNC, which can be found at <http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-1314/EPP-7189web+color.pdf>.



Fig 1. Male PNC moths attracted to a Pherocon trap with PNC pheromone lure.



Fig 2. Pecan nut casebearer egg in two locations on nutlet

If you plan on monitoring please think about participating in the PNC data collection program. This is a web-based data entry system. All pecan stakeholders with an interest in participating are encouraged to apply. The program rationale is to provide real time PNC data entry from the field to drive a PNC Risk Assessment Model that will appear in a Belt-Wide Map in real time to aid producers in making PNC management decisions in the current season. The public map page can also be used to view the results of previous seasons.

To take part as a cooperator in the PNC Data Collection Program of Pecan ipmPIPE:

- 1) Register online at http://pecan.ipmpipe.org/cooperator_programs/pnc/pidss.cfm as a member of Pecan ipmPIPE, preferably by May 15. You will be sent a unique passcode to your email with instructions to activate your account. **If you registered in previous years this step is not necessary.** If you have forgotten your password, you can retrieve it from the login page.
- 2) Log into the system. Your username/password is saved in a session unless you log out.
- 3) Request to be part of the program using the '**Become a Cooperator**' link.
- 4) Begin Collecting and reporting data from your orchard.

Please note that free PNC traps/ lures are no longer available from the parent program. USDA funds have been expended. However, some local, regional and state coordinators of pecan IPM do include this. **Please contact your local Pecan IPM agent to check availability** (Jackie Lee, jackie.lee@okstate.edu).

Collecting PNC data:

PNC pheromone traps should be placed in the field and inspected at least 10 days before first moth catch is expected (early to mid-May). This allows firm establishment of the baseline to determine when moths first begin emerging because "zero" moths in the traps provide strong evidence that the PNC is still in the pupal stage and the flight has not yet begun. Then, the first moths (that are found in the traps after the "zero" catch dates are recorded) are known to also be the first moths that are emerging in the flight. The regular tracking of this flight during the few weeks that moths are active provides an accurate picture of how that generation interacted with the pecan crop.

Data entry forms are accessed by logging into the website and selecting the '**enter data**' menu item. http://pecan.ipmpipe.org/cooperator_programs/pnc/pidss.cfm

The ideal reporting schedule is daily, and if it is convenient for you to do so, we would like to receive daily information. Alternatively, trap checking and reporting schedules of three (i.e. MWF) or even two (i.e. Monday and Thursday) times per week are of value to us.

Regular online reporting of the PNC moth catch data is essential to allow us to produce the real-time PNC Risk Map. Additional data on egg lay, hatch, nut entry, % infestation of nuts by larvae, crop load, etc. is not essential, but very useful for model validation and management

evaluation. We would appreciate your recording this as well on the forms provided. Consult the website or contact us if information is needed on how to do this. Such information will assist us in expanding our knowledge about PNC activity and help us serve you better. Participation can also be through your state/local PNC expert. The belt-wide program is designed to facilitate and not replace local expertise. Contact your local Pecan IPM expert (Jackie Lee) as needed.

PNC Pheromone and Trap Suppliers:

Advanced Pheromone Technologies, Inc.

P.O. Box 417
Marylhurst, OR 97036-0417
Ph: 315-299-2598
toll free: 877-244-9610
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Adair, OK 74330
Ph: 918-785-3061
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