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Pecan Nut Casebearer Flights Begin in Southern Oklahoma Phil Mulder, OSU Department Head and Extension Entomologist Department of Entomology & Plant Pathology Oklahoma State University - 127 Noble Research Center 405-744-5643

On May 13, Mike McCaughan, with the Noble Research Institute reported two consecutive nights of captures of pecan nut casebearer (PNC), thereby, establishing a biofix for the site in Burneyville, Oklahoma, right along the Red River. By May 15, that same location reported 21 moths in seven traps. The other 12 or more trappers across the state have only reported one PNC on May 14, in Murray county, so no biofix, yet. Several growers have reported zero's thus far. The key to using the pheromone traps is to have the traps out early in order to detect the onset of a flight. The initial date of collection, when moths are collected will act as a benchmark for predicting egg laying (oviposition).

As I stated in the last PNC news release, we hope to resurrect online information on PNC activity and generate a PNC Risk Map. The map has not yet come to fruition; however, for anyone trapping, they can go to: <u>https://pecan.ipmpipe.org/Maps/pncForecastMap</u> to enter their own data and get a forecast when 10-90 % oviposition should occur. It is suggested that 25-50% oviposition marks the time when scouting for eggs and/or damage should occur, and 12-16 days after biofix is when a treatment decision should be reached. I am once again attaching a table depicting three example orchards and how they arrived at the biofix time, note that it requires **two consecutive** nights of PNC capture.

Table 1. Examples of three orchards where traps were placed and the initial capture dates for male PNC. Note when the biofix was established for each site.

	May 14	May 15	May 16	May 17	May 18	May 19	May 20	Biofix
Orchard	0	0	1	2	1	5	8	May 16
#1								
Orchard	0	0	1	0	0	3	5	May 19
#2								
Orchard	0	0	3	0	1	3	0	May 18
#3								

Capturing just one or a few moths on a single, isolated night does not establish the biofix, you must capture moths on two consecutive nights to establish that time. In general, 7-10 days after the established biofix, eggs of PNC will start to be deposited. OSU Fact Sheet 7189 "Scouting for the pecan nut casebearer" provides guidelines for scouting. Every three days, growers should be scouting for PNC eggs and/or the first signs of damage, and continue that process until approximately the middle of June. Trap captures can also help indicate when PNC activity has temporarily ceased. If you find 2 infested clusters before reaching 310 clusters checked this warrants treatment.

Severe weather events can have a profound effect on PNC emergence, mating, and oviposition levels, so it is critical to scout the orchard regularly, especially after storm events. I have become convinced that this is why we often don't see significant first generation PNC problems throughout much of the state. Scouting becomes important from the standpoint of putting the grower, rather than the insect, in control of the population and avoiding problems later on.



PNC egg on stigma of nut



Close up of male moth in trap.





Damage indicated by frass near base of nut clusters

Disease and Insect Diagnostic Laboratory

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