

PLANT DISEASE AND INSECT ADVISORY



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Pecan Nut Casebearer Season may be Early Phil Mulder, Extension Entomologist



Early indications from captures of pecan nut casebearer (PNC) moths throughout the state suggest that the damaging first generation larvae could be present and damaging pecans as early as late May. Early warm temperatures accelerated the accumulation of degree days throughout the state and some locations in south central Oklahoma have surpassed 1500 degree days, the critical level to begin scouting for eggs. As of May 16, captures of adult casebearer have been recorded in Burneyville (1526 degree days), Shawnee (1292 degree days), Stillwater (1164 degree days) and Perkins (1176 degree days). Therefore, if we follow suggestions of the model, (<http://agweather.mesonet.ou.edu/models/pecannut/sitespecinter.html>) we could be experiencing first entry of pecans by larvae as early as 12-16 days after first capture of adult males in pheromone traps. Based on moth captures occurring on May 14 in Stillwater, Oklahoma, first nut entry could occur sometime between May 26 and May 30.



Typically, male PNC emerge about three days before females, females then require about three days for mating before they begin laying eggs and eggs may require from 3-5 days before hatch. After egg hatch, larvae will feed on buds for about two days before attempting to enter nuts and finally population buildup requires about two to four days. Once cluster infestations exceed 1-2%, treatment should take place immediately.

Treatment choices can include any of the chemicals from the following table, but consideration should be given to using something gentle on beneficial organisms. Early use of synthetic pyrethroids, carbamates and organophosphates for this insect pest are not recommended. These latter materials are cleared for use in pecan and are presented here for information and

consideration on other pests. In addition to the considerations mentioned here, if livestock are utilizing the orchard floor, growers should pay careful attention to grazing restrictions associated with some of these chemicals. Whenever using insect growth regulators, it is strongly suggested to use a spreader/sticker to increase residual capacity of these materials. Do not use these materials around any bodies of water as they may cause adverse effects on aquatic organisms. Likewise, do not use spinosad products around bees, as this material is highly toxic to honey bees.

Table 1. List of common insecticides that can be used for controlling pecan nut casebearer and other pests in pecan.

Common Name	Chemical Name	Chemical Class
Lorsban 4E [†]	Chlorpyrifos	Organophosphate
Malathion	Malathion	Organophosphate
Imidan	Phosmet	Organophosphate
Cypermethrin [†]	Ammo	Synthetic Pyrethroid
Esfenvalerate [†]	Asana	Synthetic Pyrethroid
Zeta-cypermethrin [†]	Mustang-Max	Synthetic Pyrethroid
Gamma-cyhalothrin [†]	Proaxis	Synthetic Pyrethroid
Lambda-cyhalothrin [†]	Warrior	Synthetic Pyrethroid
Spinosad	SpinTor or Entrust	Fermentation By-Product
Tebufenozide	Confirm	Insect growth regulator
Methoxyfenozide	Intrepid	Insect growth regulator
Diflubenzuron	Dimilin	Chitin-synthesis inhibitor
Bacillus thuringiensis	Javelin, Dipel, many other names	Bacterial insecticide

[†] Restricted use Chemical, for purchase and use by certified applicators only.

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