The Pecan Nut Casebearer (PNC)

Well it’s almost that time of year to start scouting for the infamous Pecan Nut Casebearer eggs. I have already received numerous calls on the subject with folks trying to prevent what happened last year (failed crop). We love our pecans here in the Lone Star state and there are so many pests of pecans that it can be overwhelming trying to keep up with managing for all of them. The PNC and the Pecan Weevil usually do the most damage to our prized nuts. These are the two most important nut-infesting insect pests of pecans that we have here in Texas. The most effective and reliable control method is a well-timed insecticide application(s) made in spring to kill hatching larvae before they tunnel into the nutlets or in the case of the Weevil, before they drill into the nut and lay eggs. Unlike treatment for the PNC, where infestations can vary from year to year by several weeks or more, the initial insecticide application for pecan weevil is applied around the middle of August. So for now we will focus on managing the PNC and worry about the Weevil at a later date.

---The PNC completes two to four generations a year. Overwintering larvae develop into moths that emerge in April and May and lay eggs on pecan nutlets soon after pollination occurs. First-generation larvae usually cause the most economic loss and for this reason, control is directed primarily at this spring generation. Usually a second-generation larvae attack the nuts in midsummer about 6 weeks after first-generation larvae enter the nut. There can be a third and fourth-generation eggs that are deposited on nuts from late July to early September if conditions are favorable. So as you can see it is very important to stay on top of this economically disastrous pest. So let’s talk about how to tell when the moths are migrating and egg-laying will begin. The only way to accurately tell is by using pheromone traps. Pheromone-baited traps can help determine when to begin scouting for first-generation eggs. 

---Ok so here it is in a nutshell: Once you find more than a few stragglers in your PNC moths traps, start scouting for eggs on the nuts 7-10 days after finding moths in your trap. Depending on the weather, insecticide applications must be timed accurately to control newly hatched casebearer larvae before they enter the nuts. Once inside, larvae are protected from insecticide treatments. Timing is critical as the larvae usually tunnel into the nut 2-3 days after hatching. There is a more accurate way that all the big boys use, which is measuring heat units. Most eggs are laid during a two-week period in late May and early June in north Texas. So when do I spray? Examine 10 nut clusters per tree every two days and if you find three or more infested clusters then apply the insecticide within 1 to 2 days, or after the first eggs hatch, or as soon as nut entry by larvae is first observed. A second application in 7-10 days should be considered if you see any unhatched eggs at the end of this time period. So what insecticide do we need to apply? You can find a list in our Extension publication “Managing Insect and Mite Pests of Commercial Pecan in Texas”. This can be found on our website at cooke.agrilife.org under the Ag tab and scroll down to “Pecan tree information”. You will find a wealth of information about managing pecans. There are some products that are restricted-use so that may be a factor. Two of the old standby insecticides commonly used is Malathion and Sevin, and yes they are still very effective after all these years. Remember there are products that will kill bees and other beneficial insects so keep that in mind when making your selection, if it matters to you. Above all, read & follow the Label directions! Questions? Email me at marty.morgan@ag.tamu.edu or call 940-668-5412.

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