New Mexico Pistachio Growers: Now is the Time to Treat Your Orchards for Navel Orangeworm!

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Pistachio growers in southern New Mexico need to have their Navel Orange Worm (NOW) traps in their orchards as soon as possible to minimize risks of significant economic loss. In the last few years, Richard Heerema, Extension Nut Crops Specialist, Carol Sutherland, Extension Entomologist and Beth Gordon, Otero County Extension Agent have evaluated these traps in commercial pistachio orchards to demonstrate the increases in NOW moth activity over the growing season and the close association of NOW larvae with Aspergillus (fungus) infestation of early split nuts. Aspergillus contamination of harvested pistachio nuts significantly reduces prices paid to growers for their harvest. While development of early split nuts can be managed by growers to some extent through careful springtime irrigation management, late July through August is the prime time for early splits to occur and for them to attract NOW moths that bring Aspergillus spores with them.

We recommend 1 NOW trap/10A block or at least 2-3 traps for orchards of <5A. NOW trap bodies can be ordered from on-line distributors of insect traps and other IPM supplies. Trap bodies are durable and will last several years. While you can purchase almond meal bait at the same time you buy your NOW traps, you may make your own fresh bait at home from pistachio kernels. Pistachio pieces for bird food are ideal for this purpose; they are inexpensive and available for purchase at NM pistachio farm stores.

Grind the dry kernels into a meal with a coffee bean grinder dedicated for this purpose (don’t use it in the kitchen again), loading each trap with enough meal to cover the screened holes in the sides of the trap. If the meal remains dry, it should last most of August; wet bait should be replaced immediately with freshly ground pistachio meal. Follow the instructions for hanging the traps in trees especially around the margins of orchards.

Check traps for the tiny pancake-shaped eggs of NOW at least 2-3 times/week, dating and recording your observations for future reference. Eggs ready to hatch are light orange in color; freshly laid and already hatched eggs are white. Moths lay their slightly sticky eggs on the sides.
and bottoms of the traps; use a magnifying glass to see and count them; egg counts on individual traps can vary widely. Spot check nut clusters for early splits, also.

When eggs are found, insecticide treatments are warranted; NOW hatchlings immediately enter early split nutlets and are soon well protected from contact insecticides; they are immune to the toxins produced by Aspergillus fungi. For conventional growers, we suggest Intrepid 2F™ (Dow AgroSciences, methoxyfenozide) according to label instructions. This is a General Use (for agricultural applications) product with ‘Caution’ on the label. The REI is 4 hours and PHI is 14 days. Other insecticides with different active ingredients are labeled. Certified organic pistachio growers must seek certifier approval before applications of allowable insecticides; multiple applications according to label directions are advised. For all insecticides, read labels and follow all directions. Use your NOW egg count records to evaluate efficacy of treatments and determine whether additional treatments are needed.