

**PECAN INSECT CONTROL—COMMERCIAL**

**Disclaimer: Not all recommended formulations are listed below. Additional formulations, each with Class/Mode of Action information, can be found online on Pecan IPM PIPE where you click “Toolbox,” click “Insecticides Search,” and then search for recommended insecticides by pest name (conventional or approved for organic) at <http://pecan.ipmpipe.org/Toolbox>.**

<b>Insect</b>	<b>Material and Formulation</b>	<b>Amount to Use/Acre</b>	<b>Remarks/Precautions</b>	<b>Days to Harvest</b>
<b>Obscure Scale</b>	Superior oil emulsion	3 gal	Apply 1%-2% horticultural oil spray November-December and again in February. Scale populations build slowly but can reach damaging levels before becoming obvious.	
<b>Phylloxera</b>	Centric 40 WG	2.0-2.5 oz	Native trees and improved varieties vary in susceptibility to phylloxera. This insect is not highly mobile, and infestations are often limited to a few trees. Treatments should be applied to those trees previously infested and those adjacent to them. There are many generic formulations available of imidacloprid. Control must be initiated at bud break (April). A hand lens should be used to confirm that phylloxera are present. Marking infested trees that have galls in May will facilitate identification of potential treatment sites next year.	14
	Lorsban (various) (R)	2-6 pt		28
	Movento	6-9 fl oz		7
	Trimax Pro	1.3-2.6 oz		7
	Warrior (R)	1.28-2.56 fl oz		14
<b>Pecan Nut Casebearer</b>	Belay SC	3-4 oz	Be careful using pyrethroids (IRAC 3A) because they kill natural enemies of aphids and mites resulting in outbreaks. Longer residual activity may be expected with the insect growth regulators (Confirm and Intrepid). First-generation larvae are the most damaging and generally occur in May. Timing of sprays requires monitoring adult moths in pheromone traps and following accumulated temperature models. Sprays are warranted when 2% to 4% of the clusters are infested or damaged. To see when to begin inspecting clusters in your orchard, go online on to the Pecan IPM PIPE web site on Pecan Nut Casebearer Risk Map at <a href="http://pecan.ipmpipe.org/Maps/pncRiskMap">http://pecan.ipmpipe.org/Maps/pncRiskMap</a> .	21
	Dimilin 2F	8-16 oz		28
	Intrepid 2 F	4-8 oz		14
	Mustang Maxx (R)	3.2-4.0 oz		7
	Warrior (R)	1.28-2.56 fl oz		14
	Entrust (OMRI*)	1.25-2.5 oz		1
<b>Spittle Bug</b>	Trimax Pro	1.3-2.6 fl oz		7
<b>Yellow or Black Pecan Aphids</b>	Assail 30SG	2.5-9.6 oz	Black aphids are more damaging than yellow aphids because they inject a toxin between leaf veins causing an area up to 1/4 inch in diameter to turn brown and die. Treatments are recommended when there is an average of one black aphid per compound leaf or 25 yellow aphids per compound leaf. Leaf samples should be randomly collected from different trees throughout the orchard. Aphid treatment is strongly discouraged before July. Use 7 oz of Provado for black aphids. Separate applications for yellow aphids are generally not recommended.	14
	Belay SC	3-4 oz		21
	Centric 40 WG	2.5 oz		14
	Fulfill 50 WG	4 oz		14
	Movento	6-9 oz		7
	Mustang Maxx (R)	3.2-4.0 oz		7
	Nexter	5.2-10.67 oz		7
	Warrior (R)	2.56-5.12 oz		14
<b>Pecan Weevil</b>	Asana XL (R)	4.8-14.5 oz	The majority of weevils emerge from soil after a heavy rain as early as August 15, especially on sandy soils. Treatments are generally warranted in infested orchards in late August. Monitoring circle traps on trunks will detect emerging adults and aid timing of treatments. Multiple applications may be required. Pecans are most susceptible to injury from gel stage to shuck split. Sevin is best for weevils alone but is not effective against aphids, mites or stink bugs and may cause mite problems.	21
	Imidan 70 WP	3.0-3.25 lb		14
	Mustang Maxx (R)	3.2-4.0 oz		7
	Sevin	2-3 lb		14
	Warrior (R)	2.56-5.12 oz		14
<b>Stink Bugs</b>	Imidan 70 WP	2-3 1/8 lb	Stink bugs are mobile pests that build populations on many broadleaf plants. Problems are often associated with orchards next to soybean. Some states recommend treatment when populations exceed one insect per 40 terminals.	14
	Mustang Maxx (R)	3.2-4.0 oz		7
	Warrior (R)	2.56-5.12 oz		14

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<b>Hickory Shuckworm</b>	Asana XL (R)	4.8-14 oz	Treatments are warranted in orchards with a history of shuckworm infestation. Multiple applications may be required. Pecans are most susceptible to hickory shuckworm after the gel stage. Sampling is very difficult, although adult moths can be monitored using commercially available pheromone traps. Once traps begin catching shuckworm moths, growers can begin weekly inspections of nuts for egg cemented to the shuck in a creamy white substance.	21
	Dimilin 2F	8-16 oz		28
	Intrepid 2 F	4-8 oz		14
	Lorsban 4 E (R)	2-4 pt		28
	Mustang Maxx (R)	3.2-4.0 oz		7
	Warrior (R)	2.56-5.12 oz		14
	Entrust (OMRI)	1.25-2.5 oz		1
<b>Mites</b>	Acramite	12-16 oz	Mites are usually more of a problem in hot, dry periods or outbreaks occur after application of a pyrethroid or Sevin insecticides that kill the natural mite predators. Treat when leaf discoloration is noted and an average of 8 or more mites are found per compound leaf. Portal may only be applied once per season (do not apply by air).	14
	Dicofol 4E	2 qt		3
	Evidor 2SC	14-18 oz		7
	Portal	2 pt		14
	Zeal	2-3 oz		28
<b>Fall Webworm</b>	Intrepid 2 F	4-8 oz	Sevin may cause mite problems to increase.  Entrust is for fall webworm only.	14
	Sevin	2 1/2-6 1/4 lb		14
	Dipel (OMRI)	1.5-2.0 lb		0
	Entrust (OMRI)	1.25-3 oz		1

**RED IMPORTED FIRE ANTS (ALL FIRE ANT BAITS)** – Apply when ants are active and soil temperature is above 60 degrees F. DO NOT treat if rain is anticipated within 6 hours.

Non-Bearing Trees	Fenoxycarb (Award)	1-3 Tbsp/mound 1.0-1.5 lb/acre	Mound-to-mound treatment rate. This is an insect growth regulator (IGR). Broadcast rate.
	Hydramethylnon (Amdro Pro)	2-5 Tbsp/mound 1.0-1.5 lb/acre	
	S-Methoprene (Extinguish)	3-5 Tbsp/mound 1.0-1.5 lb/acre	
	Pyriproxyfen (Esteem)	2-4 Tbsp/mound 1.5-2.0 lb/acre	
	Pyridine (Distance)	1-4 Tbsp/mound 1.0-1.5 lb/acre	
	Bearing Trees	Pyriproxyfen (Esteem)	

\*OMRI = Organic Materials Review Institute lists compounds approved for organic production.