

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/pesticide_list/.

Pest	Material and Formulation	Amount to Use Per Acre	Remarks/Precautions	Days to Harvest
Obscure Scale	Superior oil emulsion	3 gal	Dormant Spray After leaves fall and before buds swell.	
Phylloxera	Asana XL 0.66 EC (R)	4.8-14.5 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. 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.	21
	Centric 40 WG	2.0-2.5 oz		14
	Lorsban (various) (R)	2-6 pt		28
	Phaser 50% WP	1 1/2 lb/100 gal water		before shuck split
	Provado 1.6 F	3.5-7.0 oz		7
	Warrior 1 CS (R)	2.56-5.12 oz		14
	Thiodan 50% WP	1-1 1/2 lb		before shuck split
	Voliam Xpress (R)	6-12 oz		14
	Movento	6-9 fl oz		7
Hero (R)	10.3 oz	21		
Pecan Nut Casebearer	Confirm 2 F	8-16 oz	Be careful using pyrethroids (IRAC 3A) because they have killed natural enemies of aphids resulting in aphid 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. Monitoring adults in pheromone traps and following accumulated temperature models available online on the Pecan ipm PIPE web site on Pecan Nut Casebearer Risk Map at http://pecan.ipmpipe.org/map/pnc/index.cfm . Sprays are warranted when 2% to 4% of the clusters are infested or damaged.	14
	Hero (R)	10.3 oz		21
	Intrepid 2 F	4-8 oz		14
	SpinTor 2 SC	4-10 oz		14
	Mustang Max 0.8 EC (R)	3.2-4.0 oz		21
	Warrior 1 CS (R)	2.56-5.12 oz		14
	Voliam Xpress (R)	6-12 oz		14
	PennCap M	3-8 pt		15
Spittle Bug	Asana XL 0.66 EC (R)	4.8-14.5 oz	Phaser can also be used for aphids.	21
	Phaser 50% WP	1 1/2 lb/100 gal water		before shuck split
	Voliam Xpress (R)	6-12 oz		14
Yellow or Black Aphid	Asana XL 0.66 EC (R)	4.8-14.5 oz	Black aphids are more damaging because they inject a toxin between veins on the leaf. The damaged areas, up to 1/4 inch in diameter, turn brown and die. Treatments are recommended when there is an average of one black aphid per compound leaf. Samples should be taken from different trees throughout the orchard. Densities should be as high as 25-30 per compound leaf, and treatment before July is strongly discouraged. Use 8 oz of Provado for black aphids. Separate applications for yellow aphids are generally not recommended.	21
	Centric 40 WG	2.5 oz		14
	Fulfill 50 WG	4 oz		14
	Hero (R)	10.3 oz		21
	Mustang Max 0.8 EC (R)	3.2-4.0 oz		21
	Provado 1.6 F	3.5-7.0 oz		7
	Warrior 1 CS (R)	2.56-5.12 oz		14
	Voliam Xpress (R)	6-12 oz		14
Pecan Weevil	Asana XL 0.66 EC (R)	4.8-14.5 oz	Pecan weevils emerge from the soil in late summer to early fall. Treatments are generally warranted in infested orchards in late August. Trapping of emerging adults is an effective method of timing treatments. The majority of weevils emerge after a heavy rain, especially on sandy soils. 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 or mites. May cause mite problems to increase. Do not apply more than 64 pt of PennCap M per year.	21
	Hero (R)	10.3 oz		21
	Imidan 50 WP	1.5 lb/100 gal water		14
	Mustang Max 0.8 EC (R)	3.2-4.0 oz		21
	Sevin (various)	2-3 lb		14
	Warrior 1 CS (R)	2.56-5.12 oz		14
	Voliam Xpress (R)	6-12 oz		14
PennCap M	3-8 pt	15		

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Stink Bugs Leaffooted Bugs	Mustang Max 0.8 EC (R)	3.2-4.0 oz	Stink bugs are mobile pests that build populations on many broadleaf plants. Problems are often associated with orchards next to soybean. Trap crops of peas, soybean and other legumes have been effective. The bugs must be controlled in the trap crop before they disperse to pecan. Some states recommend treatment when populations exceed one insect per 40 terminals.	21
	Warrior 1 CS (R)	2.56-5.12 oz		14
	Imidan 70 WP	2-3 1/8 lb		14
	PennCap-M 2 EC	3-8 pt		before shuck split
	Voliam Xpress (R)	6-12 oz		14
Hickory Shuckworm	Asana XL 0.66 EC (R)	4.8-14 oz	Pecans are most susceptible to hickory shuckworm during the water through gel stages. Sampling is very difficult, although adults can be monitored in light traps. The insect overwinters with shucks on the ground or the tree. Early-season populations develop in phylloxera galls or hickory. Third-generation moths produce the most damaging generation. Treatments are warranted at shell-hardening stage in orchards with a history of infestation. Multiple applications may be required.	21
	Confirm 2F	8-16 oz		14
	Hero (R)	10.3 oz		21
	Intrepid 2 F	4-8 oz		14
	Lorsban 4 E (R)	2-4 pt		28
	Mustang Max 0.8 EC (R)	3.2-4.0 oz		21
	SpinTor 2 SC or Entrust	4-10 oz		14
	PennCap M	3-8 pt		15
	Warrior 1 CS (R)	2.56-5.12 oz		14
	Voliam Xpress (R)	6-12 oz		14
Belt	3-4 oz	Do not apply Belt by air. Do not apply more than 3 times per season.	14	
Mites	Dicofol 4E	4 pt	Mites are usually more of a problem in hot, dry periods. Treat when leaf discoloration is noted and an average of 8 or more mites are found per compound leaf. Vendex is very effective against mites. Use higher rates on larger trees. Portal may only be applied once per season (do not apply by air).	7
	Hero (R)	10.3 oz		21
	Vendex 4L	1-2 1/2 pt		14
	Vendex 50WP	1-2 1/2 lb		14
	Portal	2 pt		14
	Danitol 2.4EC	10.7-21.3 oz		3
Fall Webworm Walnut Caterpillar	Confirm 2F	8-16 oz	Sevin may cause mite problems to increase. Do not make applications of SpinTor closer than 7 days apart. Do not apply Belt by air. Do not apply more than 3 times per season. Apply Javelin at egg hatch. Javelin and Entrust are approved for organic production.	21
	Intrepid 2F	4-8 oz		14
	Sevin (various)	2 1/2-6 1/4 lb		14
	SpinTor 25C	4-10 oz		14
	Belt	3-4 oz		14
	Javelin WG	0.25-4.0 lb		14
	Entrust	1.25-2.5 oz		7

RED IMPORTED FIRE ANTS

ALL FIRE ANT BAITS – Apply when ants are active and soil temperature is above 60°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 IGR. Broadcast rate.	
	Hydramethylnon (Amdro Pro)	2-5 Tbsp/mound 1.0-1.5 lb/acre	Mound-to-mound treatment rate. This is an IGR. Broadcast rate.	
	S-Methoprene (Extinguish)	3-5 Tbsp/mound 1.0-1.5 lb/acre	Mound-to-mound treatment rate. This is an IGR. Broadcast rate.	
	Pyriproxyfen (Esteem)	2-4 Tbsp/mound 1.5-2.0 lb/acre	Mound-to-mound treatment rate. This is an IGR. Broadcast rate.	
	Pyridine (Distance)	1-4 Tbsp/mound 1.0-1.5 lb/acre	Mound-to-mound treatment rate. This is an IGR. Broadcast rate.	
	Bearing Trees	Pyriproxyfen (Esteem)	2-4 Tbsp/mound 1.5-2.0 lb/acre	Mound-to-mound treatment rate. This is an IGR. Broadcast rate.
		S-Methoprene (Extinguish)	3-5 Tbsp/mound 1.0-1.5 lb/acre	Mound-to-mound treatment rate. This is an IGR. Broadcast rate.