



Product Use Overview



TREE NUTS

| California |

	Product	Key Problems / Uses	Product Benefits and Use Recommendations
Insecticides	Asana® XL Insecticide	Aphids, codling moth, leafrollers, navel orangeworm, peach twig borer (dormant), walnut husk fly	Dormant treatment provides the best start for early-season pest control in orchards. Offers extended control with unique cottonseed oil formulation for proven, rainfast protection. Labeled rate range for almonds and walnuts: 9.6–19.2 fl oz/A. REI: 12 hours. PHI: 21 days after treatment. Asana XL is a restricted use pesticide.
	Belay® Insecticide	Aphids, leafhoppers, lygus, mealybugs, plant bugs (including leafhopper), stink bugs, walnut husk fly	Post-bloom spray for tree nuts (excluding pistachios). Labeled rate range: 3–6 fl oz/A. Use 6 fl oz/A for lygus, mealybugs and stink bugs. Maximum 12 fl oz/A per season. Must not be applied during bloom or if bees are actively foraging. REI: 12 hours. PHI: 21 days.
	Danitol® 2.4 EC Spray	Fruitworms, leafrollers, navel orangeworm, peach twig borer, stink bugs (excluding brown)	Controls many commonly occurring insect pests without flaring mites. Apply at threshold by airblast at a water volume that can ensure complete coverage. Labeled rate range: 10 ² / ₃ –21 ¹ / ₃ fl oz/A. REI: 24 hours. PHI: 3 days. Danitol is a restricted use pesticide.
	DiPel® DF Biological Insecticide Dry Flowable†	Armyworms, codling moth, fall webworm, leafrollers, navel orangeworm, peach twig borer, redhumped caterpillar, walnut caterpillar	Labeled rate range: 0.5–2 lb/A. For peach twig borer, apply when 20–40% of over-wintering larvae have emerged. Apply again at 80–100% emergence. <i>DiPel</i> DF can be tank mixed with fungicides. Use in combination or rotation with other insecticide chemistries for superior control. REI: 4 hours. PHI: 0 days.
	Esteem® 0.86 EC Insect Growth Regulator	Black scale, brown soft scale, lecanium scale, San Jose scale, walnut scale (for almonds , black scale and San Jose scale)	Highly effective insect growth regulator. Apply dormant through delayed-dormant. Use with spray oil at dormant, delayed-dormant timings. Do not use spray oil in oil-sensitive crops like walnuts. Labeled rate range: 13–16 fl oz/A. Do not make more than two applications per growing season (for almonds , do not exceed 16 fl oz/A per season). Do not apply earlier than 14 days after the last <i>Esteem</i> 0.86 EC treatment. REI: 12 hours. PHI: 21 days.
	Esteem® Ant Bait	Ants (pavement, fire ants)	Apply 1.5–2 lb/A when ants are foraging six to eight weeks before almond harvest. <i>Esteem Ant Bait</i> can also be applied following harvest to provide additional management of protein-feeding ants. REI: 12 hours. PHI: 24 hours.
	Pyganic® Crop Protection EC 1.4_{II} / 5.0_{II}†	Aphids, leafhoppers, leafrollers, lygus, mites, thrips, worms	Controls a broad spectrum of insects. For improved resistance management, consider rotating <i>Pyganic</i> with <i>Debug</i> ® brands, a combination of neem oil and azadirachtin. For more information on <i>Debug</i> brands, visit mgk.com. <i>Pyganic</i> 1.4 _{II} : 16–64 fl oz/A. <i>Pyganic</i> 5.0 _{II} : 4.5–15.61 fl oz/A. REI: 12 hours. PHI: 0 days.
	Senstar® Insecticide	Aphids, mealybugs (Gill's mealybug), San Jose scale, walnut scale	With two effective modes of action, <i>Senstar</i> provides long-lasting control of soft-bodied insects at all life stages, including eggs and crawlers. Labeled rate range: 12–18 fl oz/A. REI: 24 hours. PHI: 21 days.
	XenTari® Biological Insecticide Dry Flowable†	Armyworms	Treat when larvae are young (early instars) before crop is damaged. Labeled rate range: 0.5–2 lb/A. REI: 4 hours. PHI: 0 days.
	Zeal® MVP Miticide	Two-spotted spider mite, European red mite, Pacific spider mite	<i>Zeal MVP</i> is a mite growth regulator that affects all mite life stages, including eggs. Long-lasting mite control with translaminar and ovicidal features. Labeled rate range: 23–34.6 fl oz/A per season. Only one application per season. REI: 12 hours. PHI: 28 days.



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Fungicide	Quash® Fungicide	Alternaria, anthracnose, Botryosphaeria panicle and shoot blight, Botrytis blossom, brown rot/blossom blight, hull rot, powdery mildew, rust, scab, shot hole	Almonds: Apply 2.5 oz/A for shot hole, 3.5 oz/A for rust, powdery mildew and anthracnose, and 2.5–3.5 oz/A for brown rot/blossom blight, scab, Alternaria and hull rot. Pistachios: Apply 4 oz/A for Botrytis blossom and shoot blight, Botryosphaeria panicle and shoot blight and Alternaria late blight. Walnuts: Apply 3.5 oz/A for Botryosphaeria blight. Maximum of two sequential applications and no more than four applications per season. Maximum 14 fl oz/A per year. REI: 12 hours. PHI: 25 days.
Herbicides	Chateau® EZ Herbicide	Annual ryegrass, filaree, fleabane, mallow, marestail and more than 90 tough annual broadleaf and grass weeds	Proven, broad spectrum, long-lasting preemergence herbicide in a more convenient, easy-to-use liquid formulation. Farm-friendly and weather-ready. <i>Chateau</i> EZ stays where you put it; won't leach or co-distillate; no photo-degradation; remains active until ¼-inch rainfall or irrigation releases its activity. Labeled rate range: 6–12 fl oz/A. Maximum up to 24 fl oz/A per year. For best results, apply with a burndown herbicide. Apply after final harvest in fall and before bud break in the spring. For best results, apply in the fall before winter rains and prior to second flush of weed emergence in late winter. Apply twice per season for maximum residual weed control. In certain areas in Merced, San Joaquin and Stanislaus counties of California, almond growers must follow specific timing, soil type, pH and moisture requirements. See label for details. REI: 12 hours. PHI: 60 days.
	Select Max® Herbicide with Inside Technology™	Annual and perennial grasses	Superior postemergence for systemic grass control with outstanding crop safety. Lower volatile organic compound (VOC) formulation than other clethodim formulations. Labeled rate range for annual grasses: 9–16 fl oz/A. Labeled rate range for perennial grasses: 12–16 fl oz/A. May be used with an NIS. Maximum 64 fl oz/A per year. REI: 24 hours. PHI: 14 days.
Plant Growth Regulator	ReTain® Plant Growth Regulator for California	Nut set	<i>ReTain</i> extends the bloom viability and delays senescence of flowers, increasing the potential for pollination, and in turn, nut set. Almonds: Apply 1 pouch (333g)/A between 10% bloom and full bloom. Best results observed at 30–60% bloom. <i>ReTain</i> consistently increases nut set in walnut orchards that suffer from low nut set due to Pistillate Flower Abscission (PFA). Walnuts: Apply 1–2 pouches (333–666g)/A between 5–30% and 45–65% pistillate (female flower) bloom. REI: 12 hours.

Pyganic® Crop Protection EC 1.4_{II} and Pyganic® Crop Protection EC 5.0_{II} are OMRI Listed under MGK for organic production.



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Always read and follow label instructions.

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†DiPel® DF Biological Insecticide Dry Flowable, Pyganic® Crop Protection EC 1.4_{II}, Pyganic® Crop Protection EC 5.0_{II} and XenTari® Biological Insecticide Dry Flowable are NOP compliant and OMRI listed for organic production.

Asana XL and Danitol are restricted use pesticides.