



Apple Pest Monitoring Calendar

Pests (Listed in order of management activity)	Stages of Development											
	Dormant	Green Tip	Half-inch Green	Tight Cluster	Pink	Full Bloom	Post Bloom	Fruit Present				Post-Harvest
							June	July	August	Sept.		
Crown Gall	prevent at time of planting infects only through injuries to roots, especially at transplanting											
Phytophthora Root & Collar Rot	inspect trees for overall health spread by zoospores, which may form when soil is saturated longer than 12-24 hours											inspect trees
Iron Chlorosis	early spring soil treatments most effective											foliar testing repeat foliar applications on new growth
Fire Blight	prune out dormant cankers overwinters in cankers			←→ watch for browning foliage & prune out				multiple sprays during bloom may be necessary when weather is favorable				
European Red Mite (minor pest)	monitor eggs on limbs			monitor immatures/adults/eggs on leaves				monitor eggs on limbs				
San Jose Scale	←→ immatures on limbs			monitor ←→				adults/crawlers/immatures on limbs, leaves & fruit; immatures on limbs				
Green or Rosy Apple Aphids	←→ monitor eggs on limbs			monitor nymphs and adults on new growth				monitor ←→ monitor eggs on limbs				
Powdery Mildew	monitor ←→ fungus overwinters in buds			monitor new infections on emerging leaves				monitor infections spread during summer				
Western Flower Thrips	adults on ground			monitor flowers for adults adults & eggs in blooms & on leaves				larvae and adults on fruit and leaves				adults
Campylomma Bug	eggs in wood			monitor ←→ monitor nymphs on blooms & fruit				nymphs/adults(predators)/eggs on leaves				eggs in wood
White Apple Leafhopper	eggs in wood			←→ monitor nymphs on leaves				monitor nymphs/adults/eggs on leaves				eggs in wood
Codling Moth	overwintering larvae under bark			monitor with traps bloom through Sept. 15 pupae				adults/eggs/larvae in fruit				larvae under bark
Woolly Apple Aphid	adults in bark crevices and on roots			monitor ←→ monitor adults/nymphs multiply to cottony colonies								
Bitter Pit	fruit calcium sprays											calcium dip mineral imbalance in apple flesh develops with low calcium
Western Tentiform Leafminer (minor)	pupae in dropped leaves			monitor adults/eggs on leaves				monitor larvae in leaf mines/adults/eggs on leaves				pupae
Spider Mites	miticides not recommended unless treatment thresholds exceeded; monitor lowest leaves/branches first adults at base of tree; eggs/immatures/adults on ground cover and tree leaves; adults											

Arrows (←→) indicate intervals during which recommended management activities occur, if pest is present.

Note: The indicated monitoring times should serve as guidelines for when to monitor and manage pests, if the pest has been a problem in the past. Monitoring helps to identify whether the targeted pest is present in the orchard at damaging levels before a pesticide is used.

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