



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

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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