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## Prune Year-Round IPM Program Annual Checklist

### *Supplement to UC IPM Pest Management Guidelines: Prune*

These practices are recommended for a monitoring-based IPM program that reduces water quality problems related to pesticide use. Track your progress through the year using this form.

Each time a pesticide application is considered, review the Pesticide Application Checklist at the bottom of this form. This program covers the major pests of prune. Details on carrying out each practice, information on additional pests, and additional copies of this form are available from the UC IPM Pest Management Guidelines: Prune at <http://www.ipm.ucdavis.edu/PMG>.

✓ Done	<b>Dormant/delayed-dormant season activities</b>
	Special issues of concern related to water quality: dormant sprays, drift, and rain runoff.
	If aphids are a chronic problem, treat** during the period from November 1 to the end of December.
	Take a spur sample for San Jose scale, mites, and aphids (if not treated in November). <ul style="list-style-type: none"> <li>• Keep records on a monitoring form.</li> <li>• Treat** if needed according to PMGs.</li> </ul>
	Delay treatment for peach twig borer until bloom time.
	During pruning look for dead wood caused by shothole borer and pacific flathead borer. Prune and burn infested branches.
	Knock off and destroy mummy fruit to reduce brown rot problems.
	Allow resident vegetation to grow; monitor weeds in October and November.
	Keep a record of other pests you may see: <ul style="list-style-type: none"> <li>• Euriophyid mites</li> <li>• Fruittree leafroller egg masses</li> <li>• Italian pear scale</li> <li>• Peach twig borer hibernacula</li> <li>• Tree borers</li> <li>• Voles</li> <li>• Pocket gophers</li> </ul>

<b>✓ Done</b>	<b>Bloom season activities (green tip to petal fall)</b> Special issues of concern related to water quality: drift.		
	Treat** orchards where brown rot is a chronic problem; monitor weather to determine the need for additional treatments.		
	Place omnivorous leafroller pheromone traps in the orchard at bloom. <ul style="list-style-type: none"> <li>• Check twice weekly to establish biofix for the first flight.</li> <li>• Keep records on a monitoring/degree-day form.</li> </ul>		
	Monitor San Jose scale: <ul style="list-style-type: none"> <li>• Put up pheromone traps.</li> <li>• Keep records on a degree-day monitoring form.</li> </ul>		
	Monitor peach twig borer larvae: <ul style="list-style-type: none"> <li>• Time bloom treatments** according to PMG.</li> <li>• In fresh market, or if no dormant or bloom spray was applied, put up and monitor pheromone traps (by March 20 in San Joaquin Valley; April 1 in Sacramento Valley).</li> <li>• Keep records on a degree-day monitoring form.</li> </ul>		
	Monitor for leafrollers and other caterpillars. Treat** if needed according to PMG.		
	Mow ground cover.		
	Keep records of other pests you may see: <table style="width: 100%; border: none;"> <tr> <td style="vertical-align: top;"> <ul style="list-style-type: none"> <li>• Russet scab (only in fresh market prunes)</li> <li>• Ground squirrels</li> <li>• Pocket gophers</li> <li>• Voles</li> </ul> </td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> <li>• Bacterial canker</li> <li>• Armillaria root rot</li> <li>• Phytophthora root and crown rot</li> <li>• Viruses</li> </ul> </td> </tr> </table>	<ul style="list-style-type: none"> <li>• Russet scab (only in fresh market prunes)</li> <li>• Ground squirrels</li> <li>• Pocket gophers</li> <li>• Voles</li> </ul>	<ul style="list-style-type: none"> <li>• Bacterial canker</li> <li>• Armillaria root rot</li> <li>• Phytophthora root and crown rot</li> <li>• Viruses</li> </ul>
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✓ Done	<b>Fruit development period activities (petal fall to harvest)</b> Special issues of concern related to water quality: runoff from irrigation, and drift.
	Survey weeds in late spring. <ul style="list-style-type: none"> <li>• Mow or cultivate as required.</li> <li>• Keep records on a late-spring weed survey form.</li> </ul>
	Monitor San Jose scale: <ul style="list-style-type: none"> <li>• Continue checking pheromone traps.</li> <li>• Keep records on a degree-day monitoring form.</li> <li>• Treat** if needed according to PMG.</li> </ul>
	Monitor obliquebanded leafroller: <ul style="list-style-type: none"> <li>• Put up pheromone traps by April 15.</li> <li>• Keep records on a degree-day monitoring form.</li> </ul>
	Monitor peach twig borer if crop is fresh market and no dormant or bloom spray was applied: <ul style="list-style-type: none"> <li>• Check pheromone traps.</li> <li>• Keep records on a degree-day monitoring form.</li> <li>• Accumulate degree-days to monitor fruit. <ul style="list-style-type: none"> <li>• Keep records on a monitoring form.</li> <li>• Treat** if needed according to PMG.</li> </ul> </li> </ul>
	Monitor aphids from petal fall until July 15, or until a treatment is applied. <ul style="list-style-type: none"> <li>• Keep records on a degree-day monitoring form.</li> <li>• Treat** if needed according to PMG.</li> </ul>
	Monitor webspinning spider mites weekly using a 5-minute search, starting June 1. <ul style="list-style-type: none"> <li>• Keep records on a monitoring form.</li> <li>• Treat** if needed according to PMG.</li> </ul>
	<ul style="list-style-type: none"> <li>• Monitor rust and treat** if needed according to PMG.</li> </ul>
	Monitor cytospora canker. <ul style="list-style-type: none"> <li>• Remove (cut out) cankers.</li> <li>• Destroy dead or damaged wood.</li> </ul>
	Take a fruit damage sample just before harvest. Record the results on a monitoring form to assess the effectiveness of current year's IPM program.
	Keep a record of other pests you may see. Treat** if needed according to PMG.



✓ Done	<b>Postharvest activities (Fall)</b>
	Special issues of concern related to water quality: none.
	Sample for mealy plum aphid and leaf curl plum aphid at 75% leaf fall to determine need for dormant sprays.
	Consider zinc sulfate application** to hasten leaf fall in order to disrupt aphid's life cycle.
	Survey weeds after first rains and complete a late-fall weed survey form. Let resident vegetation grow between rows. Manage weeds in rows with pre- or postemergent herbicides, or nonchemically in organic orchards.
	Consider planting cover crop.
	Plan for next year.

✓ Done	<b>**Pesticide application checklist</b>
	<p>Before a pesticide application is made and when planning for possible applications in an IPM program, review and complete this checklist to minimize water quality and other problems.</p> <ul style="list-style-type: none"> <li>• Follow each practice in the year-round IPM program.</li> <li>• Identify target pest, treatment threshold, trigger, or justification for treatment.</li> <li>• Consider nonchemical alternatives.</li> <li>• Identify important natural enemies that might be impacted by pesticide application.</li> <li>• Choose a pesticide from the UC IPM Pest Management Guidelines for the target pest, considering impact on natural enemies and consulting UC IPM Watertox Database for water quality concerns. Select an alternative chemical or nonchemical treatment when risk is high.</li> <li>• Consider chemical class if pesticide resistance is an issue.</li> <li>• Identify sensitive areas (for example, waterways or riparian areas) surrounding your application site.</li> <li>• Identify practices or mitigation measures to be used to reduce pesticide movement off site.</li> <li>• Choose sprayers and application methods that minimize off-site movement.</li> <li>• Review and follow pesticide handling, storage, and disposal guidelines.</li> <li>• After an application is made, record application date, product used, rate, and location of application.</li> <li>• Follow up to confirm that treatment was effective.</li> </ul>

