



### SUGGESTED SPRAY SCHEDULE FOR HOME GARDEN APPLES

Growth Stage	Description	Target Information	Chemical Sprays	Important
<b>Delayed-Dormant</b> 	In late winter, just as buds begin to show first green tissue.	<ul style="list-style-type: none"> <li>Spray when daytime temperature is between 45 – 55 F, with no frost forecast overnight. Finish spraying by noon to insure good dry time. Spray for over-wintering scales, aphids, and mites. <i>Oils are not effective against woolly apple aphids</i></li> <li>Manage pests as they hatch in early spring.</li> </ul>	<ul style="list-style-type: none"> <li>Superior type petroleum horticultural oils</li> <li>May mix with lime-sulfur. Products available under a variety of labels. Follow directions on label carefully to avoid plant damage. U.R. rate of 92% or more.</li> <li>See “Pink”</li> </ul>	This is the most important stage and chemical spray to control pests.
<b>Pink</b> 	Just as flower clusters open, but before flowers open.	<ul style="list-style-type: none"> <li>Powdery mildew control.</li> <li>Hatching insect pests such as mealybug, lygus bug, stinkbug, aphid, mites.</li> <li>Feeding caterpillars</li> </ul>	<ul style="list-style-type: none"> <li>Summer Horticulture Oil</li> <li>Lime sulfur (Ex. Bonide Lime sulfur)</li> <li>Insecticidal soaps (Ex. Safer); Acetamiprid (Ex. Ortho Flower, Fruit &amp; Vegetable Insect Killer); Imidacloprid (Ex. Bayer Advanced Fruit, Citrus &amp; Vegetable Insect Control); Permethrin (Ex. Bonide Eight Insect Control Vegetable Fruit &amp; Flower Conc); Esfenvalerate (Ex. Ortho BugBGone Max Garden &amp; Landscape Insect Killer)</li> <li>Spinosad (Monterey Garden Insect Spray)</li> <li><i>Bacillus thuringiensis</i> (Bt) (Ex. Fertilome Dipel Dust)</li> </ul>	<p><b>Do not use Summer Horticulture Oil if using lime sulfur at any time of year.</b></p> <p><b>Do not</b> apply lime sulfur spray to Delicious varieties at this time as severe fruit drop can occur later.</p> <p>* <i>Make sure spray covers top and bottom of leaves.</i></p>
<b>Bloom</b>	When flowers are open.	<b>Avoid pesticide application during bloom to protect honeybees!!!!</b>		

<b>Petal Fall</b>	Just after petals fall from blossoms.	<ul style="list-style-type: none"> <li>➤ Powdery mildew</li> <li>➤ Critical time for management of insect pests listed in “Pink”</li> </ul>	<ul style="list-style-type: none"> <li>➤ Summer Horticulture Oil</li> <li>➤ See “Pink” section above</li> </ul>	<b>Do Not Use Summer Oil if Lime Sulfur was used in “Pink”.</b>
<b>Late Spring &amp; Early Summer</b>	<p>Starting 17-21 days after full bloom. <b>Keep protected through August/mid-September.</b></p> <p><i>Reapply after brief, heavy rainfall or showers of longer duration, then resume regular schedule</i></p>	<ul style="list-style-type: none"> <li>➤ Codling moth “Stings”- shallow entries made on surface of fruit. Treat “stung” apples as source of codling moth by removing infested apples from the tree, seal in black garbage bags. Leave in sun for two weeks to kill worms.</li> <li>➤ Apple maggot</li> </ul>	<p><b>PRIMARY PEST OF APPLES.</b> Start preventative spraying of fruit 17-21 days after full bloom or 10 days after petal fall. <b>SPRAY TIMING IS CRITICAL</b> – First generation lasts 6 weeks, second generation lives another 6 weeks. Protect during this entire period. Follow spray schedule on label.</p> <ul style="list-style-type: none"> <li>➤ Esfenvalerate (Ex.Ortho BugBGone Max Garden &amp; Landscape Insect Killer); Spinosad (Ex. Monterey Garden Insect Spray); Permethrin (Ex. Bonide Eight Insect Control Vegetable Fruit &amp; Flower Conc), Acetamiprid (Ex. Ortho Flower, Fruit &amp; Vegetable Insect Killer).</li> </ul> <p>Apply first in early July</p> <ul style="list-style-type: none"> <li>◆ Pesticides as above for codling moth.</li> <li>◆ Follow spray schedule on label for apple maggot.</li> </ul>	If the apple is not protected, the egg laid by the codling moth will hatch and the worm will enter the apple and be protected from the sprays. Handle infested apples as described at left under “Stings”.
<b>Additional Information</b>	<ul style="list-style-type: none"> <li>◆ <b>CAUTION</b> – Read this guide carefully. Read the product label directions carefully. Read and follow all label directions for responsible use of any pesticide. <b>THE LABEL IS THE LAW.</b></li> <li>◆ <b>Aphids</b> – Seldom build up to damaging levels in home garden fruit trees. Wash them off with stream of water from the hose, you rarely have to spray.</li> <li>◆ <b>Pesticide resistance</b> – Vary products during the season and in following seasons to minimize pest resistance.</li> <li>◆ <b>Too much fruit to handle</b> – <i>Cut down tree and purchase quality fruit for use. Help commercial orchards by maintaining good care and pest management practices for your desired fruit trees!!!</i></li> <li>◆ <b>Further information</b> – Contact WSU Chelan County Extension at (509) 667-6540 or our website at <a href="http://county.wsu.edu/chelan-douglas/GARDENING/MG/Pages/default.aspx">http://county.wsu.edu/chelan-douglas/GARDENING/MG/Pages/default.aspx</a></li> <li>◆ <b>Trade name disclaimer</b> – Use of trade names are for example purposes only. No endorsement is intended. Other appropriately labeled products containing similar active ingredients should provide similar levels of control.</li> </ul>			

Compiled by Paula Dinius, Urban Horticulturist, WSU Chelan County Extension. Revised 05/2013.

Extension programs and policies are consistent with federal and state laws and regulations on nondiscrimination regarding race, color, gender, national origin, religion, age, disability, and sexual orientation. Evidence of noncompliance may be reported through your local Extension office (509) 667-6540.

Compiled by Paula Dinius, Urban Horticulturist, WSU Chelan County Extension. Revised 05/2013.

Extension programs and policies are consistent with federal and state laws and regulations on nondiscrimination regarding race, color, gender, national origin, religion, age, disability, and sexual orientation. Evidence of noncompliance may be reported through your local Extension office (509) 667-6540.