





SUGGESTED SPRAY SCHEDULE FOR HOME GARDEN APPLES

Growth Stage	Description	Target Information	Chemical Sprays	Important
Delayed-Dormant 	In late winter, just as buds begin to show first green tissue.	<ul style="list-style-type: none"> ➤ 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> ➤ Manage pests as they hatch in early spring. 	<ul style="list-style-type: none"> ➤ Superior type petroleum horticultural oils 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. ➤ See “Pink” 	This is the most important stage and chemical spray to control pests.
Pink 	Just as flower clusters open, but before flowers open.	<ul style="list-style-type: none"> ➤ Powdery mildew control. ➤ Hatching insects pests such as mealybug, lygus bug, stinkbug, aphid, mites. ➤ Feeding caterpillars 	<ul style="list-style-type: none"> ➤ Lime sulfur. (Ex. Lilly Miller Polysul, Bonide Lime sulfur) ➤ Insecticidal soaps (Safer); azadirachtin (neem oil); <i>Beauveria bassiana</i> (Mycotrol/Botanigard ES/22WP, Naturalis TNO); imidacloprid (Bayer Advanced Tree & Shrub Insect Control); malathion, permethrin (Ambush, Pounce); esfenvalerate (Asana XL, Halmark) ➤ <i>Bacillus thuringiensis (Bt)</i> ➤ Spinosad (Entrust 80W, Success, Monterey Garden Insect Spray Easy-to-Use) 	Do not apply lime sulfur spray to Delicious varieties at this time as severe fruit drop can occur later. ★ <i>Make sure spray covers top and bottom of leaves.</i>
Bloom	When flowers are open.	Avoid pesticide application during bloom to protect honeybees.		

Petal Fall	Just after petals fall from blossoms.	<ul style="list-style-type: none"> ➤ Powdery mildew ➤ Critical time for management of insect pests listed in “Pink” 	<ul style="list-style-type: none"> ➤ See “Pink” section above ➤ See “Pink” section above 	See “Pink” section above
Late Spring & Early Summer	<p>Starting 17-21 days after full bloom. Keep protected through August/mid-September.</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"> ➤ 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. ➤ Apple maggot 	<p>PRIMARY PEST OF APPLES. Start preventative spraying of fruit 17-21 days after full bloom or 10 days after petal fall. SPRAY TIMING IS CRITICAL – 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"> ➤ Esfenvalerate (Halmark, Asana XL) ➤ Spinosad (Entrust 80W; Monterey Garden Insect Spray Easy-to-Use; Bull’s-eye Bioinsecticide from Gardens Alive) ➤ Kaolin clay (Surround at Home) <p>Apply first in early July</p> <ul style="list-style-type: none"> ➤ Kaolin clay (Surround at Home) 	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”.
Additional Information	<ul style="list-style-type: none"> ◆ CAUTION – Read this guide carefully. Read the product label directions carefully. Read and follow all label directions for responsible use of any pesticide. ◆ Aphids – 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. ◆ Pesticide resistance – Vary products during the season and in following seasons to minimize pest resistance. ◆ Too much fruit to handle – <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> ◆ Further information – Contact WSU Chelan County Extension at (509) 667-6540 or our website at www.ncw.wsu.edu ◆ Trade name disclaimer – Use of trade names are for example purposes only. No endorsement is intended. 			

Compiled by WSU Chelan County Extension Urban Horticulture Program. Revised 05/2009.

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