






**SUGGESTED ORGANIC SPRAY SCHEDULE FOR HOME GARDEN APPLES & PEARS**

| Growth Stage  | Description  | Target Information  | Chemical Sprays  | Important  |
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| <b>Dormant</b><br>                   | Before buds show any activity in late winter                   | <i>PEAR</i> : overwintering scales, aphids and mites.<br>➤ <b>When daytime temperatures reach 40 – 45 F.</b> Finish spraying by noon to insure good dry time.<br>➤ Manage pests as they hatch in early spring.  | ➤ Superior type horticultural dormant oil<br>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.<br>➤ See “Pre-Pink”   | These are the most important stages and chemical spray for pest control.   |
| <b>Delayed-Dormant</b><br>           | In late winter, just as buds begin to show first green tissue. | <i>APPLE &amp; PEAR</i> : overwintering scales, aphids and mites.<br>➤ <b>When daytime temperature is between 45 – 55 F, with no frost forecast overnight.</b> Finish spraying by noon to insure good dry time. | ➤ See “Dormant”<br><i>Oils are not effective against woolly apple aphids.</i>  | These are the most important stages and chemical spray for pest control.   |
| <b>Pre – Pink to Petal Fall</b><br> | Just before bud clusters show any color through petal fall.    | Critical time to manage pests.<br>➤ Powdery mildew control.<br>➤ Hatching insects pests such as mealybug, lygus bug, stinkbug, aphid, mites.<br>➤ Feeding caterpillars  | ➤ Lime sulfur (Lilly Miller Polysul, Dormant Spray for Disease)<br>➤ Insecticidal soaps (Safer); azadirachtin (neem oil); <i>Beauveria bassiana</i> (Mycotrol/Botanigard ES/22WP)<br>➤ Spinosad (Entrust 80W, Monterey Garden Insect Spray Easy-to-Use, Bull’s-eye Bioinsecticide form Gardnes Alive)<br>➤ <i>Bacillus thuringiensis</i> (Dipel Pro) | <b>Do not</b> apply lime sulfur spray to <b>Delicious apple</b> or <b>Anjou pear</b> varieties at this time as severe fruit drop can occur later.<br><i>Make sure spray covers top and bottom of leaves.</i><br><b>See “Bloom” below</b> |
| <b>Bloom</b>  | When flowers are open.   | <b>Avoid pesticide application during bloom to protect honeybees.</b>   |  |  |

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| <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>   | <p>➤ 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.</p> | <p>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> <p>➤ Spinosad (Entrust 80 W, Monterey Garden Insect Spray Easy-to-Use, Bull’s-eye Bioinsecticide from Gardens Alive)</p> <p>➤ Kaolin clay (Surround at Home)</p> <p>➤ <b>Alternative Method:</b> Exclusion bags – these bags are placed on each fruit just after petal fall to exclude codling moth and apple maggot. This method works best on small trees. (Red Apple Bag #6 for codling moth. Can be found at orchard supply co. such as Wilson Irrigation &amp; Orchard Supplies in Wenatchee)</p> | <p>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. See “Stings” at left for handling treatment.</p> |
|   |   | <p>➤ Apple maggot</p>   | <p>➤ Kaolin clay (Surround at Home) Apply 1<sup>st</sup> in early July</p> <p>➤ <b>Alternative Method:</b> Exclusion bags – See above. (Apple maggot exclusion bags can be found on-line).</p>  |  |
| <b>Important Additional Information</b> | <ul style="list-style-type: none"> <li>◆ <b>Postharvest - To reduce infestation and spread of pests</b> to commercial orchards - <b>REMOVE ALL FRUIT</b> - on the tree and ground.</li> <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.</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://www.ncw.wsu.edu">www.ncw.wsu.edu</a></li> <li>◆ <b>Trade name disclaimer</b> – Use of trade names or supply companies are for example purposes only. No discrimination is intended and no endorsement is implied.</li> </ul> |   |   |  |