

Gardening Basics

Dormant Season Fruit & Nut Spraying

Some spray treatments should be applied during the dormant season (winter) for both fruit and pecan trees. For pecan trees, dormant season treatments are for scale insects, mite eggs, and phylloxera. Dormant season treatments for peach and plum trees are for scale insects and peach leaf curl. Let's focus on treatments for fruit trees.

What are scale insects? Scale insects are unique because they create protective armor as they grow. They overwinter on the plant and begin to reproduce in the spring. They feed on nearly all parts of the fruit tree - bark, leaves, and fruit. They can cause stunted growth, leaf drop, fruit lesions, and even the death of branches or entire trees if left untreated.

They often look like small warts or bumps on the tree's bark. The female insect is sucking sap from the plant and laying eggs underneath the protective armor, hidden from view. Many species of scale insects, ranging in size from 1mm to 3mm, are usually circular or oval-shaped. Their color range is also broad, from white to brown to red or orange; some are spotted or striped.

White peach scale insects (*Pseudaulacaspis pentagona*) and San Jose scale insects (*Quadraspidiotus perniciosus*) can be problems on peach, nectarine, apple, pear, cherry, and plum trees. Scale insects look like small bumps on the branches and trunk of the tree and can blend in with the texture of the bark. The white peach scale is white with a yellow-orange color, and the San Jose scale is white.

What is the treatment for scale insects? Applying 97% dormant oil during winter is an effective treatment for scale insects. It's much easier to thoroughly coat the tree's trunk and branches during the dormant season when there are no leaves on the tree. The oil seeps under the scale's protective cover, coats the insect and eggs, and smothers them. Dormant oils are safe, easy to apply, and have little impact on beneficial insects.

Apply dormant oil when the temperature is between 40 and 70 degrees and at least 24 hours before or after rain or freezing temperatures. Follow the packaging label for the concentration mixture, which can be at a higher rate during winter. Thoroughly coat all the bark surfaces, paying particular attention to the nooks and crannies of the tree where scale insects like to congregate. Plan to repeat the application in 2 - 3 weeks.

Peach leaf curl (*Taphrina deformans*) can also be treated in the late dormant season if there's been a history of leaf curl. Apply a copper fungicide or Chlorothalonil following the packaging instructions. Learn more about peach leaf curl disease at this website from Texas A&M AgriLife Extension: https://aggie-horticulture.tamu.edu/newsletters/hortupdate/hortupdate_archives/2002/mar02/art9mar.html



White peach scale
(*Pseudaulacaspis pentagona*),
United States National Collection
of Scale Insects Photographs,
USDA Agricultural Research
Service, Bugwood.org

Learn more about fruit and nut spraying for homeowners and controlling scale insects at these websites:

- Texas A&M AgriLife Extension. “Homeowner’s Fruit and Nut Spray Guide”,
<http://counties.agrilife.org/wise/files/2020/02/Homeowners-Fruit-and-nut-Spray-Guide.pdf>
- Texas A&M AgriLife Extension, Insects in the City. “Now's the time for dormant oils.”
<https://citybugs.tamu.edu/2011/02/15/dormant-oil-treatment-window-closes-fast/>
- North Carolina State Extension. “Check Fruit Trees for Scale Pests.”
<https://growingsmallfarms.ces.ncsu.edu/2016/02/check-fruit-trees-for-scale-pests/#:~:text=White%20peach%20scale%20and%20San,ornamentals%20are%20also%20host%20plants.>