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Spring Forward with Dormant Oil Applications

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Dormant oils control scale insects, aphids, some borers, and mites that are overwintering on trees. It is a refined petroleum product formulated for use on trees and shrubs. The name refers to the time of application which should be late winter or early spring when trees are dormant. To determine if you need to apply dormant oils, look back at your pest history and



inspect trees. Look at branches for a small (3mm or smaller) round to oval gray/brown raises on the bark. This is a waxy cover that the scale insect uses for protection and to blend into the environment. Scale covers can be several layers thick resembling rough patches of bark (left). Heavy and repeated infestations can result in limb die back and negatively affect tree health and pecan/fruit yields. If aphids, mites, or scale insects have been a problem in the past year, a dormant oil application will help decrease the overwintering populations.

Dormant oil applications should be made when temperatures are above freezing and before bud swell, bud break, or new growth forms. The ideal temperature for application is between 40 and 70 degrees. If dormant oil is applied too early, before hardening off, the trees can sustain winter injury. Also, if the temperature is too low, the oil will not mix well in solution, which will lead to inadequate coverage. March should be a good time to make these applications, although check the weather and make sure there will not be any freezing temperatures or rain for a few days after applications.

The oil must be applied with enough water to get thorough coverage (read label recommendations). Coverage is very important so that the spray can reach in between the cracks and crevices of the bark where many insects hide. The oil coats the insects and fills the spiracles. Insects use their spiracles to breathe and when they are blocked, they suffocate. Dormant oils will suppress insects by killing overwintering adults and eggs which can result in slowing the seasonal build-up of these pests in the spring. Dormant oils can be purchased at any garden center and are relatively inexpensive. Use paraffinic oils with unsulforated residues (UR) greater than 92%. Remember to read the label and follow all label recommendations.

Applications should be made to apples, pear, plum, pecan and crabapples. Peaches, nectarines, apricots and plums often do not require dormant oil sprays but if the insect pests mentioned have been an issue in the past, it could be useful. Dormant oils can also be beneficial for shade trees and woody ornamentals. Consult the label before application to make sure the plant is listed. Some plants are sensitive to dormant oil applications.

<u>*Precautions*</u>: Do not apply too early or too late. Avoid temperature extremes. Avoid using on plants that are oil sensitive. Dormant oils will kill annual flowers; do not make applications to trees close to annuals. Do not apply in combination with sulfur containing pesticides such as Captan as this will cause plant injury.

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