



What are Dormant Sprays?

by Michelle Le Strange, Master Gardener

Dormant sprays are a generic term for any spray applied to leafless deciduous trees during fall, winter, and early spring. Some dormant sprays are applied to control over-wintering insects, while others are used to prevent disease infection. Dormant sprays are applied from late November to the latter part of February. A delayed dormant spray (which is recommended for plum and prune trees) means February to the middle of March, depending upon when buds swell for the particular variety.

All fruit and nut trees and many landscape trees and roses are susceptible to aphids, mites, scale and specific insect and disease problems affecting fruit quality and tree health. The dormant spray is the most important because it is the least disruptive to beneficial insects and the environment and it is the easiest to apply. In the commercial orchard (with the exception of walnuts) the dormant spray is essential. In the backyard orchard a dormant spray may not be warranted every year, except where peach leaf curl is consistently a problem. Decide if you need to apply by noting the amount of insect and disease pressure during the previous growing season.

Insect & Mite Control: Dormant season applications of specially refined oils, often called insecticidal, horticultural, or narrow range oils (e.g. Safe-T-Side) are effective against many insects common to most deciduous fruit and landscape trees. The oil smothers the insects. *These sprays have no effect on diseases.*

Dormant oil sprays DO control peach twig borer, European red and brown mite eggs, San Jose scale and most soft scales, aphid eggs, and mealybug. For better control of peach twig borer add an insecticide to the dormant oil spray. Dormant oil sprays alone DO NOT completely control codling moth, oriental fruit moth, navel orangeworm, or two-spotted and pacific spider mites.

Many deciduous landscape trees (like Chinese evergreen elms) are infested with soft scale and a dormant oil spray is particularly effective.

Disease Control: Dormant season applications of copper or a synthetic fungicide are used to limit infection and prevent the spread of certain bacterial and fungal diseases like fire blight, brown rot, leaf curl, powdery mildew, and shot hole.

A fixed copper fungicide (Liqui-cop, Microcop, etc.) contains elemental copper, such as tribasic copper sulfate, copper oxychloride sulfate or cupric hydroxide. Copper sprays with 50 percent copper are most effective, but harder to find. For diseases with a long infection period like fire

blight, it may be necessary to make several applications to protect new emerging shoots and flowers, especially during rainy spring weather.

Synthetic fungicides: Commercial fungicides containing chlorothalonil (daconil and others), iprodione (Chipco 26019), thiophanate methyl (Fungo, Cleary's) and orchard sanitation are the solution to brown rot disease of peaches and nectarines, which is less of a problem in the southern part of the valley compared to the northern San Joaquin Valley where there is more rainfall.

Specific disease and insect pests for trees & shrubs in the San Joaquin Valley:

Brown rot (fungus) - almond, apricot, cherry, nectarine, and peach (sometimes plum).

Codling moth – apple, pear, plum, and walnut.

Downy mildew (fungus) – grape and rose.

Fire blight (bacteria) – apple, crabapple, pear (ornamental and fruiting), pyracantha and quince.

Leaf curl (fungus) – nectarine and peach.

Peach twig borer – apricot, nectarine and peach (sometimes almond, plum, prune).

Powdery mildew (fungus) – grape and rose (occasionally apricot, cherry, nectarine and peach).

Rust and black spot (fungi) – rose.

Shot hole (fungus) - almond, apricot, nectarine, and peach.

Soft scale - many kinds of soft scale affect many kinds of landscape trees.

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