### **Dormant Sprays and Prepping for the Year**

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# DELAYED-DORMANT OIL SPRAY[ps2id id='anchor-1' target="/]

Despite the fact that some call it "dormant oil" spray, the timing of the spring horticultural oil spray is not when trees are still dormant. A better term would be a "delayed-dormant" application, because the oil should be applied after bud swell. This timing coincides with the increasing activity of the overwintering insect, including aphid eggs, scale nymphs, and peach twig borer larvae. (Scroll down for pests that the oil spray targets.)

In the warmest areas of Utah, the dormant oil may already have been applied. But in northern Utah, it is approaching time to apply the spray in some areas.

There are **two factors** that must coincide to determine when to spray: the **bud stage** of your fruit trees (pictures of fruit bud stages), and **temperature**.

### **Bud Stages**

The window for application extends from **bud swell** to when leaves just start emerging. The **last point** at which you can safely apply oil for each crop is:

- **apple**: half-inch green (ideally, application is made at green tip stage)
- apricot: just before first bloom
- cherry: white bud
- **pear**: green cluster
- **peach/nectarine**: just before first bloom (when the pink shows through the flower bud)
- plum: green cluster

#### **Temperature**

Oil should be applied on a clear, non-windy day in the 50 to  $70^{\circ}F$  temperature range. Only apply oil if the temperature will remain above freezing (ideally above  $40^{\circ}F$ ) for 24 hours after application. Following these guidelines will prevent damage to the flower and foliage tissue.

#### **How to Spray**

#### **Commercial growers:**

- Oil should be applied at a rate of 2%, which is 2 gallons per 100 gallons of water.
- Mix oil with an insecticide such as Warrior or Asana to help improve knockdown of overwintering pests.
- When spraying apple trees, add in copper for fire blight.
- Thoroughly cover all cracks and crevices.

#### **Backyard growers:**

- There are many brands of oil, such as All Seasons Oil, Volk Spray Oil, etc., and can be purchased at any garden center or box store.
- Oil should be applied at a rate of 2%, which is 5 tablespoons in 1 gallon of water.
- If you are not growing organically, and aphids or scale have been a serious problem and oil alone has not worked in past years, consider adding in an insecticide, such as Spectracide Triazicide, GardenTech Sevin, malathion, or carbaryl.
- When spraying apple trees, add in copper for fire blight (only if fire blight was an issue last year).
- Thoroughly cover all cracks and crevices.

#### Insects and Diseases Affected by Delayed-dormant Spray (oil and/or copper)

Click on image for caption information.



Aphids overwinter as eggs near buds. Use oil alone or with an insecticide.



San Jose scale overwinters as a mix of nymphs and adults. Use oil alone or with an pyrethroid or pyriproxyfen (Esteem, for commercial use).



Peach twig borer overwinters as larvae in crevices in the tree canopy on peach/nectarine. Use oil alone or mix with an insecticide. Good coverage is important.



All the tiny specks on this bud are eriophyid mites. Blister mites, peach silver mites, and rust mites are all eriophyid mites. They overwinter in bud scales.



Pear psylla eggs. Adults lay eggs near buds in early spring. If this was a problem last year, apply oil twice, spaced about 7 days apart.



Brown mites overwinter as eggs in protected sites on trees (unlike spider mites, which overwinter on the ground). Oil alone is sufficient for this pest, if it has been a problem.



Peach leaf curl is only treated by applying a dormant spray of copper, either in fall or spring. Fungal infections occur during leaf expansion in spring when conditions are cool and moist. The foliage then becomes distorted, discolored, and swollen. If your trees had peach leaf curl last year and you missed the fall application, you can apply copper this spring, up to the point where the green leaf

tips emerge.



For fire blight, apply copper to apple/pear between swollen bud and green tip stages. It is OK to mix with 2% oil for the insect treatment. The primary purpose of this treatment is to help reduce the bacteria on the orchard surfaces. Spray all surfaces of the orchard (including trellis posts and other inter-mingled tree crops) as a high volume spray.

## A YEAR IN BACKYARD FRUIT PEST MANAGEMENT[ps2id id='anchor-2' target="/]

We presented a webinar in the past that provides a seasonal "to do" list of pest management activities for backyard fruit trees.

Click on the image below for a pdf document of the slides, showing one slide per page (16 MB in size), or get the black and white version showing 6 slides per page, which is a smaller file size (2 MB).

Click here for the recorded webinar.

## Prepping for a Healthy Fruit Harvest

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