



# Redwood Barn Nursery

1607 Fifth Street Davis, California

## Dormant Spraying Fruit trees and ornamentals

**Do I need to spray my fruit trees, roses, berries, and grape vines?  
How about ornamental trees? Yes, yes, yes, and yes.**

### And probably..?

Dormant sprays containing **copper** or **sulfur** help prevent many of the diseases we see each spring, including peach leaf curl, powdery mildew, shothole fungus, and brown rot on stone fruits (peaches, nectarines, plums, cherries...). **Spray oils** help to smother overwintering insect pests, and help the spray stick to the trees. Some other products may help the spray stick even better, and should be used when rain is likely soon after spraying. **Ornamental trees** that are related to fruit trees should also be sprayed -- flowering plums, pears, crabapples, etc.

### What should I spray on my fruit trees this winter?

Copper sulfate (sometimes called "fixed copper") is the most widely used dormant spray. It is a powder that is mixed with water. It tends to settle out of solution, so you need to keep shaking the sprayer.

Lime sulfur is as effective and easier to spray, but it smells like rotten eggs (it's sulfur!) and is very irritating to the skin and eyes -- AND IT IS TOXIC TO APRICOT TREES!

The dormant spray oil can be added to either material in the same spray mix.

### Do you sell Bordeaux mixture?

No. The **newer copper materials are better** than the old copper mixture that was called Bordeaux. Some companies incorporate that name ("Bordoil") in their products because people are familiar with it.

### What about the liquid copper sprays I see that are labelled for dormant use?

Although these are much easier to spray, university tests showed they are also much less effective. So **we don't recommend them** for this purpose, although they are useful for some diseases in the growing season. But if you must use a hose-end sprayer, they are the only type you are likely to be able to apply (wetable powders plug hose-end sprayers), and they're better than doing nothing at all.

### When should I spray?

Do you mean "what time of year?" The old rule of thumb is: **Thanksgiving, Christmas, and Valentine's**. The one to skip, if your time is limited, is the Christmas spray -- that is the least important of the three.

This schedule works, except that if brown rot of stone fruits has been your big problem (as it's been in the two very wet springs of 1997 & 1998!) an additional spray while the tree is in bloom is important. Do you mean "should I spray today?" or "does it matter if it's going to rain soon?" **If it rains within 24 hours of spraying you should spray again.** If you're trying to decide whether or not to spray, and your schedule is tight; go ahead and spray but add the "sticker" instead of the oil. It'll make the spray more effective if it rains shortly after you spray.

### What will happen if I don't spray my trees?

Certain disease problems, especially **peach leaf curl and brown rot**, will get worse year after year, especially on older trees and if we repeatedly have wet springs. If your trees are young you can get by without spraying for a few years.

### Will dormant sprays help prevent the worms in my apples?

**No.** You need to spray a pesticide (organic or otherwise) to kill the codling moth adults before they lay their eggs, which happens just as the tree is finishing blooming. Dormant sprays will help prevent diseases on apple trees.

### How poisonous is this spray?

Both copper sulfate and lime sulfur can be irritating to the skin and eyes, so it is very important to wear gloves, long sleeves, and goggles when you spray them -- especially because you are spraying up into a tree, so it's likely to drift. The dormant oil is very low toxicity. Copper sulfate is approved for use by certified organic growers.