



PROTECT YOUR PLANTS FROM SPRING DISEASES AND PESTS

By Nanette Londeree, Marin Master Gardener



Before hanging up your gloves for the next month waiting for spring's approach, you may want to do one more thing – dormant spraying. Even if you don't routinely spray your garden, you may want to consider this type of spraying to reduce the pest and disease populations in your garden (without the use of harmful pesticides) as part of your overall pest management program. Like any pest and disease control system, there are pros and cons, so read on to decide whether dormant spraying is right for your garden.

WHAT IS IT AND WHY DO IT?

Dormant spraying is simply spraying a plant when it has neither leaves nor any active growth. It helps control a broad spectrum of pests and is relatively safe compared to synthetic pesticides. A thorough dormant-spraying offers you an improved chance for control of major fungal diseases like rust and blackspot, along with pests like aphids, thrips, scale and mites.

WHAT DO YOU SPRAY WITH?

Dormant spraying combines horticultural oil with water and a mild soap to produce an emulsion. Sulfur or copper can be added to the mixture depending on what you're attempting to prevent. You can purchase a dormant spray product that contains all the required components so that all you need to do is add water, or you can make your own from the individual materials.

Oil is a "contact insecticide" – killing pests when the spray touches them. The horticultural oil kills all stages of insects (eggs, larvae and adults) by basically smothering them. Oils break down quickly and are generally more toxic to pests than to beneficial insects. Sulfur is an effective fungicide; direct contact with sulfur can prevent the development of disease-causing fungi. It is a key component of healthy soil so any residue can be beneficial as long as it's not in too high a concentration. Copper is a powerful, nonspecific fungicide. It can damage beneficial soil microorganisms and beneficial insects and is more toxic than sulfur to plants. It is available as a powder or liquid, and for dormant spraying, the most common form is one called a "Bordeaux" mixture.

HOW DO YOU SPRAY?

Sprays can be applied with a pump sprayer or hose-end sprayer that is sized appropriately for the number of plants you need to spray. Use a clean sprayer that is in good working order and hasn't been used for any herbicides. When using any chemical, be sure to follow the manufacturer's directions. Mix only the amount of spray you can use in one application - you can't save the prepared solution for use later. Because these products are oil based, shake them to ensure complete mixing when you prepare the spray mix and during spraying.

All fungicides should be handled with care. Sulfur and many other fungicides are eye and skin irritants. Wear appropriate protective clothing – pants, long sleeves, a hat, chemical-resistant gloves (not your kitchen rubber gloves), and anti-splash goggles. After application, wash hands and face and launder your clothes.

Dormant spraying is generally safe to use on fruit trees, roses or deciduous trees and shrubs. Don't use it on any plant that has any leaves (even baby ones) – they may be damaged by the spray. Spray the entire dormant plant plus the soil around it, totally saturating each and every branch, stem or cane, making sure you haven't missed any small ones - insects and the tiny dust-like spores of fungal diseases hide in the smallest crevices.

WHEN DO YOU SPRAY?

Select a mild day when there is little or no breeze; if possible, temperatures should remain over 50 °F for at least twenty-four hours, and don't spray if there is any chance of frost overnight. If you are plagued by diseases or insects, dormant spraying twice about four weeks apart (being careful that the last spraying is still while the plants are dormant), may produce better results.