Control Garden Pests and Diseases of Spring

By Rachel Oppedahl

The alternating cool and warm weather of spring, plus intermittent rains, create an ideal environment for some garden pests and diseases that can make for a bad start to the gardening season. But there are preventive measures you can take now and throughout spring to prevent or minimize damage. Keeping in mind that using synthetic chemicals should always be a last resort, here are some safe, effective ways to get a jump on garden pest and disease control.

Horticultural Oils

Using horticultural oils on fruit trees during their dormant season to control overwintering insects has been a common integrated pest management practice for years. But these sprays are also effective in the ornamental garden both before (dormant oils) and during the growing season (summer oils). If applied at the right time and in the right way (always read the label), horticultural oils can be one important tool in controlling many common soft-bodied garden pests such as mites, aphids, white flies and mealybugs. They work primarily by suffocating the insects— and sometimes the eggs —that are on the plant at the time you spray. But unlike broad-spectrum pesticides, horticultural oils are much safer because they do not leave a long-term toxic residue that can harm beneficial insects.

Like most pest controls, the sooner you spot an infestation, the more effective horticultural oils will be. Spray when populations are relatively low; you will have a better chance of minimizing damage to your plants.

Mechanical and Cultural Controls

Soil- and wind-borne pathogens such as molds and mildews that prefer cooler, wetter weather can be difficult to control, but there are things you can do to minimize damage.

For fruit trees and bushes, organic mineral-based products such as fixed copper can help prevent or control diseases like peach leaf curl. Some of these products can be harmful to mammals and/or beneficial insects, so read the labels carefully for instructions on when and how to use them properly.

If you don't already have several inches of coarse mulch protecting plants, add some now. Soilborne diseases can be carried onto stems and leaves when hard rains splash dirt back up onto the plant. A good mulch can prevent the problem.

Make time at least once a week to look for early signs of pests and/or disease. Often, the best way to lessen the chance of a widespread infestation is to spot the problem early, then remove insects or diseased leaves by hand or a hard spray with the hose early enough in the day so the moisture evaporates. Being diligent about pulling weeds among ornamental and crop plants also helps, as weeds host pests that can spread quickly in the garden.

Insecticidal Soaps and Home Remedies

These days, there are safer pesticides and fungicides (for humans and the environment) available, which can, when used early and wisely, help you stop infestations before they can do widespread damage to your garden. Insecticidal soaps and neem oil are examples of such safer pesticides. The biological fungicide *Bacillus subtilis*, sold as Seranade, is another environmentally safe fungicide that can be used against powdery mildew and some other foliar diseases. To learn more about the more environmentally friendly controls, visit http://www.ipm.ucanr.edu, the UC Davis Integrated Pest Management website.

Some gardeners swear by homemade concoctions such as diluted dish soap (best to use milder kinds, such as baby shampoo), sprays made from a water and vegetable oil base with added ingredients like cayenne pepper (for chewing insects) or garlic (for deer). While the latter methods are not proven scientifically, they are inexpensive, harmless tactics that just might be a good addition to your garden toolbox.

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