

Natural Pesticides For Your Garden

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Gardeners wanting to be 'organic' or garden more naturally are overwhelmed by the flood of confusing and conflicting claims in the marketplace. What works and what doesn't? I will try to cast a bit of light, logic, and reason on the subject, and hopefully help you garden with nature.

Pesticide Sprays: A Last Resort.

Organic gardening is far more than spraying with organic sprays. There are many cultural practices and techniques we must understand and employ if we want to be successful at organic gardening. However, when all else fails, or when pest populations reach unacceptable levels, chemical controls enter the picture.

How safe is it? In choosing a pesticide spray, the factor most often considered is toxicity. There is no totally safe product. It is grossly inaccurate to say that natural or organic controls are less toxic than synthetic or man-made ones. Many of the most toxic compounds are natural, while many of the least toxic are synthetic.

Products also vary in the **spectrum of control**. Some kill only a narrow range of insects. Others affect a wide range of insect orders. There are times when both are warranted, although for the most part, narrow-range products are the least disruptive to the ecosystem.

Another consideration is **how long a product lasts in the environment**. Some, such as soap, may become ineffective soon after they are applied. Others may last 10 days or more. There are times when you want a product to break down quickly, and times when lasting control helps avoid many repeat applications. Nicotine sulfate (organic) is among the most acutely toxic products available over the counter; rotenone is very hazardous to fish; *Bacillus thuringiensis* (BT) kills butterfly larvae (caterpillars); and insecticidal soap is devastating to ladybug larvae and other soft-bodied beneficials. While organic controls tend to break down quickly in the environment, they must be selected carefully and used with caution.

Some Top Weapons in the Organic Arsenal

Insecticidal Soap - Works great on soft-bodied pests, including mites, aphids, and lace bugs. Mix at label rates. Apply early to avoid the hot sun. Some plants are sensitive to repeated use of soap sprays. Spray must contact pests to work, so direct-spray upward from beneath the plant.

Oil - Dormant oil is fine for late winter just prior to bud-break, while horticultural oils are lightweight and can be used throughout the growing season. Spray must contact the pests to work.

Neem - Products from the neem tree have been used in India for centuries. Extracts of azadirachtin from neem trees are a very low-toxicity insecticide, and we now have neem oil, which, in addition to being an insecticide, will also control several diseases.

Pyrethrin and Rotenone Sprays - Have good 'knock down' power and break down very rapidly in the environment.

Water Wand - A high-pressure mister, which attaches to a hose, the wand cleans mites, aphids, and the like from roses and other garden plants.

Newspaper and Bagged Leaves - For season-long weed control, place four sheets of wet newspaper around plants, and cover with leaves. By season's end, the paper will be mostly decomposed and can be mixed into the soil.

Spunbound Polyester Rowcover® - This super lightweight fabric (.6 oz per square yard) excludes pests but allows light, air, and water to pass through. Great for covering a bed of pest-prone greens or a row of 'looper-friendly' cole crops.

While there are many other organic products that will control groups of pests, their toxicity varies, and many are tough on beneficials. Remember that your garden is also a zoo. Proper pest identification and informed pest-management decisions can help you get the most out of your landscape and garden while reducing risks to you and your environment. If you need help identifying an insect or disease, contact your local Extension office for a free diagnosis and recommended control options.

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