

Organic Insect Control Products for Gardens and Landscapes

By Clark McAlister

As consumer demand for organic products increases nationwide, companies are responding by offering more and more naturally derived product options. After a quick glance at local hardware and big box stores recently, I was impressed at the amount of organic pesticide options available compared to just a few years ago.

When using organic products, know that they are usually not like-for-like replacements for conventional insecticides. Most organics have little to no residual action, meaning they affect what they come in contact with and not much else. This means they have to be applied much more often than conventional insecticides.

Here are some of the organically labeled insecticides that can be used in your garden or landscape:

Bacillus thuringiensis (B.t.) – B.t. is derived from a naturally occurring soil bacteria which provides control of the caterpillar form of insects. This liquid product is sprayed on plant leaves and consumed by the caterpillars. B.t. has very low risk to non-target species. Product names: Dipel, Thuricide.

Spinosad – another naturally occurring soil bacteria, Spinosad is effective on a wide range of pests, including caterpillars, thrips, stinkbugs, and beetles. Product names: Entrust, Monterrey Garden Insect Spray.

Insecticidal soap – as the name implies, this is a form of soap that has good activity on insects that it is directly sprayed on. The active ingredient is potassium salts of fatty acids. These can cause plant injury when sprayed during hot weather. Can be used to control aphids, whiteflies, mites, and other soft-bodied pests. Many companies make insecticidal soap formulations.

Pyrethrum – this active ingredient was derived from naturally occurring compounds found in chrysanthemums. It is effective against a wide range of insects, including caterpillars, aphids, whiteflies, yellow jackets, and many more, but its short residual means that it needs to be applied directly on what you are looking to control. Product names: PyGanic, others.

Neem – derived from leaf extracts and nut oils from the Neem tree. Neem has action as an insecticide, repellent, and insect growth regulator (prevents maturation of insect juveniles). It is labeled for use on caterpillars, aphids, whiteflies, stink bugs, beetles, and more. Many companies now make Neem products.

Oils – this category includes horticultural oils, dormant oils, and plant derived oils. Horticultural and dormant oils are often derived from refined petroleum, and as such are not considered organic, they don't have the environmental risks associated with conventional insecticides. There are many plant derived oils that are organic, such as orange oil, cedar oil, sesame oil, and others that are commonly available. Oils are useful for controlling mites, scale insects, aphids, whiteflies, and other soft-bodied insects. There are dozens of different products and brand names containing organic oils.

Hopefully these active ingredients will be helpful for anyone looking to pursue a more sustainable garden or landscape.