

What are “Organic Gardening” practices?

Gardeners choose to garden organically for many reasons, but they all center around doing no harm – to the garden, the general environment, and to ourselves. The concept is simple. The uncertainty is around what practices are and aren’t acceptable.

In gardening, “organic” specifically means using no **synthetic** pesticides, fertilizers or soil amendments. It does not necessarily mean pesticide-free, as there are a number of naturally-derived materials that are allowed for use in certified organic gardens.

Let’s look at what the relevant terms mean:

A pesticide is a substance or mixture of substances intended for destroying, repelling or reducing any pest. It should control the pest but not be detrimental to humans or other non-target organisms in the environment when used correctly.

Pesticides are further categorized by the organism they are meant to control. “*cide*” is Latin for “to kill”. So an **herbicide** kills or controls plants, an **insecticide** kills or controls insects and a **fungicide** does the same for fungi. They are all forms of pesticides.

The pesticide can be either naturally derived or synthetic. If it’s naturally derived (and not detrimental to humans or other non-target organisms in the environment when used correctly) it’s probably an acceptable material to use in an organic garden.

Some examples of allowable pesticides include Bt (*Bacillus thuringiensis*), which is used to control caterpillars; spinosad, a naturally occurring bacterial product that controls a variety of insect pests; and copper sprays, which are used to control a variety of fungi.

Materials that have been tested and certified as acceptable in organic gardening are known as **OMRI (Organic Materials Review Institute) certified**. If you want to purchase an organic pest control product, look for the OMRI logo on the label. You can also find listings of the OMRI-certified materials at <https://www.omri.org/>.

Many of us have heard of one or more “home remedies” for pest control. Some of these have a valid scientific basis, such as baking soda mixtures’ which when sprayed on foliage temporarily changes the pH of the leaves to control powdery mildew and black spot. Many others, however, have no such research-based validation and may actually do more harm than good! When considering a home remedy, it’s a good idea to thoroughly research the mixture online or in reference books, or to consult your Extension folks for advice.

It’s important to understand that “organic” doesn’t necessarily mean “safe”. Many organic pesticides are potent poisons that if used incorrectly can harm people and others. Therefore, it is extremely important to read the label of a pesticide and follow the directions as written, using it only for the plants and pests listed. **The label is the law** when pesticides are used. You can also choose the level of toxicity you use by the **signal word** on the label. **Caution** means it is slightly toxic, **Warning** means moderately toxic and **Danger/Caution** means very toxic.

One other important consideration is how **any pesticide affects pollinators** such as honeybees. By choosing the right time of day to apply a pesticide and by not treating plants when they are in bloom you can reduce the risk of inadvertently harming these important insect helpers. Further information is available from the UConn Extension Master Gardener’s Office or online at <http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx>