

454 COLLEGE HIGHWAY, SOUTHWICK, MA 01077

Town of Southwick Southwick Agricultural Commission



Telephone (413) 569-6907 Fax (413) 569-5284

Sofinowski Community Garden

Dealing with Weeds

WEEDING: "Experience is the best teacher, as every gardener who has ever let a weed go to seed knows." Weeds are something that every gardener has to deal with. They can be helpful and/or nuisance. They can reduce crop yields by competing for water, nutrients and light. They can harbor insect and disease pests, and some are poisonous. Many weeds also serve a positive role in the garden. Many are edible themselves. Some are leguminous and therefore add usable nitrogen to the soil. Weeds can also serve to "disguise" food crops from potential pests because they have strong aromas or are attractive food sources for insects.

CATCH THE PROBLEM EARLY: You don't need to pull or rake every little green thing as soon as it pops up. Wait for the plants to reach a certain height, and weed after a rain. Weed removal is much easier if the soil is slightly moist.

MANAGING THE WEEDS TO SUIT YOU: Learn to identify your weeds. Some have medicinal properties and can even be added to an early summer salad, such as lambs quarters, young dandelion leaves, and purslane. Bare ground is your enemy. Your food crops will not be harmed by a low cover of weed growth: just keep it under control.

COVER BARE GROUND WITH MULCH OR A PHYSICAL BARRIER: Newspapers, sheet cardboard, brown paper, grass clippings, shredded leaves or straw will smother weed seedlings if layered on thickly. Newspapers should be saturated with water and weighted at the corners to keep them from shredding and blowing away. Piling woodchips or compost on top of the newspaper also helps. Over the growing season these materials will gradually break down and become part of the soil. Do NOT use glossy paper, and minimize the use of colored newspaper.

ADDITIONAL RESOURCES: *Rodale's Successful Organic Gardening - Controlling Weeds*, by Erin Hynes. One of the most comprehensive and readable books for home gardeners is *The Garden Primer* by Barbara Damrosch.

Dealing with Pests

CONTROLLING INSECT PESTS WITHOUT PESTICIDES. Your Agriculture Commission strongly discourages the use of chemical pesticides. If you feel you must use chemicals to control pests, you MUST read the label and apply as directed and in the right time during the pest's life cycle. Many gardeners use chemical pesticides to control pests, and these toxins may be very effective at reducing pest insect populations. But they also: indiscriminately kill beneficial insects (such as bees!) and microorganisms; are expensive; may pose a threat to the health of the gardener and those who eat the food; encourage pesticide-resistant insect species; leach into groundwater and pollute aquifers. The majority of the insects in your garden are beneficial to the natural balance of the garden.

Organic pest controls quickly break down and don't have long-term negative effects on the environment. 'Pyganic' is an organic pesticide made from chrysanthemums. Some people use water with a little Dawn dishwashing liquid in a spray bottle (not organic). Insecticidal soap is also applied diluted in a spray bottle.

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Pests continued

Organic pesticides and supplements can be identified by "OMRI approved" on the label. Still, they are quite expensive. Try these other methods before turning to pesticides:

START WITH AND ENCOURAGE HEALTHY PLANTS IN YOUR GARDEN: Stressed plants encourage attack by insects and are more vulnerable to disease. Removing diseased or dying plants immediately reduces the chances of more plants suffering a similar fate. Watch for early signs of problems and take preventative measures as soon as possible. Water well and keep the whole garden "clean" by removing debris and dead plant material.

ACCEPT SOME LEVEL OF DAMAGE: Consumers have come to expect perfect-looking fruits and vegetables. Produce with cosmetic defects (spots, discolorations, uneven shape) may be rejected from retail trade, but is still delicious and healthy. Some insect damage is inevitable, but often it has little effect on the plant's long-term health.

LEARN THE NAMES AND LIFE CYCLES OF THE PESTS: Not only will you learn how to deal with the harmful bugs, but you will avoid killing "beneficials" such as the praying mantis and lady beetles, which eat many insect pests.

HAND-PICK & TOSS THE INTRUDERS: Check your vegetables regularly and thoroughly (including the undersides of the leaves). Pick off and dispose of insect pests. Damage from potato beetles and Japanese beetles can be minimized if you simply knock them off the leaves with your hand or a spray bottle of water early in the day.

ASK FELLOW GARDENERS WHAT THEY DO: Experienced gardeners always have helpful tips that they are happy to share. In a community garden especially, **gardeners should coordinate pest control methods.** If Colorado Potato Beetles and Japanese Beetles are infesting your potatoes, they're on everyone else's plants too!

ROTATE CROPS YEAR TO YEAR.

PLANT DECOY CROPS OR SET TRAPS: Planting one or two squash plants to coincide with increases in squash bug population may allow you to destroy most of the pests before they infest the whole crop. Homemade traps are easy to make, such as sticky yellow cards to trap and kill white fly. Shallow pans filled with beer placed on the ground will attract and kill slugs, which are especially destructive to melons.

PLANT COMMUNITIES OF PLANTS: Companion plants are mutually beneficial when grown together, because they deter insect pests or provide nutrients that promote the growth of both plants.

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Pests continued

IMPORTANT NOTES ON PESTICIDES AND HERBICIDES

The Northeast Organic Farmers' Association

Glyphosate

More commonly known as Roundup, glyphosate was first patented by Monsanto in 1964 as a pipe cleaner. It is now the most widely used herbicide in the world. Glyphosate is mostly used to kill weeds on genetically engineered crops like soy, corn and canola. It is also commonly applied to gran and beans just prior to harvest. Numerous studies show that even small doses of glyphosate are responsible for alarming health and environmental impacts.

https://www.nofamass.org/content/glyphosate

IARC

The International Agency for Research on Cancer of the World Health Organization has determined that glyphosate (Roundup) is probably carcinogenic to humans. https://www.centerforfoodsafety.org/files/glyphosate-faq_64013.pdf

Studies are ongoing of other pesticides such as Malathion and Dursban, a product name for the chemical chlorpyrifos.