

The Garden Plot, November 2008

By Robin Mittenthal, University Apartments Community Gardens Committee

In last month's column, I reminded Eagle Heights gardeners that the Eagle Heights garden plots are supposed to be "organic."

This month and next month, I want to give you a little more information about growing organically, and specifically about organic pest control. Though I will not talk much about organic fertilizers (I have covered them in previous garden columns), I should note here that a) the symptoms of many nutrient deficiencies can look very much like plant diseases, b) there is some evidence that properly fertilized plants not only grow well but are also better able to defend themselves against insects and diseases, and c) my experience in Eagle Heights suggests that many plots have not been fertilized adequately (or at all) for years and are deficient in various nutrients. If you are interested in having the soil in your plot tested by the UW Soil and Plant Analysis Lab (at a cost of \$15), see the "Lawn and Garden" section at <http://uwlab.soils.wisc.edu/madison/index.htm?../forms.htm&contents.asp>

There are some options out there for managing weeds, insects, and diseases organically. Note that I say "manage" and not "control." With most organic materials, you will not be able to destroy a pest the way you might with a synthetic ("man-made") spray or powder, but you might be able to reduce the severity of the problem, at least for a while.

Here are a few other points that I feel are important to make regarding use of organic pesticides:

- 1) Most organic pesticides are minimally or not all harmful to humans, pets, and the environment at large. This is one of the reasons they are approved for use in organic food production. HOWEVER, some organic materials *can* be toxic if inhaled, swallowed, or spilled on skin. ALWAYS read and follow all safety instructions on whatever pesticides you buy. Instructions may tell you, for example, to wear protective clothing (such as gloves or eye protection) or to keep pets and small children out of the area where you apply the pesticide. Reading instructions carefully may also give you more realistic expectations for how effective the material will be.
- 2) When you have a pest or disease problem, make sure you know what the organism is before you even consider buying a pesticide. Talk to a more experienced gardener (this will usually do the job, especially for common weeds and insects), try using the UW weed identification tool (see <http://agronomy.wisc.edu/weedid/weedid.php>) or get help from either the UW Insect Diagnostic Lab (see <http://www.entomology.wisc.edu/entodiag.html>) or the UW Plant Disease Diagnostics Clinic (see <http://pddc.wisc.edu/index.html>).
- 3) Once you know what pest you have, make sure you get the right material to deal with it. Many organic pesticides work only on a single species of pest, such as the Colorado potato beetle. Be aware that the same material may be sold by many companies under many different brand names (for example, there are dozens of companies selling insecticidal and fungicidal powders and liquids made from the seed of an Indian tree called *neem*). Some of these products may be more effective than others, while some may not be effective at all.
- 4) Recognize that for some pests, a pesticide is simply not the best answer to the problem. For weeds in particular, there are very few organic pesticides that are at all effective (not "none," but few), and your best choice may be some kind of mechanical control (pulling the plants out, and/or burying them with something so they can't grow). Mechanical control is also important for diseases (pull out the sick plants, take them away, and avoid touching those that don't look sick) and for some insects. One of the most common ways to prevent insect damage is the use of a thin, white, clothlike material called a "floating row cover" that physically keeps the insects away from your plants (see instructions in the garden manual at http://www.eagleheightsgardens.org/tips/garden_manual_v_1.1.pdf). For some insect and disease pests, you

may also benefit from buying crop varieties that are advertised as having resistance to those pests. To manage diseases, crop rotations can be helpful even in a small garden (for example, make sure you wait at least two years after planting tomatoes in part of your garden before you plant them again in the same place). Finally, I encourage you to develop lowered expectations for appearance. Most of us have been conditioned by heavy pesticide use to expect perfect-looking vegetables and fruits, but in nearly every case, even a large amount of cosmetic damage (leaf spots on lettuce, scars on cucumbers, etc.) does not affect either the flavor or cleanliness of the food.

Next month, I will talk about how to manage just a few of the pests and diseases that are particularly common in Eagle Heights gardens. I will also suggest a few other sources of information you can turn to for help.

As always, e-mail me if you have questions (mittenth@gmail.com).