Pest Corner

March, 2007

Quote from 1999 Private Applicator Pesticide Education Manual (WSU's MISC0126): "Chemical pesticide use has increased sharply during the past decades in the US and worldwide. The benefits of pesticides to humans have been demonstrate: controlling malaria and other insect-vectored diseases; helping increase the yield and quality of numerous crops, resulting in more food and fiber for more people; helping control nuisance pests. However, the wide-scale use - and misuse - of pesticides is of worldwide concern because of associated human health and environmental problems."

Spring time displays of chemical pesticides (including herbicides) are abundant in retail stores. One may think about other options about what to do and use in the landscape and inside our homes. Perhaps in 2007, adopt another gardening resolution learning more about Integrative Pest Management (IPM) principles. Here below are just a few strategies to implement:

PREVENTION: Plant a variety of species that are pest-resistant and/or plants that attract beneficial insects and birds. If a plant does not do well in the garden, replace it with something else (check 2007 Plant Picks List for our area). Build good soil with compost and give each plant its proper exposure and recommended care in the garden. Keep garden pathways clear of weeds and objects that may harbor pests such slugs and snails.

OBSERVATION: Monitor your plants to identify the ones that are struggling trying to find out reasons for the problem. The insect that you see near a damaged leaf may actually be a beneficial insect that devours pests. Be realistic and do not expect to kill all Pests; some of these are critical to support the life and activity of beneficial insects, birds, and other organisms. Act only when necessary.

CONTROL OPTIONS: Physical and cultural controls such as traps, barriers, soapy solution sprays (as in Safer soaps, and hand-picking insects are the least hazardous methods. Biological controls are natural predators that eat, infect, or destroy pests. Attract beneficial insects, live predators (garden snakes, frogs, etc.,) and birds to your garden and then protect them Biological controls include Bacillus thuringiensis (B.t.), the bacterium that controls caterpillars, but does not hurt beneficial organisms.

STUDY THE CHEMICAL PESTICIDE YOU ARE ABOUT THE APPLY: Chemical controls may be used as last resort. Choose products that are the least damaging to the environment. Read labels carefully as to amount needed, dilutions, warnings, best time to apply (to protect pollinating insects), and whether product is indicated for the specific problem. You may have to decide whether the potential toxicity and risks of a product warrant its application. At times, the best approach is not doing a thing at all. It is possible at times that the chemical pesticide we are about to apply may not be efficient as the pest may have left or evolved into another form in the garden.

DEVELOPING PATIENCE AND SELF-RESTRAINT: Treat problems individually and avoid a "blanket application" of a pesticide as a preventative measure. Consider the effect of what you apply as pesticide on the NON-Target Organisms (including yourself). Often applying the same broad-spectrum chemical across the entire garden only creates new problems… as one might destroying precious insects a.k.a. the "beneficials" (these can be present in various stages of their life cycle). You may only need to reduce pest populations below a reasonable damage threshold rather than killing all pests.

EVALUATION: As you consider your options in pest management, evaluate the individual problem in the specific plant and how it relates to other elements in the garden (described needs of the plant species and genus, best location, exposure, soil fertility, miniclimates, stressors, other plants, etc.). Make note of what happens when you change or modify the elements above. Make note of what type of damage you find in leaves, stems, root system, and at what particular time of the year. Assess your risk of exposure to substances and, how you might protect yourself, pets, birds, soil, air and water quality before you apply a product that contains chemicals that are known to have other effects/damage potential.

COMPLIANCE WITH LABEL DIRECTIONS: Follow label recommendation carefully. Make note of date and conditions when chemical was applied to be able to evaluate results and change.

Submitted by Cecilia