INTEGRATED PEST MANAGEMENT (IPM)
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For years we have used pesticides and other chemicals to control pest in our gardens, this has produced cheap and plentiful food supplies. However, we have learned that many of these chemicals have adverse effects on humans, have contaminated our environment and have resulted in some pest becoming resistant to them.

Integrated Pest Management (IPM) is a pragmatic method to manage the 10% of insects harmful to your garden while doing minimal damage to the beneficial organisms that inhabit even the smallest yards and gardens.

IPM addresses garden pest issues and provides a method to take advantage of all available pest management options. These options including cultural, biological, genetic and chemical controls, to prevent detrimental levels of pest damage by the most economical means, and with the least possible hazard to people, property, and the environment. This is accomplished by moving from the least damaging methods of control to judicious use of chemical pesticides as a last resort. NOTE: IPM is not an organic method of pest control.

Following are some IPM methods you may want to try in your home garden:

Physical Controls:
- Prune out heavily infested plant parts and diseased branches. This is very effective against localized infestations of scale insects and tent caterpillars.
- Place protective floating row covers on vegetables.
- Place stiff paper tubes or wrap aluminum foil around stem of transplants to deter cut worms.
- Wash insects off with stream of water.
- Hand-Pick insect pest and slugs and destroy egg masses.

Preventive Measures:
- Plant flowers and herbs with vegetables to help attract beneficial insects while repelling pest.
- Place bird and bat houses in your garden, birds and bats eat hundreds of insects daily.
- Time plantings to avoid peak periods of infestations.
- Keep Gardens free of debris.
- Remove crop debris from garden following harvest.
- Till gardens in the fall.
- Plant cover crops.
Disease Inhibitors:
- When possible plant disease resistant plants.
- Rotate vegetables and annual flowers where practical so the same plant does not occupy the same space every year.
- Space and prune plants to improve air circulation.
- Water early in the day and at the base of the plant not the leaves.
- Use drip irrigation.
- Remove disease infected plants from the garden.

Instead of chemical pesticides use the following:
- Insecticidal Soaps.
- Pyrethrum, Rotenone, B.t. (Bacillus thuringiensis)
- or Neem based sprays.
- Horticultural Oils.
- Note: When using these products follow manufactures instructions.

As a last resort use chemical pesticides:
- Except for some serious fruit diseases, pesticides should not be applied on a scheduled or preventive basis.
- Avoid using broad spectrum residual pesticides.
- If you must use chemical pesticides closely follow the manufactures instructions closely to avoid unintended harm to beneficial organisms, yourself and the environment.

Remember the first step in pest control is correctly identifying the pest. The insect you see may not be the pest causing the problem.

For more information on IPM visit the University of Maryland’s WEB site: http://extension.umd.edu/news/video/integrated-pest-management-ipm-basics

For more information about the Frederick County Master Gardener/Horticulture Program, visit : http://extension.umd.edu/frederick-county/home-gardening or call Susan Trice at the University of Maryland Extension Frederick County office, 301-600-1596.
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