

## Alternatives to Pesticides

You can have a green and healthy lawn and garden without depending on large amounts of pesticides. It is better for your yard, the people and animals that use your yard, and our streams. Follow the guidelines below to decrease pesticide use.

- Grow native plants that are able to handle the climate and pests of our region. See <http://www.dcnr.state.pa.us/forestry/plants/nativeplants/> for more information on native plants, including where to buy them.
- Spread mulch at the base of trees to keep mowers and weed whackers from opening up wounds in the bark. Spread mulch flat on the ground to a height of no more than two inches; do not smother the tree's roots and bark by building a cone or "volcano" around the tree.
- Provide the proper amount of water to keep your lawn and gardens stress-free. Water your lawn deeply, but only every several days and not at all if it rains. Mow your lawn to a height of 2 ½ to 3 inches.
- Get a soil test to determine if you need to use any fertilizers. Apply fertilizers only at the rate needed and never before a storm. A soil test kit can be cheaply obtained from your local Penn State Extension office (Delaware County: 610-690-2655, Chester County: 610-696-3500).
- When weeds sprout, hand dig or spot treat them with herbicides.
- Rotate your garden crops, just as farmers do. Do not plant tomatoes or peppers in the same place each year. Consider scattering species throughout your garden. If a tomato hornworm finds one of your tomato plants, for instance, it may easily move to all of your tomato plants if they are next to each other.
- If you find a pest damaging one of your plants, consider the following questions before deciding what approach to take.
  1. What is it? If you don't know, Penn State Extension's website, <http://extension.psu.edu/pests/ipm>, is a good place to start.
  2. Where does the pest live, breed, and what does it eat?
  3. How many pests are there?
  4. How many pests are too many?
  5. If I have "too many," what is the best way to get rid of the pest?
  6. What are the potential "side effects" of control methods?
- When pesticides are needed, use insecticidal soaps and *Bacillus thuringiensis* or "Bt."



Being selective in your pesticide use and growing plants native to our region will increase the number of beneficial insects, such as butterflies and other pollinators, in your gardens.