

Alternative to Chemical Control of Pests

A landscape with healthy soils and a diversity of native plants generally has much fewer problems with pests. Nonetheless, there is no such thing as a pest-free landscape (even those treated with chemicals). Employ these strategies to prevent problems:

- ❖ Prevention is always the best cure – design your landscape in ways that discourage pests
 - create a diverse mosaic of plant species
 - use companion plantings in gardens
 - use natural mulches and ground covers to create habitat near the ground for beneficial insects; also resisting the urge to cut back and remove dried stems and leaves from gardens after growing season provides beneficial insects with winter habitat (eggs, larvae, etc.)
 - use physical barriers to keep deer and other animals out of gardens
- ❖ Integrated Pest Management (IPM)
 - learn to recognize pests and treat problems only when they occur and intensify
 - some tolerance of limited numbers of pests is encouraged
 - begin any treatments with the least toxic remedy available
 - if problems persist or worsen, employ a slightly more toxic solution
 - if numbers become excessive and a pest begins to cause widespread and extensive damage, resort to chemical control, but limit applications to what is necessary to get problem under control. Also follow all label directions and be specific about where chemicals are applied.
- ❖ Examples of low-toxicity remedies
 - Corn gluten meal – weed control for lawns
 - Floating row covers – lets in light, air and water but keeps insects off garden vegetables
 - Insecticidal soaps – kills soft-bodied insects, used as a spray
 - Horticultural oil – lightweight oils (often vegetable oils) that smother insects
 - Bt – *Bacillus thuringiensis* are various natural bacteria that attacks the larvae of butterflies and moths; must be used sparingly, because it can harm non-pest insects
 - Neem oil – extract from a tropical tree seeds is a very effective non-toxic deterrent
- ❖ Introduced beneficials – introducing ladybugs, lacewings, and preying mantis does work but can have limited effectiveness.

