

THE PURDUE LANDSCAPE REPORT

Prevent Summer Pests With A Dose of Patience

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Whether it be a hail storm, late frost, or an early season pest, springtime is when Mother Nature tests the patience of even the most experienced gardeners. While many gardeners have learned the hard way not to plant during a warm spell two weeks before the frost-free date, many more are unable to resist the urge to protect the new leaves of their precious plants with the first insecticide they can get their hands on.

What can be wrong with taking care of small pest problems before they become big problems? There is nothing wrong with closely monitoring your plants for pests. Indeed, monitoring plants and resolving pest issues before they damage your plants is actually the hallmark of a good pest management program. Problems arise, however when the method of pest control, kills the pest of concern, as well as the beneficial insects in your garden that can keep other insects and mites from becoming pests.

In order to avoid problems with late season pests ask yourself the following questions:

1. *Can this pest damage my plants?*

To answer this question you need to identify the pest. Many early season pests that suck sap, like aphids and spittle bugs rarely threaten plant health, because there are many beneficial insects that feed on them before they can cause irreparable harm. Other pests that chew like early season caterpillars and sawflies can cause extensive damage.

2. *Are there enough pests on my plants to make damage likely?*

A single insect rarely if ever causes enough damage to harm a plant. For example, a single monarch butterfly caterpillar or parsley worm will not cause extensive damage and rarely merit control action. Cabbage butterflies, or bagworms occur in groups are often present in large enough numbers to completely

defoliate and kill plants.

3. *Am I using a tactic that is appropriate for controlling the problem?*
 - Mechanical control, or the physical removal and destruction of an isolated cluster of pests, may sometimes be enough to stop a pest problem.
 - Applying *broad spectrum insecticides*, like pyrethroids (eg. bifenthrin, deltamethrin, cypermethrin), or neonicotinoids (eg. imidacloprid, clothianidin, dinotefuran) kill a wide variety of pests, but will also kill beneficial insects and mites that keep late season pests. Removing these beneficials early in the season, gives spider mites and scale insects plenty of time to grow, reproduce and damage plants.
 - *Biorational insecticides*, like Spinosad (Fertilome borer and bagworm killer) can kill caterpillars and sawflies without killing many beneficial predators. [Horticultural oil](#) and soap, can be used to smother sucking insects, like aphids and some scale insects without long-lasting impacts on beneficial insects.
4. *Does this problem really warrant the use of broad spectrum insecticide?*

Sometimes, as in the case of borers, like [emerald ash borer](#), the pest will kill the plant if a broad spectrum insecticide is NOT used. In these situations, it makes sense to protect the plant from imminent danger. You can always clean up scale or mite outbreaks after the primary problem has been solved.

Check your diagnosis and find the most appropriate controls for you pests, by using the Tree, Shrub, Annual, or Perennial Flower Doctor apps available at PurduePlantDoctor.com

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