

How to treat common garden pests

How do I know insects are damaging my plants?

You're looking at your garden and you're thinking that your plants used to look good and now they look **bad**. Don't immediately assume that insects are causing the problem! There are many other things that can cause plants to look unhealthy. It could be nutrition, disease, temperature, moisture, or some other environmental factor.

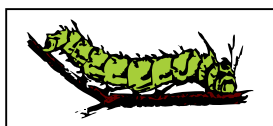
Should I be concerned about insects I see in my garden?

◆ Most insects are not pests! In fact, many insects you see in the garden are good to have around. Bees, butterflies, ladybugs, and spiders are all 'good bugs'. If you see them you should be happy instead of looking for a can of insecticide. When you see insects actually eating or damaging your plants it's pretty safe to say that the insect is a pest.

Here's my problem... What can I do about it?

◆ There are **caterpillars** eating my plants.

Caterpillars will make holes in the leaves or eat the edges of leaves as they munch on your plants. If they're feeding on your vegetables then you want to be careful to use a pesticide that is very safe for people. You can control caterpillars



with Bt (*Bacillus thuringiensis*). Bt is very safe for humans, pets, and other animals. Neem oil and Sabadilla are two other safe products you can use to control caterpillars.

◆ There are **slugs** or **snails** eating my plants.

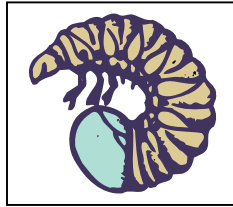
Slugs and snails aren't insects but they sure can do a lot of damage! They will eat all of the leaves off small transplants or other tender plants. Oftentimes you won't know slugs are causing the damage because they hide during the day. In order to get rid of slugs you can create traps for them using boards or newspaper – check under the surface each morning and destroy the pests that are there. Sprinkling salt on the slugs is effective but it increases soil salinity so it might not be a good idea. Stale beer in a shallow container



works but will only attract slugs in a small area. You can place a barrier of copper flashing or diatomaceous earth around plants to deter slugs. If you use diatomaceous earth remember to refresh the barrier after rain. You can use slug bait that contains iron phosphate (Slug-go or Escar-go) to control slugs.

◆ There are **grubs** in my lawn.

Before you put down an insecticide to control grubs in your lawn you should know how many grubs you have per square foot of grass. Don't put down an insecticide unless there are 8-10 or more grubs per square foot.

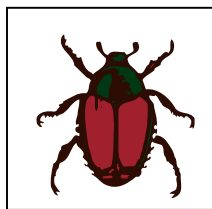


If you plan on using a chemical that contains imidacloprid (Merit or Grub-X) then you need to treat the lawn before the beetles lay their eggs – in late June or early July. If you are going to use diazinon or oftanol, then you need to know what kind of grub you have (Japanese beetles, European chafer, June bug, etc.) and when that pesticide will kill them. Grubs

only eat at certain times of the year so you have to be sure that the grubs are feeding when you put the pesticide down. Ask your local Cooperative Extension Office or lawn treatment company for assistance.

◆ There are **Japanese beetles** in my garden.

Japanese beetles are a problem as larvae and as adults, when they eat roses, zinnias, cannas, and many other flowering plants. The popular Japanese beetle traps are usually **not** effective for pest control. It is a good idea to control



Japanese beetles as grubs in the soil (see above). *Bacillus popillae* Dutky, bacteria that you put down in the soil, is worth looking into for controlling grubs. You can hand-pick the adults off the plants and put them in soapy water to kill them. Chemical controls that work are rotenone+pyrethrin, malathion, carbaryl (Sevin), and acephate (Orthene).

◆ There are **aphids** on my plants.

Aphids are small, soft-bodied insects that put their straw-like mouthparts into a plant and suck out plant juices. Aphids are often green, but can also be clear, yellow, black, or almost any other color. Aphids can reproduce quickly, so you will often see many of them feeding on a plant. Ladybugs and several other



kinds of insects feed on aphids - please encourage them in your garden! One of the safest ways to get rid of aphids is to douse the plant with insecticidal soap. You can also treat aphids with pyrethrin sprays or dusts.

Note: When you use pesticides remember to read & follow all label directions.

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