

Natural Remedies to Keep Away Pests

Prevention - The easiest way to prevent insect damage in your garden is to discourage them from coming in the first place. A healthy garden is the best defense.

- **Pull out any weak plants.** They may already be infected. If not, they will attract predators. Pull the plant and dispose of it away from the garden area.
- **Build healthy, organic soil.** Natural composting methods, mulching and top-dressing your soil with compost or natural fertilizer is the best way to develop strong, vigorous plants.
- **Seaweed mulch or spray.** Seaweed contains trace elements such as iron, zinc, barium, calcium, sulfur and magnesium, which promote healthy development in plants. Seaweed fertilizer in mulch or spray form will enhance growth and give plants the strength to withstand disease. Seaweed mulch also repels slugs.
- **Minimize insect habitat.** Clear garden area of debris (dead leaves, twigs) and weeds which are breeding places for insects. Use clean mulch.
- **Companion Planting.** Insect pests are often plant specific. When plantings are mixed, pests are less likely to spread throughout a crop. Planting aromatic herbs and companion flowers with other plants in your garden can also act as a natural deterrent for many pesky insects. Some plants that possess the natural ability to repel insects include:
 - Onions scattered throughout the garden will keep root maggots from traveling from plant to plant;
 - Aromatics such as chives, dill, thyme, basil, oregano, and mint attract valuable pollinators and ward off a great number pests;
 - Petunias planted next to beans repel bean pests.
- **Rotate crops.** Rotating crops each year is a common method to avoid re-infestation of pests which have over-wintered in the bed.
- **Keep foliage dry.** Water early so foliage will be dry for most of the day. Wet foliage encourages insect and fungal damage to your plants. If possible deliver water to the root systems without wetting the foliage.
- **Disinfect.** If you've been working with infested plants, clean your tools before moving on to other garden areas. This will reduce the speed of invading insects.

Beneficial Insects - Beneficial insects can be attracted to your garden to prey on harmful insects or their larvae. There are many different species for specific problems.

- Parasite Wasps. These small beneficial insects destroy leaf-eating caterpillars. You can attract them to your garden by planting carrots, celery, parsley, and caraway which are all members of the Umbelliferae family. These plants are easy to grow, and some should be left to flower. It's the flower that attracts the insects.
- Ladybugs, Lacewings and Hover-flies. These common insects consume aphids, mites, whiteflies and scale. They can be attracted to your garden by planting members of the daisy family (Compositae), tansy, yarrow, black-eyed susan's and asters.

Homemade Remedies - They usually involve noxious (but non-toxic) ingredients such as garlic, cayenne, stinging nettles or horsetail which are diluted in water and blended to be sprayed on the plants. For less severe pest problems, you can also pick off the offending insects by hand.

- Soft-bodied insects (mites, aphids, mealybug). Mix one tablespoon oil and a few drops of dish soap into 4 cups of water. Shake well and pour into a spray bottle. Spray plant from above down, and from below up to get the underside of the leaves. The oil smothers the insects. Or try a mix of two tablespoons of hot pepper sauce or cayenne pepper with a few drops of dish soap into 4 cups of water. Let stand overnight, then stir and pour into a spray bottle. Shake the container frequently during application.
- Earwigs, slugs, and other soft-bodied garden pests. Sprinkle diatomaceous earth or crushed eggshells over plants and around edges of garden beds. Insects cannot become immune to its action, as it is a mechanical killer – not a chemical one. Earwigs will collect overnight in folds of damp paper or cardboard. Just pick it up early in the morning and toss in the garbage. Young snails love to eat fallen lavender flowers, then it kills them.
- Fungal diseases. Mix two tablespoons of baking soda into 4 cups of water. Pour into a spray container and spray affected areas. Repeat this process every few days until problem ceases.
- Powdery mildew. Mix equal parts milk and water and spray on infected plants. Three treatments a week apart should control the disease.

Caution: Sprays which kill harmful insects will also kill beneficial insects. Use these homemade remedies selectively, only spraying the infected plants. Apply them early in the morning or just before dark. Re-apply after a rain. Wear protective clothing when spraying any insecticides.

Traps and Barriers

- Yellow Flypaper. Old-fashioned fly-paper is very effective in the garden for aphids and whiteflies. Make your own for the frugal option.
- Pheromones. These biological mating scents attract insects to a trap which is coated with a sticky substance. Pheromone traps are effective, but remember they are "attracting" the insects - be sure to position them on your garden perimeter or you'll attract outside pests into your garden!
- Cloche. The cloche is like a miniature greenhouse for your seedbeds and young plants, and acts as a barrier against pests. Unfortunately, the cloche has to be opened on hot days and for watering, and this presents an opportunity for pests to find the plants. But the best defense against pests and disease is a well established plant.
- Barrier Paper. Scraps of waxed cardboard from milk cartons, or a scrap of roofing felt are a simple yet effective defense against cabbage moths. Cabbage moth larva kill young sprouts of the Brassica family (broccoli, cabbage, brussel sprouts, kale or cauliflower).

Rodent Control

Secure any open food sources, especially the compost bin. As a deterrent, soak cotton balls in oil of peppermint or dab in areas of rodent activity. Replace after a rain.