

How to Make Organic Repellants and Insecticides

The following concoctions are all non-toxic. They are easy to make and use ingredients that can be bought at any supermarket if they are not already on hand in your kitchen.

Peppery Rodent Repellant

A few shots	Tabasco
1 tsp. (5 mL)	chili powder
2 cups (500 mL)	water
1/2 tsp. (2.5 mL)	dishwashing soap

Mix the ingredients together and pour into a clean spray bottle. Spray on the leaves of plants that are clearly being eaten. This repellant is effective against squirrels, groundhogs, rabbits, and other rodents. The peppery taste of the "sauce" on the leaves can prove so unpleasant that the animals may leave your garden alone and look elsewhere for their food. The repellant also discourages insects. Respray after heavy rain.

Dog Repellant

10	garlic cloves
1	medium onion
4 cups (1 litre)	water
1 tsp. (5 mL)	Tabasco

Peel and chop the garlic and onion. Combine with the water and tabasco, and blend in a blender. Strain, pour into a clean spray bottle, and spray on and around plants where dogs are being a nuisance.

Aphid Spray

10	garlic cloves
4 cups (1 litre)	water

Peel the garlic, chop it finely, and soak in water overnight. Strain, and pour the liquid into a clean spray bottle. Spray on infested plants. This spray is effective against flea beetles and other small insects as well as aphids. It works chiefly by keeping the insects off the plants rather than killing them, though they may die if hit by the spray.



Late blight [View photo 4.19](#) is caused by a fungus-like pathogen (*Phytophthora infestans*) and is a serious disease of both potato and tomato, and is infamous as the cause of the Irish potato famine. It can quickly defoliate plants and cause fruit rot in tomato and tuber rot in potato. Spores are carried long distances in the wind and the disease can spread rapidly. The pathogen overwinters only in living plant debris, most commonly on seed potatoes or unharvested and cull potatoes in the Northeast. Imported solanaceous transplants including tomato and petunia may harbor late blight

Cultural Control:

1. Destroy cull potatoes and control potato volunteers in all fields.
2. Use drip irrigation rather than overhead in order to keep the foliage dry. Alternatively, overhead irrigate early in the morning before dawn so the plants are dry early in the day. The key factor is to keep the period of leaf wetness to a minimum.

Materials Approved for Organic Production:

Copper products give fair to good control but must be applied often and thoroughly.

***COLORADO POTATO BEETLE* (*Leptinotarsa decemlineata*)**



Colorado potato beetles (CPB) overwinter as adults [View photo 4.2](#), hibernating in the soil near where previous host crops were grown. They emerge in the spring and primarily crawl to new hosts where they feed and lay eggs [View photo 4.3](#). The resulting larvae [View photo 4.4](#) and successive generations can quickly defoliate a crop. The CPB prefers potatoes and eggplants but can also be a problem on tomatoes and peppers

Cultural Control:

1. Crop rotation out of susceptible crops is the first line of defense since CPB only feeds on solanaceous plants. Control of solanaceous weeds such as horse nettle is important.

For plantings less than two acres, hand-picking may be practical if the CPB pressure is low

Materials Approved for Organic Production:

1. Spinosad: Recent studies showed 12 good and 2 fair results.
2. Neem products: Recent studies showed 1 good and 2 fair results. Generally, neem is slow-acting, but it reduces overall damage and numbers of large larvae.

Source: Cornell Pest Management Guidelines for vegetables 2004. Cornell Cooperative Extension Publication