

Recipes for Homemade (and Least Toxic) Pesticides and Repellants

Many home gardeners are looking for ways to control garden pests and diseases without introducing potentially harmful chemicals into the environment. Here are some suggestions for environmentally safe recipes.

Cooking Oil Solution

Effective against egg and immature stages of insects

1 cup cooking oil
1 tablespoon liquid soap

Mix oil and soap. Use 2 ½ teaspoons of this mixture in 1 cup of water. Spray on the surface and underside of leaves to coat insects in various stages of development.

Soap Solution

Effective against aphids, mites and whiteflies

1 to 3 teaspoons household soap (not detergent)
1 gallon water

Mix soap and water. Spray on the surface and underside of infested foliage. The soap acts to paralyze insects, which prevents them from feeding. The pests eventually die of starvation. For heavy infestations spray every 2 to 3 days for 2 weeks. Monitor plants for further required treatments.

Solar Tea

Effective against aphids, thrips, and grasshoppers

½ cup hot peppers
½ cup onion and /or garlic cloves
2 cups water

Chop peppers and garlic cloves and add water. Steep this mixture for 24 hours. An easy method for steeping the tea is to combine the ingredients in a clear glass jar, seal, and set in a sunny location. Strain and spray onto foliage.

Wormwood Tea

Effective in preventing infestations of aphids and slugs as well as larger pests such as moles and gophers

½ pound (approx.) Artemisia leaves (*A. Absinthium* is common wormwood)
6 pints water

Coarsely chop leaves and bring to a boil in 2 pints of water. Reduce heat and simmer for ½ hour, keeping water at the same level in the pot. Strain solution into sprayer adding 1 quart fresh water. Use immediately after preparation, covering the surface and underside of foliage.

Pyrethrum

Effective against aphids, thrips and whiteflies

1 pound (approx.) *Chrysanthemum cineraiifolium* flower heads and leaves
6 pints of water

Chop flower parts and bring to a boil in 2 pints of water. Reduce heat and simmer for ½ hour, keeping water at the same level in the pot. Strain solution into a sprayer and add 1 quart water.

The pyrethrin that is extracted from the flower parts is a natural irritant that will irritate insects, forcing them out of hiding on plants. Often this alone will knock them off the plants, but pyrethrum is most effective when used in conjunction with another pesticide.

Salt Solution

Effectively repels caterpillars, red spider mites and leather jackets

2 ounces common salt
1 gallon water

Dissolve salt in water. Spray onto foliage surfaces and undersides. Salty taste will discourage chewing insects from feeding on plant foliage.

Home Brew Deer Repellant

Get the hottest peppers available (suggested: dried Habaneros which are now widely available)
1 bottle of a commercial product called *Hinder*
Palmolive Dish Washing Liquid

Put a couple of handfuls of the peppers in each container, fill with water and let stand in the sun for 7 days, just like making sun tea. After 7 days, or as soon as it really begins to smell bad, strain off 2 to 3 quarts of the liquid and put it in a pump-sprayer.

Refill the bucket with water and after the second or third time you use it, add some more peppers. Don't bother throwing the old ones out, just keep adding to the mixture, the worse it gets the better it works. Add ¼ to ½ cup of *Hinder* and a couple of tablespoons of Palmolive liquid. Fill the sprayer with water.

Spray all the plants you want to protect to the point of run-off once a week or after a heavy rain. (This can also be used on vegetables with no noticeable taste once they are washed.) A light misting will work. Things like tomatoes can be sprayed heavily on the foliage without any concern. As a side benefit, some organic solutions for common garden pests include the same pepper ingredients. There are no side effects to the spraying, unless you are standing down wind, and then it will take your breath away. Switch from one bucket to the other every other week and you will always have a supply of spray.

*The source for this **GVST Gardening Guide** is Julie Maloy, a former intern with the American Horticultural Society. Recipes were originally published in March, 1994. The **Deer Repellant Recipe** was submitted by Cliff Bingham of **GVST**. This and other **GVST Gardening Guides** can be found on our website at www.gardeningvolunteers.org.*

