

## What Is Pyrethrin Insecticide?

<https://www.thespruce.com/pyrethrin-insecticide-definition-1902891>

Pyrethrin insecticide is derived from the pyrethrum daisy (*Chrysanthemum cinerariifolium*) which contains nerve toxins that kill insects on contact. This perennial daisy is also nicknamed the Dalmatian chrysanthemum. Pyrethrin insecticide is commonly produced synthetically by industrial methods. It also naturally occurs in the pyrethrum daisy flowers, so it's often considered an organic insecticide. As with all garden chemicals, you should be careful to apply according to the label directions and only when necessary.

### How to Buy and Use Pyrethrin Insecticide

You can buy pyrethrins in several forms, but the most common are bottled insecticides that contain pyrethrin extract. The dried flower heads are also available or you can grow your own and dry them. Pyrethrin-extract based insecticides are effective against a wide variety of insects, including soft-bodied insects and chewing and sucking insects such as aphids, leafhoppers, mealybugs, spider mites, stink bugs, scale, thrips, and whiteflies.

Although they are organic, pyrethrin-based insecticides are still moderately toxic to mammals, including household pets like cats and dogs. Also be aware that many store-preparations are enhanced with piperonyl butoxide, which increases toxicity levels. If you have small children or pets in the house, limit their exposure to any application of pyrethrin-based insecticides. Pyrethrins are also sold in combination with a number of other products, including copper and sulfur fungicides.

To use pyrethrin, follow label instructions during application, wear gloves and protective coverings, and repeat applications as needed to control your insect problem. Depending on the pest target, multiple applications may be necessary. Once the pest problem is under control, stop the applications.

### Make Your Own Pyrethrin Insecticide Spray

You can make your own pyrethrin insecticide from homegrown pyrethrum daisies. Once the plant is blooming, pick off the full blooms and dry the flower heads in a cool, dark, and dry place. Store the dried flower heads in a tightly sealed, airtight container. When you are ready to use them, grind up 1 cup of flower heads to a powder, mix the powder with a little liquid soap to increase the spreadability, and combine with enough water to make a sprayable solution. Pour the solution into a spray bottle and use it as you would storebought insecticide. Be sure to label the bottle and store it out of reach from any children. The strength of homegrown pyrethrin varies based on the flower heads, so feel free to experiment with the proportions until you achieve effective control.

Alternatively, you can use an alcohol extraction process to obtain pyrethrin from the flowers. Soak 1 cup of packed, fresh flower heads in 1/8 cup of 70% isopropyl alcohol. Cover the container and let it sit overnight. The next day, strain the mixture through a cheesecloth and store the homemade extract in a tightly sealed and labeled container. To use, mix the extract with up to 4 quarts of water and spray on your plants as needed. Again, label the spray bottle and keep it out of reach from any children.

### Pyrethrin and Garden Safety

Pyrethrin insecticides are biodegradable and will break down within a few days in direct sunlight. The insecticide does not persist in the soil or on crop, which is why it is relatively safe to use within a vegetable garden. Remember that pyrethrum is highly toxic to most insects. While it is an effective agent against pests, it can also be deadly to the insects that pollinate your garden and eat pets. It is not wise to spray pyrethrum spray on all your plants. Direct the insecticide only when and where you have a pest outbreak.