



BOTANICAL INSECTICIDES

Botanical insecticides come from plants. Botanicals are useful against insect pests in yards and gardens such as ants, aphids, beetles, caterpillars, cockroaches, fleas, flies, leafhoppers and mosquitoes. The advantage to using botanicals is that they all break down into non-toxic compounds within hours or days when exposed to sunlight. The potential of these chemicals to contaminate the groundwater is less than some of the synthetic insecticides. Nicotine, from the tobacco plant, is an example of a botanical insecticide. Pyrethrum, derived from the chrysanthemum, is another.

Just because these "natural" botanical insecticides come from plants does not mean they are not toxic. Some are very toxic. Nicotine causes convulsions and death in insects and can cause them in humans at high enough doses. Ryania is 20 times more toxic in mammals than in insects. As with any pesticide, use botanicals according to label instructions, and remember that complete elimination of the pest is not realistic.

Some of the currently recognized botanical insecticides are limonene, neem, nicotine, pyrethrum, rotenone, ryania and sabadilla. Some organic products contain combinations of the above. Following is a partial list of those currently registered in Washington for home garden use.

Botanical Insecticide	Product Names	Pests Killed
Rotenone	Green Light Rotenone Plus Bonide Rotenone 5 Organic Insecticides Black Leaf 1% Rotenone Garden Dust Science 1% Rotenone	asparagus beetles, cucumber beetles, flea beetles, fleas, lice, vegetable weevils, whitefly mites, Colorado potato beetles, imported cabbageworms, spittlebugs, tomato hornworms, mites, European corn borers, thrips
Pyrethrin	Ortho Rose & Flower Insect Spray Organic Greenhouse Houseplant & Vegetable Spray Concentrate Safer Wasp & Hornet Attack Safer Crawling Insect Attack Cooke Ant Barrier Lilly Miller Tomato & Vegetable Garden Spray	ants, aphids, cockroaches, fleas, flies, lice, mosquitoes, beetles, leafhoppers, stink bugs, whiteflies, caterpillars, cabbage loopers

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