

Insecticidal Soaps

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Insecticidal soaps are made of sodium or potassium salts combined with oil, essentially the same materials in the soaps we use at home. However, they are preferred over use of dish soaps because the blend of fatty acids is not consistent among brands and correct dilutions cannot be determined. Insecticidal soaps kill soft-bodied insects (the ones that squish instead of crunch when you squash them) by dissolving the outer cell membranes. The insect then dries out and dies. These products are gentle to the environment and biodegrade rapidly in the soil. Insecticidal soaps are effective on many outdoor pests and on indoor houseplant pests where use of more toxic chemicals is not advised.

The list below shows some of the pests effectively controlled by using insecticidal soaps. Many of the beneficial insects in gardens are not harmed by soaps. Bees, wasps, and adult beetles are not affected. Sometimes, however, the larval stage of beneficial insects will be killed. This is true for ladybugs and lacewings.

The soaps must be sprayed directly on pests to be effective. Spray the undersides of leaves, the growing tips and any place the pests are feeding. Because the soaps only work when wet, new applications are required as new pests arrive or hatch. Some plants may be harmed by the soap. Watch for warnings on the label. It is a good idea to test a small portion of the plant for sensitivity.

If using a product that needs to be diluted, be careful preparing the concentration. A solution that is too strong can damage a plant by getting through its protective coating. Always Read AND follow label directions.

Organisms susceptible to Insecticidal Soaps:

aphids	caterpillars(*some)	crickets	earwigs	fleas	flies
grasshoppers	lacebugs	leafhoppers	mealybugs	mites	
psyllids	sawflies	scales	spittlebugs	springtails	thrips
ladybug larvae*	Lacewing Larvae*				

***Beneficial Insects**

Compiled by Tonie Fitzgerald, WSU Master Gardener Program

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