

### COLORADO STATE UNIVERSITY EXTENSION SERVICE

## **Quick Facts**

Satisfactory insect control begins with proper insect identification.

The effectiveness of chemical control depends upon selecting the correct insecticide, following labeled directions, timing and proper application. Early treatment of insects gives better protection of plants.

Many of the insecticides suggested here are contained in various commercial all-purpose rose and flower dusts. Most of these contain malathion or methoxychlor in combination with other insecticides.

These combinations will control many insect problems. However, there are many insects that can be controlled more effectively by using a specific insecticide. (See Table 2.)

Select the insecticide that will control the insects which are a problem. For most home gardens, dust formulations are more convenient to use than liquid concentrations.

Read the label before applying the insecticide to determine the correct amount and the proper method of applying the material.

Most insecticides do not perform efficiently at temperatures below  $50^{\circ}$ F ( $10^{\circ}$ C) and will not give satisfactory results at these lower temperatures. Rain within a few hours after application will wash off much insecticide and make it ineffective.

# Insect control in the flower garden

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For the most part, it is best to apply an insecticide when the temperature is above  $50^{\circ}F(10^{\circ}C)$  but below  $95^{\circ}F(35^{\circ}C)$  and there is no rain expected for at least 12 hours.

Apply the insecticide at the proper time for better control of insects. Early treatment affords better protection of plants and prevents insects from multiplying.

Make thorough treatments, especially on the lower parts of plants and the undersides of leaves.

#### Table 1: Insecticides for flower gardens.

Material	Dusts percent	Sprays amount/gallon (3.8 l) water*
1. Carbaryl (Sevin)	5	6 teaspoons of 50% WP
2. Orthene	none	4 teaspoons of 15% EC
3. Diazinon (Spectracide)	2	2 teaspoons of 25% EC
4. Lindane	none	6 teaspoons of 20% EC
5. DiSyston	none	2% granules only, used as directed to soil
6. Malathion	4	2 teaspoons of 57% EC
7. Meta-Systox	none	11/2 teaspoons of 25% EC
8. Methoxychlor	5	3 teaspoons of 50% WP 2 teaspoons of 25% EC

"one teaspoon equals 5 milliliters

WP, wettable powder

EC, emulsifiable concentrate (liquid)

## <sup>1</sup>/W. M. Hantsbarger, CSU extension professor, entomology (revised 5/15/82)



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Insect Attack methods			Insect	Attack methods		
Ant	Ants do not feed on plants but loosen the soil around the roots. They also care for aphids and feed on the "honey dew" secreted by aphids or on the sap exuded by some plant buds.		Pill bug	Pill bugs feed on decaying organic matter as well as on plants. They curl up into a ball when disturbed.		
Insecticides 3, 4 (see Table 1) Dust or spray plants thoroughly.			Insecticides 1, 4, 8 (see Table 1) Remove boards and trash under which pill bugs hide. Spray or dust plants and surrounding area thoroughly			
Aphid	Aphids are small, soft-bodied insects that suck plant juices. (For more information, see SA sheet 5.511, Aphids.)	T	Plant bug and leaf-hopper	These are active insects that suck plant juices, causing flowers and foliage to become spotted and		
Insecticides 5, 6, 7 (see Table 1) Dust or spray the entire plant thoroughly. As a preventive spread one pound (.45 kilograms) of DiSyston 2-percent granules over each 100 feet (30.5 meters) of row or furrow and water thoroughly. DiSyston is highly toxic to humans. Follow directions carefully.			Insecticides 3, 6, 8 (see Table 1) Dust or spray plants thoroughly.			
Blister beetle	Blister beetles are large, long- legged, active insects that strip foliage from plants.					
Insecticides 1, 3, 4 (see Table 1) Dust or spray plants thoroughly.			Rose slug	on undersides of rose leaves, skeletonizing them and causing them to turn brown.		
Cutworm	Cutworms cut off plants at night and spend days curled up in the soil.			North States		
Insecticides 1, Dust or spray pretal colars pl	2, 4, 6 (see Table 1) plants and surrounding soil. Protect tr aced around the stems.	ansplants with paper or	Insecticides 6, Dust or spray	8 (see Table 1) plants thoroughly.		
Grass- hopper	Grasshoppers attack most plants. (For more information, see SA sheet 5.536, Grasshopper control in flower and vegetable gardens.)	- Ale	Slug	Slugs are large, soft-bodied creatures that leave a slimy trail as they move. (For more information, see SA sheet 5.515, <i>Slugs.</i> )		
Insecticides 3, Dust or spray (	4, 6 (see Table 1) garden and surrounding grassy and w	eedy areas.	Scatter a meta according to d Table 1).	aldehyde or mesurol slug and snai irections on the package, or spray w	I bait around the plants vith carbaryl (Sevin) (see	
Iris borer	Iris borers are large borers that feed in the rhizomes of the plants.		Red spider mite	These are tiny mites that cause foliage to turn gray and die. (See SA sheet 5.507, <i>Spider mites</i> , for more information.)	XX	
Insecticide 8 (s Dust or spray reinfestation b discarding rhiz	see Table 1) weekly for four weeks when new by transplanting rhizomes every thr omes that are borer-infested.	growth starts. Prevent ee or four years and	Insecticides 2, Spray with a m spray with one DiSyston 2-per water thorough	5, 7 (see Table 1) ticide such as Kelthane, Tedion, Dim of the insecticides listed above, or spr cent granules over each 100 feet (30. ily.	ite or Chlorobenzilate, or ead one pound (.45 kg) of 5 m) of row or turrow and	
Leaf Lea that	Leaf beetles are chewing insects that feed on both foliage and	W.W.	Stalk borer	Stalk borers are found in the stems of plants.		
flowers. They also will make the holes in leaves.		WA	Insecticide 8 (see Table 1) Dust growing plants frequently and thoroughly. Destroy dead plant debris in the fall. Borers also can be removed from the stalks by slitting and pinching the stems.			
Insecticides 1, 2, 3, 6, 8 (see Table 1) Dust or spray plants thoroughly.		e ar vez generalen ner ywys yn yw yn yw yw ann ar	Thrips are tiny, active insects that			
Leaf-feeding caterpillar	Caterpillars damage plants by eating the foliage, boring into flower buds or rolling the leaves.		Thrip	cause foliage to become spotted and flowers to be deformed. They are a serious pest of gladiolus.		
			Insecticides 2, Dust gladiolus	3, 5, 7 (see Table 1) corms in the fall with methoxychlor.	Dust gladiolus and other	
Insecticides 1, 2, 3, 4, 6, 8 (see Table 1) Dust or spray plants thoroughly.			flowers with methoxychlor. Spray with methoxychlor, Diazinon or Meta- Systox. Soil treatment of 2-percent DiSyston granules also give effective control.			