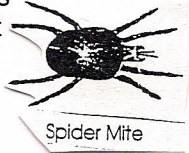


## \*ROSE INSECTS AND THEIR CONTROL

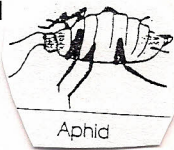
Most insecticides may be used with fungicides and sprayed for dual purposes of control of insects and diseases. Make sure that you read the manufacturers label to see if these can be mixed together and sprayed as one spray.

**1. ROSE MIDGE** (*Dasineura shodophaga*) - Evidence of this is seen in the buds which are deformed (mosaic looking) or black and dry. Tiny white maggots may be seen feeding at the base of the flower buds or on the stem tips. The insect is tiny (1/20th of an inch long) which becomes a tiny yellowish fly and appears in mid or late summer. Female lay eggs in the growing tips, flower buds and unfolding leaves (20-40 eggs per bud). Eggs hatch in two days and maggots feed causing the tissue and buds to become distorted and blackened. The mature larva drops to the ground and pupate. New young adults appear in 5 to 7 days and lay more eggs causing a recycle of the insect. Recommended systemic sprays such as: Bonide Systemic Insect Control (Orthene) or treating the ground with granular insecticide called Imidacloprid may help.

**2. MITES** - Blanching of leaf with microscopic insects normally found on the underside of the leaf, at times causing webbing on leaves. To identify take a leaf or leaves off of the plants and tap on piece of white paper. In about 15-30 seconds movement will occur if they are alive. For control of these use the following insecticides: Conserve Naturalyte Insect Control (Spinosad), Neem Oil, Bonide Systemic Insect Control (Orthene), Malathion, Permethrin. These may be mixed with fungicides and applied together if they are compatible to use together. Spray already combined Organocide (Fish Oil) Insecticide & Fungicide. Also the use of Fertilome Rose Food with Imidacloprid Insecticide or Bayer 3 in 1 Insect, Disease & Mite Control.

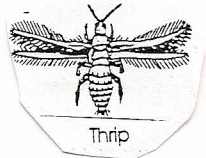


**3. APHIDS** - Are green (sometimes black) insects found normally in large quantities on new growth and flower buds. These insects will cause distortion of leaves and flower buds. If you notice ants crawling around the buds or a mound at the base or near the rose plant, this could be a good indicator that you may have Aphids. For control use as directed the following insecticides: Orthene; Malathion; Permethrin; Organocide (Fish Oil) Insecticide Also the use of Fertilome Rose Food with Imidacloprid Insecticide, Bayer Rose & Flower Systemic 2 n1 or Bayer 3 in 1 insect Disease & Mite Control.



#### 4. THRIPS – 2 kinds – Flower Thrips & Chilli Thrips

**FLOWER THRIPS** - Usually occur during the spring of the year. When all the flowers come into bloom. Flower thrips are tiny, fast moving, rasping sucking insect. They are found at the base of the flower petals in the bud or bloom. It is characterized by a burning or wilting at the edge of the flower petal. Flower Thrips are extremely hard to kill once an infestation takes place. Removal of all buds showing discoloration is recommended. A continuous spray program is suggested, using Conserve Naturalyte Insect Control (Spinosad), Bonide Systemic Insect Control (Orthene). Mix according to label in a quart squirt bottle, spray tight buds before the sepals unfold to prevent the thrips to penetrate in the flower buds and also spray any flowers opening. Spray at least 18"-24" away from the bud or flower. Light in color (yellow, light pink, apricot) roses attract thrips so look inside the flower petals.



**CHILLI THRIPS** – are native to S E Asia and introduced in the Caribbean over the past years. Therefore the recent Hurricanes brought them to Florida. Chilli thrips like hot dry weather and destroy roses very rapidly. If untreated leaves will discolor, curl upward, flowers & buds turn brown will not open, new foliage is stunted and dwarfed then defoliates. Repeated defoliations may kill the rose bushes. For control a continuous spray program is suggested also. Remove all the damaged buds and canes. Spray twice a week rotating insecticides. For control use also Conserve Naturalyte Insect Control (Spinosad) or Bonide Systemic Insect Control (Orthene). Spray the flower, plant and ground because the pupa stage takes place in the soil for Chilli Thrips. Eggs or Larval stage normally hatches in six to eight day and the adult stage live up to 20 days (average 11 days).

**▶ ▶ ▶ ▶ ▶ ▶ ▶ Reminder spray 2 times a week until under control and alternate your chemicals.**

**5. CHEWING INSECTS** - There is a number of insects that move from plant to plant, chewing and sucking on foliage, buds and flowers. These are the Curculio, Rose Chafer, Leaf Cutting Bees, Fullers Rose Weevils, Worms and others. Control is obtained by dusting with Sevin, Malathion, or Rotenone.

**6. BEETLES** – In May, June, July the beetles attack the flower buds of our roses. Hand pick eaten rose flowers and then spray with Sevin (dust or liquid), Conserve Naturalyte Insect Control (Spinosad) or Bonide Systemic Insect Control (Orthene).

**For best control on any kind of insects always alternate your sprays so they won't build up a resistance to the chemical.**

## PRODUCTS AVAILABLE FOR APPLICATION ON ROSES

## INSECTICIDES

- Organocide
- Orthene Tree, Turf & Ornamental
- Bonide Systemic Insect Control(Orthene)
- Malathion
- Permethrin
- Neem Oil
- Bonide Systemic Insecticide (Imidacloprid)
- Sevin (Liquid or Dust)
- Pyrethins Spray
- Rotenone

## FUNGICIDES

Dithane M-45  
Daconil 2785 (Cleary's)  
Liq. Ornamental & Veg. Spray  
Captan  
  
Liquid Copper  
  
Thiomyl

## FERTILIZERS

Espoma Rose - tone  
Howard's Rose Fertilizer  
Bone Meal  
Dolomitic Limestone  
Milorganite  
Calcium Nitrate  
EME - Ess. Minor Element  
Ironite (Liquid)  
Black Kow

**COMBINATION SPRAYS OR FERTILIZERS FOR ROSES-** Fertlome Rose Food (Fertilizer & Imidacloprid); Bayer 3 in 1 Insect, Disease & Mite Control, Neem Oil, Organocide (Fish Oil) Insecticide & Fungicide