

# Managing Pests & Roses

## Plants before pests

Many pests are opportunistic. They take advantage of weakened plants so it is important to think about the health of your rose first. Use an integrated approach to pest management from the following strategies

- Plant sustainable varieties; many shrub roses are very durable and can survive substantial abuse.
- Give your roses good immune systems by keeping them healthy

### Maintain a clean garden

- Prune off diseased canes and foliage and dispose of properly.
- Provide good air circulation

### Provide ample sunlight

- Provide 6-8 hours of direct sunlight
- Strategic placement; a few hours of late afternoon shade, can help avoid heat stress

### Provide ample water

- If you push your finger an inch into the soil and it's dry, it's time to water.
- Keep foliage dry when watering.
- Mulch or plant groundcover to prevent splashing.
- Combat heat stress with deep watering and companion plantings.

### Maintain a clean garden

- Roses like to be fed once a month or with a time release. Don't fertilize past mid Aug.
- Organic options: Manure, Fish emulsion, topdressing with compost in the spring
- Chemical options: There are many options, try to pick one that is well balanced and preferably time release. Anything below a 14-14-14 should be fine. Less balanced fertilizers are good if you are trying to really make a rose bloom but can be unsustainable.

### Good Soil

- Amend with plenty of organic matter.
- Test the pH. Roses like a pH of 6.5.

## Managing Bugs

There are many organic strategies for promoting a healthy ecosystem that support beneficial insects and minimize pests

- Add companion plants such as garlic, thyme, oregano, chives, scented geraniums, marigolds, lavender, daylily to attract **beneficial insects**.
- Blast aphids, spider mites & spittle bugs with water.
- Hand pick Japanese beetles and caterpillars. Often insects emerge at a specific number of Growing degree days and can be predicted. (GDDs can be found through UMass extension)
- Control grubs with Nematodes
- Attract birds with birdbaths and feeders to eat the bugs
- Use organic sprays where possible (Neem, hort oils, insecticidal soaps)

### Chemical Options:

- Insecticides, fungicides and miticides.
- Wait until you actually see the insects or their damage.
- Remember that broad spectrum insecticides kill **both** good and bad bugs.
- Fungicides are to be used **preemptively** throughout the season

### Good Bugs

- Ladybugs: eat aphids.
- Green lacewing larvae: eat aphids and small caterpillars
- Spiders: predator of many insects (many are tiny and can't be seen, some living in mulch).
- Ground beetles: eat grubs, ant eggs, cut worms and other insects living in the soil.
- Soldier Beetles: Resemble lightning bugs. Predators of soft bodied insects.
- Dragonflies: eat caterpillars, flies and grubs

## Bad Bugs

**Winter Moth:** Winter Moths emerge and lay their eggs in early winter. The eggs then hatch in spring when the buds swell.

Symptoms: New and emerging leaves are chewed with many holes, often resembling a cheese grater. Minor webbing can often be seen. Larva appear as small green inchworms.

Solutions: Roses are often heavily pruned and most of the eggs with it. The damage is usually from nearby trees where the larva have hatched. They float down with silk threads on the wind. Treating the nearby trees can go a long way to alleviate some of the damage. Winter moth damage is seasonal and only lasting a short time, if the rose is in good health it will simply re-foliate. In extreme cases, where the rose is entirely barren and all new growth is being consumed, treatment of the rose is necessary. There are many products for Winter Moth and for each stage of its life cycle.

**Aphids:** Very common. Nearly any color. Attracted by nitrogen in new growth and buds. Suck sap from plants. Excrete honey dew. Quickly multiply in warm weather. New generations occur every 5-7 days, so treatment must be repeated.

Symptoms: Can be seen with naked eye. Tender parts of plants exhibit damage. New growth may emerge distorted. Black sooty mold may form on honeydew residue left by aphids.

Solutions: Knock off with forceful spray of water. Natural predators: Ladybugs and lacewing larvae. Plants to repel aphids: garlic, dill, catnip, marigolds. Sprays: Insecticidal soap or chemical insecticide.

**Rose Slugs / Rose Sawfly:** Primitive wasps lay their eggs along the margins of the leaves. When larvae hatch, they eat soft tissue of leaves. Once full grown, they drop to the ground and pupate in leaf litter. Can be many generations per year, depending on species.

Symptoms: Skeletonized leaves. Larvae can be seen on leaves.

Solutions: Inspect often. Remove infected leaves and squash larvae. Sprays: Neem, insecticidal soap, horticultural oil. Bt is NOT effective.

**Thrips:** Tiny thin brownish insects, can be hard to see. Feed on petals both in bud and bloom. Seem to prefer light color petals. Sometimes it causes flower “balling” or deform new growth. Mostly cosmetic damage only. Can fly from plant to plant, but rely on wind dispersal.

Symptoms: Deformed buds, buds with brown edges, fine black stippling, buds that do not open. Spots or streaks on blooms. You may see the tiny insects inside the flower – look like tiny slivers.

Solutions: Remove infected blooms promptly. Lacewing larvae feed on thrips. Planting alliums may deter thrips. Spray with insecticide.

**Spider Mites:** Tiny arachnids that suck the sap from the leaves and other tender parts. Often correlating with hot dry weather.

Symptoms: Lower foliage turns yellow with fine stippling and drops. On inspection, leaves have tiny salt and pepper spots on underside. Tap leaves over a white sheet of paper and the mites will fall and look like small dots. Webbing may appear under leaves if infestation is advanced.

Solutions: Light infestation can be controlled with forceful spray of water on undersides of leaves. This must be done regularly, as mites are persistent. Lady beetles and lacewing larvae eat mites. Dill sometimes protects against mites. Spray with miticide. Spider mites can build up a resistance to miticides, so change miticides to effectively control. Keep the rose watered well so it can re-foliate when the mites pass.

**Japanese Beetles and Rose Chafers:** Copper colored beetles. Feed on buds, blooms and leaves. Mostly July-Aug

Symptoms: Dead areas in lawn may indicate colony of grubs. Beetles are clearly evident on plants during the day.

Solutions: Pick beetles by hand as soon as possible, feeding adults attract more. Adults emerge just after 1000 growing degree days. Spray with ammonia or Windex to seven parts water. Plant thyme, parsley or scented geraniums. Avoid Japanese Beetle traps. Treat the lawn with nematodes to kill the larva before they mature into adults. Grub control must be timed properly in order to be effective, nematodes should be put down in late may. See products for their proper application.

**Leafrollers:** Small green caterpillars found inside rolled leaves. The eggs are deposited on the undersides of leaves which are rolled into a protective covering.

Symptoms: Inspect for rolled leaves.

Solutions: Remove the rolled leaves and destroy.

**Spittle Bugs:** Small, goeey insects that usually appear in early spring floating in a mass of bubbles.

Symptoms: White frothy foam on new stems. Damage, if any, is usually superficial.

Solutions: Knock the foam off with a strong spray of water.

- **Earwigs:** Minor pest
- **Leaf Cutter Bees:** Minor pest
- **Leaf Hoppers:** Minor pest

\*Avoid spraying in direct sunlight, in high temperatures or on windy days.\*

\*Always hydrate the plant before applying any spray treatment (chemical or organic) to prevent foliage burn. \*

\*\* NEVER apply pesticides of any kind to Rugosa roses – their foliage is easily damaged by chemicals. \*\*