



Daylilies are called the "perfect perennial"!



Aphids



Aphids Identification:

- 1) Small, soft bodies insects
- 2) Feed in colonies on leaves of the daylily (new growth)
- 3) They insert mouth parts into plant tissue and suck juice
- 4) White specks are plant aphids casts after molting
- 5) Leave excrement "honeydew" on the plant
- 6) Aphids will not kill the plant but if left untreated will cause the plant to bloom less and in some cases will cause deformities in the plant and blooms.



Aphids Treatment

How to Get Rid of Aphids:

- Try spraying cold water on the leaves, sometimes all aphids need is a cool blast to dislodge them.
- Use commercially available biological controls or by spraying with insecticidal soap, horticultural oil. No Kelthane.
- You can often get rid of aphids by wiping or spraying the leaves of the plant with a mild solution of water and a few drops of dishwashing soap such as Dawn.
- Stir together 1 quart of water, 1 tsp of liquid dish soap and a pinch of cayenne pepper. Do not dilute before spraying on plants.

or

 In a spray bottle combine 2 parts rubbing alcohol, 5 parts water, and 1 tablespoon liquid soap.

Aphids Treatment

How to Get Rid of Aphids:

- Organic controls include alcohol spray (isopropyl alcohol, straight or diluted), soapy emulsion (can be mixed w/alcohol), horticultural oil (read the directions) and pyrethrum spray or soapy water/alcohol should be reapplied every 2-3 days for 2 weeks.
- You can also purchase beneficial insects, such as lady beetles and parasitic wasps, which will feed on aphids. These are usually ordered via mail—check the Internet for labs.
- Bring beneficial insects to your garden by adding plants that attract them. For example, nasturtiums are a good plant to <u>rid</u> your garden of aphids.

OR

Aphids Treatment

How to Get Rid of Aphids:



Leaf Miner Identification:

- 1) Small, shiny black fly adult stage
- 2) Makes long, gently meandering leaf mines in daylily leaf blades, especially on the upper leaf surfaces
- 3) Damage is caused by a small, yellowish maggot (up to 5 mm-long) burrowing through leaf tissue
- 4) It will not kill daylilies, heavily damaged leaves will become disfigured leave
- 5) Remove leaves to allow to be replaced by new growth.

Treatment:

Little is currently known about insecticidal control, though some control may be achieved by removing and destroying infested leaves as they appear.

Leaf Miners



- Spider mites can be rusty green, greenish amber or yellow and unlike insects, they have eight legs instead of six.
- They are very small, but still visible.
- Overwintering females are red or orange, mites have two/four black spots on top.
- Typically spider mites overwinter in the soil as adults that reemerge in spring. In mild winter weather, they may continue to feed and lay eggs at a reduced rate.
- Spider mites feed on many weeds and other wild plants such as blackberries.
- Cleaning the area by removing leaves and plant debris will help to reduce future infestations.

Spider Mites
Identification



- Spider mites are usually found on the underside of leaves.
- Thorough application of pesticides to the underside of the plant foliage is essential for good control.

In hot weather:

- Another application may be suggested 7 to 10 days later, to kill mites that were in the egg and resting stages during the first application.
- Plants should be examined regularly for re-infestation or for the offspring of mites missed on the first and second applications.

Spider Mites Control





Slugs and Snails

- Slug and snail damage on daylilies can be difficult to detect if your plants are clumped closely together.
- In the spring and fall, spread plants apart and look for heavy damage to new growth and ragged notches or holes in leaves of all ages.
- Silvery slime trails leave no doubt that slugs are responsible for the nocturnal damage to your plants.





Slugs and Snails Treatment

- Slugs and snails seem to appear after it rains.
- Remove the visible slugs and snails by hand.
- Search for slugs during the day under pots and stones.
- Purchase snail bait from big box stores and follow instructions on the package.
- Treatment must be repeated after each rain.
- Clear debris from garden beds.





Rust - What is it?

- Daylily rust is caused by a fungus that affects the leaves and scapes.
- The main method of rust spread is by wind borne spores.
- It is an orange powdery substance that comes off on your fingers when you touch it.

Note: Other leaf problems may resemble daylily rust. Leaf streak, spring sickness and other non-rust disorders that affect daylilies and may look like rust.

Please see the following web site hosted by AHS member Susan Bergeron:

http://www.ncf.ca/~ah748/rust.html



Rust What does it do to my plant?

- Rust, by itself, is unlikely to kill the plant in the short term
- Rust infestations weakened the plant, making the plant susceptible to other stresses and diseases, or that bloom could be reduced.
- Looking into the future, steps are already being taken by some hybridizers to monitor plants for rust susceptibility in the hopes that it will be possible to breed rust resistant cultivars.



Rust - How Did I Get It?

Acquiring new daylilies:

- These plants could be carrying a rust infection even though it isn't necessarily visible at the time of receipt.
- There have been numerous reports of rust first becoming apparent several weeks or months after the plants have arrived.
- The fungus may be alive inside a leaf, or spores be hiding on a leaf, without showing any obvious signs externally. An early infection may go undetected until the rust begins to form more spores, at which time it produces the characteristic yellow-orange powder.
- The infection may soon spread throughout one's garden or nursery.

From this point on:

 It is advised as a precaution to isolate all new dayliles well away from existing daylily plantings for several months or a growing season to minimize rust spread if they turn out to be infected.

Rust Why Do I Have It So Bad?

- Differences in rainfall, humidity, temperatures and cultural practices will cause the severity of the disease to vary between gardens.
- Because rust is a spore that can spread, gardeners can spread rust from plant to plant and throughout the garden.



Rust - What Do I Do Now?

- First of all, remove infected leaves from the plant. Trim the plant back.
- In some cases, the whole plant is removed from the garden. Some plants are more susceptible to rust and have rust no mater what you do to treat the rust.
- Start with a contact spray to kill the visible rust.
- Since the fungus is inside the leaves as well as on the outside, use systemic chemicals.
- Develop and document your spray schedule.
- To reduce the spread of rust, bag and remove the leaves from the garden.
- It is advised as a precaution to isolate all new daylilies well away from existing daylily plantings for several months or a growing season to minimize rust spread if they turn out to be infected.

Rust - Advise From the Experts

- Start with a contact spray such as Daconil (generic chlorotthaloni 720 SFT) or Fore (80%) WP to kill the visible rust.
 In all cases use only the recommended doses to avoid damage.
- Since the fungus is inside the leaves as well as on the outside, use systemic chemicals such as Cabrio, Bayleton or Heritage again using only the recommended dosages.
- <u>Develop and document your spray schedule</u>. Approximately every 14-21 days during peak rust times.

Rust Times: the cool nights and warm days in Spring and Fall. The Gulf Coast high humidity causes rust to run rampant if left untreated.

Crown Rot – What, Why and How

- Crown rot is caused by bacteria or a fungus in the soil. These are found naturally in the soil and sometimes effect the plant.
- It is believed that daylilies have a natural resistance to crown rot and only stressed daylilies succumb to the disease.
- First symptom is yellowing of the leaves. It can be one fan or if left untreated the entire clump will suffer the same fate. Once the crown is infected the plant will die.
- When you first notice the leaves yellowing, remove the plant, wash the soil off, remove the damaged plant material (slime) and soak in Agrifos for one hour.
- Then put the plant in a pot, in a shady place until it recovers.
- Good practice: Soak plants in Agrifos for one hour before planting.



Crown Rot - Advise From the Experts

- When you first notice the leaves yellowing, remove the plant, wash the soil off, remove the damaged plant material (slime) and soak in Agrifos, Banrot or bleach solution (4 parts water/1 part bleach) for a few hours.
- Remove as much of the soil where the plant was, discard it and then clean the area (hole and around the hole) drench the area with Agrifos, Banrot or the bleach solution and refrain from replanting the same spot for at least one season, if possible.

Fertilizing Daylilies

Potting:

Good potting soil

Nutricote or other slow release fertilizer mixed in soil

Planting:

Nutricote

Lifting: 13-13-13, Nutricote

Maintenance: Feb-June, Oct-Nov
Before replacing mulch Milorganite
Monthly during bloom and recovery
season – Hooker Formula



Daily Care of Daylilies

Water Trim and Clean **Fertilize** Inspect for pests/diseases

Treat pests/diseases Enjoy!!



Document Care of Daylilies

Use calendar to record:

- Water schedule
- Fertilization Schedule
- Pest/Disease
 Treatment Schedule



Summary

- Care for your plants. Healthy plants resist disease.
- Water
- Fertilize
- Treat pests and diseases
- Clean your beds.
- Plant debris encourages infestations of pests and diseases
- Remove and bag "rusty" leaves (mold spores spread quickly)
- Inspect your plants. While out admiring the plants look at the new growth.
- Many insects and diseases attack the plant under the leaves.
- Look at the new growth. Spider mites like the new growth on your plant.
- Move the foliage to look for pest
- Treat pests once they are found. Left untreated:
- Will effect the health of the plant
- Reduce blooming
- In some cases may kill the plant
- Clean your garden tools to prevent spreading disease:
- Clean with soap and water
- Clean hand tools with soap and water, then alcohol
- Use disposable gloves and discard then after removing diseased leaves
- REMOVE and BAG damaged or sick plant material!!

