Are hydrangeas bothered by any diseases or insects?

While hydrangeas in landscape settings are relatively pest free, under certain growing conditions some diseases and insects can become problems. For the bigleaf hydrangea, the major disease problem is powdery mildew (see image at right). It is most common on plants growing in shade and under high humidity conditions. Powdery mildew infested leaves are covered with a light gray powdery-looking substance. Purple splotches may also appear. Powdery mildew rarely kills plants, but is unattractive. Powdery mildew may occur on other hydrangea species, but is most severe on bigleaf hydrangea.

There are several fungal leaf spot organisms that attack *Hydrangea*. Leaves develop brown to gray lesions surrounded by purple halos (see image at left). These leaf spots are most common in late summer and early fall, and seem to be more common among plants grown in sunny locations. Again, plants are rarely killed, but severe infestation can be very unattractive. All the cultivated species of *Hydrangea* are susceptible to one or more of these leaf spots.

Oakleaf hydrangeas are susceptible to root rots. The most common is Armillaria root rot. Infested plants will appear wilted, but will not recover when watered and will eventually die. Planting hydrangeas on poorly drained soils will increase incidence of root rots and should be avoided.

Smooth hydrangea is susceptible to rust, which will appear on the back side of leaves as small, orange spots (see image at right). Rubbing the back of the leaves will release an orange dust which contains spores of the fungus. The disease is usually seen near the end of the growing season and rarely kills plants.

Japanese beetles will feed on oakleaf hydrangea, but are rarely a problem on the other species. Japanese beetles can be controlled by spraying or dusting with the insecticide Sevin, but the problem is rarely severe enough on hydrangeas to merit the use of an insecticide.

Aphids can be a problem on the new growth of all hydrangeas, but can be easily controlled by washing, using an insecticidal soap, or an insecticide spray. The presence of ants crawling on plant leaves is often an indicator of an aphid problem. The ants feed on the sticky honeydew (excrement) left by the aphids. If you see ants on the leaves of your hydrangeas, turn the youngest leaves on the plant over and look for small green insects. As leaves become tougher during the growing season, aphid problems usually diminish.
Why are the new leaves on my bigleaf hydrangea yellow?

Bigleaf hydrangea is susceptible to iron chlorosis. Because, iron becomes less available as pH increases, iron chlorosis is most likely to be found on plants growing on high pH soil. In contrast to nitrogen deficiency, which is expressed as yellowing of old leaves, iron chlorosis is found on new leaves (see image at right).

Iron chlorosis can be corrected by the addition to iron to the soil. The best way to do this is to use a chelated iron product. You should be able to find one of these products at a garden center or the garden section of a hardware store or mass merchandiser. Follow package directions carefully. You should begin seeing results in a couple of weeks.

As long as the soil pH remains high, you will probably need to re-apply the chelated iron product yearly or whenever symptoms reappear. Lowering soil pH through application of aluminum sulfate or mulching with acid organic materials like pine bark is a long-term solution for iron chlorosis.

Source: United States National Arboretum (www.usna.usda.gov)

**CANE BORERS:**

**Symptoms:**
- Holes in the branches can be either round, oval or D-shaped and can be seen randomly on the plant.
- A sawdust-like frass (excrement) can be seen around the hole, in piles on the ground, or on the foliage.
- Plants that are severely infested may show signs of stress in reduced growth rate and poor form.
- Hydrangeas, if infested, are likely to have Dogwood Borers

**Treatment:**
- If the borer holes are isolated on only a few branches, prune away the infested ones, well into the non-infected part. **DO NOT ADD TO COMPOST!**
- An infestation that covers the majority of the plant may require you to physically remove each borer, by taking a small, flexible wire and inserting it into the hole to try and puncture the borer.
✓ Hanging pheromone traps around the yard will help detect the first sign of adults, and will disrupt the mating ritual, reducing the amount of eggs produced.
✓ If the infestation is severe, then either severe pruning or total removal of the plant is called for.

Chemical Controls:
✓ Type of control: Contact  Active ingredient: Permethrin
  Spray over the entire surface of all branches to kill emerging adults or newly hatched larvae. The residual effect will last three to 10 weeks, and will not kill borers inside of the shrub.
✓ Type of Control: Systemic  Active ingredient: Imidacloprid
  Spray on the foliage, pour around the drip line of the shrub or inject directly into the branches. Systemic insecticides translocate throughout the plant through the sap, and will only kill borers that feed on the sap and not the hardwood.
✓ Keep your plants healthy by using proper care in planting and cultivation, using good sanitation practices and using the least toxic methods first.
✓ When using chemicals controls, always read the instructions thoroughly and follow them exactly.