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Houseplant Problems

Paul C. Pecknold, Extension Plant Pathologist

Houseplant problems can often be avoided by knowing the proper environment in which a plant should be grown and placing the plant in that environment—as best you can. However, in spite of your best efforts, houseplants will frequently exhibit poor growth, yellow foliage and a variety of other sickly symptoms. To help determine the cause(s) of these problems, the following guide lists common symptoms with the most frequent causes. Remember that more than one factor may be the cause of a problem and that symptoms may often overlap in their appearance.

*Diagnostic Guide for Houseplant Problems**

Symptom	Causes
1. Leaf yellowing, small leaves, stunted growth	a. Root rot - A b. Nutrient deficiency - B c. Insufficient light -D d. Pot bound roots - F
2. Browning of leaf tips or margins	a. Hot and/or dry air - C b. Accumulated salts - E c. Nutrient deficiency - B d. Root rot - A
3. Wilting of entire plant	a. Root rot - A b. Too little water
4. Sudden loss of leaves	a. Sudden change in environment - G b. Root rot - A
	a. Natural in older plants

5. Bottom leaves turn yellow, may drop off	b. Nutrient deficiency - B c. Pot bound roots - F
6. Spots on leaves	a. Fungal leaf spot - H b. Water spots - I c. Other causes - J
7. Leaves take on a speckled, yellowish appearance; webbing may be seen in the axils of leaves	a. Spider mites - K
8. Leaves covered with a sticky substance; small cottony fluffs or brown objects seen on leaves	a. Mealybugs or scale - K
9. Plant growth through roof	a. You are blessed with a green thumb
<i>*Capital letters refer to section on Management</i>	

Management

A. Root rot: The most common problem with houseplants is root rot. Several factors may cause the roots of a plant to rot; but, without doubt, the number one reason is overwatering. Heavy soils (containing too much clay) and containers that lack adequate drainage water holes will often be associated with overwatering and aggravate the problem.

Watering frequency is individually determined for each plant, the type of pot, soil, and the growing conditions surrounding the plant (which will vary depending on the time of year). Always water thoroughly until water comes through the pot's drain holes; do not water again until the soil just beneath the surface is barely moist. Planter boxes and pots should have adequate drainage holes so that excess water can drain from the container. Potting media should be porous enough so that water soaks quickly and uniformly through the soil.

If root rot is suspected, remove the plant from its container and examine the root system for indications of rot. A healthy root system will appear fibrous with white root tips; where rotting is present, roots will show blackened root tips with various degrees of a slimy, brown-black decay. If root rots are not extensive, attempt to improve drainage and water only as needed! If root rot is severe the top portion of the plant may be saved by air layering. Refer to publication HO-1A New Plants Form Layering. If air-layering is not possible the plant should be discarded.

B. Nutrient deficiency: Leaves that turn pale green or yellow often indicate a shortage of nitrogen. A shortage of potash results in browning and dying of leaf margins. Phosphorus deficiencies are difficult to determine. Sometimes the leaves will turn a dark, dull green or bluish green. Be sure to follow the label directions when applying fertilizer. Also, do not allow the fertilizer to touch the plant foliage.

As a general guide to fertilizing, apply fertilizer every 1 to 2 months while growth is rapid, and once or twice only during the winter months. Refer to publication HO-39A Indoor Plant Care for information on types of fertilizers and how and when to fertilize.

C. Hot and/or dry air: This problem is most severe during winter months as humidity in the house drops because of heating and generally reduced atmospheric humidities. Fern and tender-leafed plants are especially sensitive. For plants requiring humid conditions use room humidifiers and group plants together. Another way to increase humidity is to stand pots in shallow, pebble-filled trays that are filled with water. The water in the trays should be maintained at a level just below the surface of the pebbles so that the pots do not sit constantly in water. ABOVE ALL.... avoid placing plants on or near radiators, heat ducts, or vents.

D. Insufficient light: Pale, yellow, small leaves and poor growth often indicate insufficient light. Plants with brightly

colored foliage lose their rich coloration and become drab appearing. Determine the light intensity required for each plant and place it in an appropriate location. Refer to publication HO-39A Indoor Plant Care that lists the light intensity required for different houseplants.

E. Accumulated salts: Plants grown in the same pot for a period of time often show a white or yellow crust on the soil surface and plant stems. This is due to an accumulation of unused salts from fertilizers or hard water. If the salt accumulation reaches certain levels, then plant growth is impaired. At least once a month, apply enough water to the top of the soil to thoroughly leach all excess salts to the bottom of the pot or out the drainage hole. A loose porous soil allows the soil to be leached more easily and decreases salt buildup.

F. Pot bound roots: Plants which are grown in the same pot for a long period often become pot bound. If you remove the plant from the pot and note a large amount of roots circling the potting soil, or if a solid mass of roots is present with little or no soil showing, repotting is necessary. The new pot should be 1 or 2 inches wider and deeper than the old one; under-potting is preferable to overpotting where most house plants are concerned.

G. Sudden change in environment: Leaves will often drop suddenly from a plant if there is a sudden change in the plant's environment such as rapid temperature changes, drafts of dry, hot or cold air, or change of location from a sunny to a dark area.

H. Fungal leaf spot: Leaf spots caused by fungi are most likely to be seen on newly purchased plants, therefore, it is prudent to keep newly acquired plants separate from established plants for a few months. Fungal leaf spots can vary in size, shape, and color. Often the spots will have a distinctive margin and be sprinkled with minute black dots. If spots are numerous, or if they enlarge, diseased areas may come together to form irregular blotches. Infected leaves may wither and die.

Fungal leaf spots can be prevented by keeping the foliage DRY. Most fungi require moisture on the leaf surface before infection can occur. Never mist plants if a fungus leaf spot is suspected. If infection is light, pick off and destroy infected leaves. Increase air circulation by spacing plants so that they are not crowded. Most fungal leaf spots will clear up after a few months of such attention. Pesticides are generally not required nor recommended for such problems. If foliage is excessively dense, lightly thin the plant. **KEEP DISEASED PLANTS ISOLATED FROM HEALTHY PLANTS.**

I. Water spots: Some plants (African violets) are very prone to have severe leaf spotting occur when cold water is splashed onto leaves. Be careful not to get water on leaves when watering or water from the bottom.

J. Other causes: Spotting of leaves can be caused by many other factors than those already listed. Other frequent causes of leaf spotting are: aerosol sprays used in the household which are toxic to plant tissue; spattering of hot grease in the kitchen area; and sun shining on wet leaves. Careful consideration of the plant, its location, surroundings and history will often reveal possible causes of injury.

K. Mites and insect problems: Spider mite infestations are extremely common on houseplants of all kind. Refer to publication E-42 Spider Mites on Ornamentals for information on how to best manage spider mites. Mealybugs and scales are two insect problems that are also commonly found on houseplants. See Extension Entomology publications or consult an extension entomologist for the most current control recommendations for these and other insect pests.

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