

Preventing, Diagnosing, and Correcting Common Houseplant Problems

Houseplants bring a bit of nature to indoor spaces. They add color, texture, and fragrance, and are visually appealing. Properly selecting houseplants for purchase at a garden center or other retailer is essential if you want to take home a good, healthy plant and avoid potential problems.

Before buying, examine the plant thoroughly for signs of insects and disease. Avoid wilted plants, as the roots may already be damaged. Look at the foliage (leaves) and examine the color, shape, and size. An off color may indicate a nutrient problem (which may be easy to correct), insect damage, or damage from too much or too little water. Small, stunted, or misshapen leaves can also indicate a pest or nutrient problem, or improper care.

Even after the plant is in your home, it can still encounter diseases, pests, and unfavorable growing conditions. One important step is to examine the place in your home where you'd like to keep your plant. Consider these questions when making your assessment: What type of light does the location receive and at what intensity? Is the area well insulated from drafts? Will the humidity level need to be increased or will the plants be placed in a kitchen or bathroom, where humidity levels tend to be higher? For more information, consult the fact sheet *Caring for Houseplants*.

When choosing a houseplant and placing it in your home, remember that it was grown under ideal conditions in a greenhouse. The plant will need time to adjust to the light, humidity, and temperature conditions in your home. Don't be alarmed if, in the meantime, leaves drop, leaf tips turn brown, or leaf color changes

slightly. After the houseplant has been given enough time to become established and its condition does not improve, consult an expert.

This fact sheet outlines potential problems that affect houseplants. By knowing what influences a houseplant's establishment, how to correct a problem, or where to go for help, you can ensure that your plant receives the attention necessary to bring it back to health.

Pest Problems

To effectively manage insect pests you need to properly identify the pest. It's also necessary to know at what developmental stage the pest can best be managed and what tools work most efficiently. Non-chemical management tools include using a stream of water to remove the insect, wiping the pest off, or picking pests off the plant by hand. For more information about pests and pest management, and for chemical control options, contact your county Cooperative Extension office. A map with links to counties in Pennsylvania can be found at <http://www.extension.psu.edu/extmap.html>.

Some of the more common insects of houseplants and the damage they cause are summarized in the following table.

Pest	Description	Damage
Aphids	<ul style="list-style-type: none"> §Tiny green, brown, or black insect §Located on the undersides of leaves 	<ul style="list-style-type: none"> §Feeding damage causes: <ul style="list-style-type: none"> §Stunted plant growth §Curled or distorted foliage
Mealybugs	<ul style="list-style-type: none"> §Scale insect §White cottony appearance on stems, undersides of foliage (leaves), and on nodes (where the leaf or bud attaches to the plant's stems) 	<ul style="list-style-type: none"> §Feeding damage causes stunted plant growth
Mites	<ul style="list-style-type: none"> §Tiny, light-colored arachnids (not insects) 	<ul style="list-style-type: none"> §Produce webbing on foliage and stems §Feeding produces distorted yellowish foliage
Scale	<ul style="list-style-type: none"> §Oval or round, brown insects §Located on stems and leaves 	<ul style="list-style-type: none"> §Suck plant juices resulting in poor or stunted plant growth
Thrips	<ul style="list-style-type: none"> §Extremely tiny insects §Adults are light tan to dark brown; appear white when young 	<ul style="list-style-type: none"> §Feed on foliage and flowers, causing them to become distorted and discolored
Whitefly	<ul style="list-style-type: none"> §Small, white, gnatlike insect 	<ul style="list-style-type: none"> §Adults and young feed on leaves, causing the leaves to turn pale yellow or white

Disease Problems

Most houseplants, if grown under proper cultural conditions (proper light, humidity, air circulation, and water) experience very few disease problems. However, plants under stress are weakened and more susceptible to infection.

Some of the common houseplant diseases and their symptoms, along with management tips, are described in the following table.

Name	Organism	Symptom	Management
Anthracnose	<i>Collectrotrichum</i> and <i>Gloeosporium</i> fungi	<ul style="list-style-type: none"> §Leaf tips turn yellow, then brown §Entire leaf may die 	<ul style="list-style-type: none"> §Remove infected leaves §Avoid misting leaves
Leaf spots	Fungi and bacteria	<p>Fungal:</p> <ul style="list-style-type: none"> §Leaf spots appear brown with a yellow halo §Tiny black dots (fungal bodies) can be seen with a magnifying lens on the brown tissue §Portions of or the entire leaf may die <p>Bacterial:</p> <ul style="list-style-type: none"> §Leaf spots appear water soaked §May also have a yellow halo 	<ul style="list-style-type: none"> §Remove infected leaves §Increase air circulation §Avoid getting water on leaves

Name	Organism	Symptom	Management
Powdery mildew	Fungus <i>Oidium</i> species	<ul style="list-style-type: none"> §White powdery fungal growth on foliage §Leaf distortion §Leaf drop may result 	<ul style="list-style-type: none"> §Increase air circulation around plant §Avoid saturated soils §Remove severely infected foliage
Root and stem rots	Botrytis, Pythium, Alternaria, Phytophthora, Sclerotinia, and Rhizoctonia	<ul style="list-style-type: none"> §Brown to black soft or punky roots §Gridled soft stems with a brown or black ring near the soil line §Plants wilt and eventually die 	<ul style="list-style-type: none"> §Avoid overwatering §Remove infected plants §Where symptoms are infecting some but not all the roots, cut out infected roots, then repot plant using sterile potting mix and a clean pot

Abiotic Problems

Abiotic problems are caused by nonliving agents, for example, environmental, physiological, or other non-biological factors. Not all problems are easy to diagnose and may be a combination of several factors.

Some of the symptoms and causes of common problems are listed in the table below.

Symptom	Common Cause
Spindly plants	§Not enough light or poor lighting conditions
Few flowers	§Poor lighting conditions
Few flowers and excessive growth	§Too much nitrogen fertilizer
Yellowing leaves	<ul style="list-style-type: none"> §Overwatering §Not enough light §Relative humidity is too low §Soil drains poorly and remains wet for too long §Injured by low temperatures resulting from a draft caused by an open door, window, or air conditioner
Leave scorched	§Receiving direct sun
Brown leaf tips	<ul style="list-style-type: none"> §Chemical burn from overapplication of pesticides or fertilizer §Soft water §Soil remains dry for extended periods of time §Temperature is too low
Small leaves	§Soil remains either too wet or too dry
Weak growth	§Incorrect lighting
Wilting plant	§Root system is damaged from being kept too wet
General defoliation	<ul style="list-style-type: none"> §Soil remains either too wet or too dry §Overwatering §Poor lighting conditions §Injured by low temperatures

Though the threat of insects, diseases, and abiotic problems is real, houseplants can survive and thrive in almost any home. As with any living thing they need a certain amount of care and attention. Inspect your houseplants often to make sure that they have the correct growing conditions, that they are getting the proper amount of water and fertilizer, and that they are free of pests. Taking care of them now will lessen your chances of having to buy replacements in the future.

Suggested Further Reading

- Hessayon, D.G. 2002. *The Houseplant Expert*.
Transworld Publishers, London.
- Jantra, I. and U. Kruger. 2000. *The Houseplant Encyclopedia*. Firefly Books, New York.
- Kramer, J. 1999. *Easy-Care Guide to Houseplants*.
Creative Homeowner, Upper Saddle
River, New Jersey.

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