

Houseplant Selection and Care

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This MontGuide addresses environmental needs to aid in houseplant selection so they can thrive, and not just survive. Topics include appropriate lighting, watering, fertility, temperature, and humidity. A brief discussion of problems is included, and a table of selected easy- and moderately easy-to grow houseplants is presented.

HOUSEPLANTS GO A LONG WAY TOWARDS MAKING

a house feel like a home, or an office or dorm room less sterile. They can bring life and color to a drab environment and flowering plants can bring fragrance and beauty to an otherwise lackluster room.

Houseplants are raised in greenhouses under ideal conditions so it's important to care for them properly while they are becoming established in a home environment, which will undoubtedly not have the conditions they're used to. Houseplants have varying needs, so when selecting a new plant, consider the new plant's requirements, and match the plant to an appropriate place in the home. Light, temperature, and humidity must all be addressed. Placement of a houseplant can contribute to its ability to thrive and not just survive in the new environment.

Before purchasing a houseplant, do a little research to help select the right plant for the right spot, or have the spot in mind when shopping and ask the knowledgeable garden center folks what plant might work.

When the decision has been made, examine the plant carefully for the presence of insects and diseases, damaged tissue, and root issues. Plants that have been raised in a greenhouse will need special care to adapt to a new location and may share insects and diseases with other nearby plants. Isolate from other houseplants for a week or two to be sure that hiding pests weren't missed. Don't bring problems home!

Light

Houseplants have different light requirements, depending on the environment where they naturally occur. Plants grown in improper light conditions will not thrive. See Table 1 for common houseplants and their requirements to

thrive. Plants brought home from the ideal environment of a greenhouse may take a little time to adapt and look their best, so don't give up. Once established, plants can adapt to less than ideal conditions and may be moved successfully to different locations in the home or office.

Almost all flowering houseplants require moderately bright light. Place them near a south, east, or west facing window. African Violets are an exception; place them near a north window or in a bathroom with a skylight. When in bloom, keep out of direct sunlight to avoid early wilting of the flowers.

Plants grown for their attractive foliage are divided into three general light requirement categories, bright-, moderate-, and low-light, which some authorities further divide:

- **Shade:** enough light to read a book, but well away from any window.
- **Semi-shade:** near a north window.
- **Bright but sunless:** on a north windowsill, near a bright window, or filtered through a sheer curtain.
- **Some direct sunlight:** close to an east- or west-facing window. May need protection in summer.
- **Full sun:** near a south-facing window. Some shading may be necessary in the heat of summer.

Water

Unfortunately, many houseplants are killed by well-intended owners due to a lack of understanding of how much water to apply, and how often to water. Pot size, shape and material, as well as plant type, season, humidity level, and light all impact watering needs, and for watering, one size does not fit all. Water from the kitchen sink is fine for most plants, unless it goes through a water softener, in which case use rainwater, melted snow or bottled water. Some plants, including African Violets do poorly if water is too cold; apply tepid water to these (**Table 1**).

Generally, houseplants should be potted in a container with drainage holes. These pots may be placed in decorative pots, trays, or sleeves to catch applied water.

Plants that require more water include flowering plants as well as plants potted in a porous container such as terracotta clay. Bottom watering is recommended for some houseplants to avoid stem rots, but for most, either bottom water or water from the top. When watering from the top, apply until water runs out the bottom of the pot. Do not let any plant sit in drainage for more than an hour after watering. Potting media of plants that are always bottom-watered will often accumulate a layer of salts on the surface. Leach these salts occasionally by top-watering until water actively flows from the bottom of the pot. Do not let the plant sit in this salty water.

Check established plants occasionally to ensure drainage is occurring, and that the plant isn't sitting in water.

Fertility

During the time when houseplants are actively growing (spring, summer and fall) use a water-based balanced fertilizer such as 10-10-10 according to label directions. Most houseplants are in a resting stage during the winter, and do not benefit from fertility during that time. Most flowering houseplants are an exception—continue fertilizing them as long as they are in flower. Apply the fertilizer monthly, or dilute to half-strength and fertilize weekly.

Temperature

Most houseplants thrive in temperatures comfortable for humans, 55–75°F. A drop in temperature of 5° at night will help flowering plants retain their flowers longer. Temperatures above 75°F are associated with much dryer air in Montana than in the tropics, where most houseplants are native, therefore managing humidity is also important.

Humidity

Montana air is dry, and the air in heated homes in winter can be exceptionally dry. Home humidifiers can help, but some plants will benefit from the use of a pebble tray under or around the plants: fill a tray with gravel, sand, or decorative pebbles and fill with water. Evaporation will increase humidity. If the pots are placed directly on the tray, be sure the bottom of the pot does not come in contact with the water. Hand misting can also increase humidity; don't mist when the plant is in bright sunlight.

Problems

Insects

The three most common pests afflicting established houseplants are spider mites (**Figure 1**), scale (**Figure 2**), and mealybugs (**Figure 3**). All three of these pests can cause distorted and stunted growth. Spider mites (actually



Figure 1: Spider mites. BY CLEMSON UNIVERSITY – USDA COOPERATIVE EXTENSION SLIDE SERIES – BUGWOOD.ORG #1234228

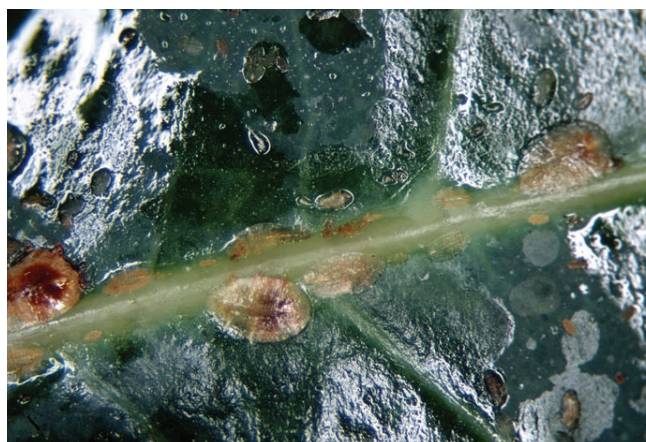


Figure 2: Scale. BY WHITNEY CRANSHAW, COLORADO STATE UNIVERSITY, BUGWOOD.ORG #1326064



Figure 3: Mealybugs. BY WHITNEY CRANSHAW, COLORADO STATE UNIVERSITY, BUGWOOD.ORG #5573438

an arachnid, not an insect) can often be washed off the plant with water, or controlled using insecticidal soap or a houseplant pest control product labeled for mite control. Spider mites are typically observed on the underside of leaves in a light infestation. Webbing will be seen with severe

infestations. Scale insects are often seen on stems, and may also be treated with insecticidal soap or horticultural oil labeled for houseplants. Systemic control products are also available. Read and follow all label directions. Mealy bugs are often seen in leaf axils, and can be difficult to control if the infestation becomes severe. Head this off when the infestation is light by dipping a cotton swab in rubbing alcohol and removing individual insects. With all houseplant pests, isolate infested plants to avoid spread.

Diseases

Given proper environmental conditions, most houseplants remain disease-free. Improper conditions may stress the plant, leaving it more susceptible to problems. Root and stem rots are caused by several different organisms, and can be affected by overwatering. Remove the plant from the pot, cut off any brown or mushy roots, and repot in a clean pot with new, well-draining potting mix. Leaf spots can be caused by various fungi and bacteria. Avoid wetting the leaves, increase air circulation, and remove infected leaves.

Abiotic (Caused by nonliving issues)

Improper watering, light, humidity, over-fertilization, and poor air circulation can cause many abiotic problems. Environmental issues can result in weak plants with small leaves, brown leaf tips, wilting, few flowers and yellowing leaves.

Houseplants are living organisms that require care. Make it a habit to inspect them regularly for problems as well as successes.

Table 1 lists numerous houseplants that are easy or moderately easy to care for, along with the best environmental conditions to give them to ensure they thrive, and not just survive.

Table 1. Selected houseplants that are easy or moderately easy to care for, and conditions in which they thrive.

Common Name ¹	Botanical Name ²	Light Requirements	Watering	Humidity	Ease
African Violets	<i>Saintpaulia</i> spp.	Bright but sunless	Bottom water. Keep moist, wait for surface to dry. ³	High	Easy
Asparagus Ferns	<i>Asparagus</i> spp.	Bright or semi-shade	Moderate in spring to autumn, Low in winter	Mist	Easy
<i>Begonia</i>	<i>Begonia</i> spp.	Bright but sunless	Heavy when in bloom but not soggy	High	Moderately easy
Cacti	Desert types	Bright	Heavy, then allow to dry	Low	Easy
Cast Iron Plant	<i>Aspidistra elatior</i>	Adaptable. No direct sun	Moderate in spring to autumn, Low in winter	Adaptable	Easy
Chinese Evergreen	<i>Aglaonema modestum</i>	Semi-shade. No direct sun	Evenly moist	High	Easy
Corn Plant	<i>Dracaena fragrans</i>	Bright but sunless	Keep moist	High	Easy
Creeping Charlie	<i>Pilea nummularifolia</i>	Bright or semi-shade	Moderate in spring to autumn, Low in winter ³	High	Easy
<i>Dracaena</i>	<i>Dracaena</i> spp.	Bright but sunless	Keep moist	High	Easy
Dumb Cane	<i>Dieffenbachia</i> spp.	Partial shade in summer. Bright in winter	Moderate in spring to autumn, Low in winter	High	Moderately easy
<i>Fittonia</i>	<i>Fittonia</i> spp.	Partial shade	Moderate in spring to autumn, Low in winter ³	High	Moderately easy
English Ivy	<i>Hedera helix</i>	Bright in winter, no direct sun in summer	Moderate in spring to autumn, Low in winter	High	Moderately easy

¹ Many houseplants have several common names ²Some houseplant genera have many species available (“spp.”) while others are specific species ³Use tepid water ⁴Do not mist when in bloom

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Inchplant (Wandering Jew)	<i>Tradescantia zebrina</i>	Bright	Moderate in spring to autumn, Low in winter	Mist	Easy
Norfolk Island Pine	<i>Araucaria heterophylla</i>	Bright or semi-shade	Moderate in spring to autumn, Low in winter	Mist	Moderately easy
Parlor Palm	<i>Chamaedorea elegans</i>	Moderate to low. No direct sun	Evenly moist	High	Moderately easy
Peace Lily	<i>Spathiphyllum wallisii</i>	Semi-shade in summer, bright in winter	Evenly moist	High	Moderately easy
<i>Peperomia</i>	<i>Peperomia</i> spp.	Bright or semi-shade	Drench, then allow media to dry, but don't let plant wilt.	High in summer	Moderately easy
<i>Philodendron</i>	<i>Philodendron</i> spp.	Bright but sunless	Evenly moist	High	Easy
Pothos (Tongavine)	<i>Epipremnum</i> spp.	Bright but sunless	Drench, then allow media to dry, but don't let plant wilt.	High	Easy
(Dwarf) Umbrella Tree	<i>Schefflera arboricola</i>	Bright	Moderate in spring to autumn, Low in winter	High	Moderately easy
Snake Plant	<i>Sansevieria</i> spp.	Bright	Moderate in spring to autumn, Low in winter	Average	Moderately easy
Spider Plant	<i>Chlorophytum comosum</i>	Bright but sunless	Evenly moist	High in summer	Easy
Wax Plant (Porcelainflower)	<i>Hoya carnosa</i>	Bright, some direct sun	Moderate in spring to autumn, Low in winter	High ⁴	Easy

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(GENERAL)

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