Houseplants

William T. Kemper Center for Home Gardening



Offered in a wide variety of sizes, shapes, colors, and textures, houseplants beautify our homes and help soften the built environment. Some are prized for their showy blooms, while others produce a colorful foliage display. Growing houseplants successfully begins with knowing the specific cultural requirements of each plant and trying to create an indoor environment that will suit their specific needs.

Light

The most important factors to consider when choosing the right location for a given houseplant are light intensity and duration. Often you will see plants classified according to whether they prefer low, moderate, or high light levels.

Plants that prefer low light may start to show dull, pale or bleached leaf surfaces and brown, scorched leaf margins when exposed to too much bright light. Conversely, not enough light can cause slow, spindly growth and the development of small pale leaves. Low light levels can also cause plants to not flower. If they do form buds, the buds may drop, or the flowers may fade quickly. Variegated leaves often revert to being completely green when not enough light is provided.

Window Exposures

The cardinal direction a window faces partially determines how much sunlight will enter the window. In the northern hemisphere, north-facing windows generally receive low levels of indirect light, east and west-facing windows receive some direct light and some indirect light,

and south-facing windows receive direct light. However, obstructions such as awnings, trees, and buildings, as well as how close a plant is placed to the window will affect how much light the plant actually receives.

Temperature and Relative Humidity

A second factor often interrelated to light exposure is temperature. Generally, keep tropical houseplants away from air conditioning vents in the summer, or drafty areas in the winter. Sudden temperature fluctuations can cause rapid yellowing, dropping leaves. Curling leaves that turn brown and drop also indicate that it is too cold.

Relative humidity is a measure of water vapor held in the air relative to the air temperature. Warm air is able to hold more moisture than cold air. Most houseplants grow well with a relative humidity level of around 50%. Some require even higher levels of around 70-80%. Houseplants may suffer, especially during the winter, from a lack of moisture in the air. Humidifiers can be used to increase the relative humidity in a room where houseplants are located. Placing many houseplants in close proximity to each other can also create a more humid environment. Plants

that require high levels of humidity can be placed in a terrarium or small, indoor greenhouse structure.

Watering and Fertilizing

Most houseplants are ready for water if they are dry one-inch down from the surface of the soil. This can be determined using a moisture meter or your fingertip. To water properly, moisten the soil completely until water is coming out of the bottom of the pot. Drain excess water out of the saucer or drip tray after around 20 minutes.

All houseplants need adequate amounts of food to grow. Look for a balanced plant food with an N-P-K analysis like 10-10-10. Feeding should be done only while the plant is actively growing or flowering. Three feedings during the growing season, starting in spring and ending in mid to late summer is usually sufficient.

Maintenance and Pruning

Remove shriveled or discolored leaves with clean, sharp pruners or scissors. Dead foliage should not be allowed to accumulate in the pot, as this can encourage pest and disease development. A layer of dust and grime can accumulate on indoor plant leaves over time. Leaves can be cleaned with a damp, soft cloth while supporting the leaf with one hand.

Pruning is not strictly necessary for most houseplants, but it can modify and redirect growth, improve structure, and reduce overall size. Prune with sharp, clean scissors or pruners. New growth will be generated in the remaining stems or from the plant's base. Stems pruned above a leaf or a growth bud will develop one or more new tips making the plant appear denser.

Repotting

Most houseplants benefit from being repotted every 1-2 years. This prevents the plant from

becoming pot-bound. Pot-bound plants have very slow leaf and stem growth. The soil dries out quickly even with frequent watering. Roots may be seen circling the top of the pot, or begin to grow out of the drainage hole.

Move your plant to a new pot that is 1-2" larger than its current container. Tip the plant out of its existing container using your open hand for support. Place the plant in the new pot and fill it in with moistened potting soil. Water thoroughly.

Some plants actually prefer to be slightly potbound and do not require frequent repotting. These include *Spathiphyllum* sp. (peace lily), *Schlumbergera* sp. (holiday cacti), *Sansevieria* sp. (snake plant), *Schefflera* sp. (umbrella plant), and *Ficus* sp. (fig)

Diseases and Pests

Spots, rots, wilts, and mildews on your houseplant are symptoms of disease. It is important to identify the problem correctly so it can be treated effectively. Soft, slimy stems with black or brown decayed areas can be symptoms of crown rot, also caused by a fungus. Brown leaf spots which grow and merge can be either bacterial or fungal leaf spot diseases. If any of these symptoms occur, a recommended treatment includes destroying infected leaves, using a fungicide, and modifying cultural practices.

There are a variety of pests which plague houseplants. Sap-sucking insects including mealybugs, scale, and thrips are the most common. Identify the pest and apply the appropriate remedy as soon as the first symptoms appear. Repeated treatments may be required to break the life cycle of overlapping generations of most of these insects.

Cacti and Succulents



Succulents are plants with fleshy stems and/or leaves that are often chosen as houseplants for high light conditions. They typically require less frequent watering than most houseplants and are able to tolerate drought by tapping into water resources stored in their succulent stems and/or leaves. These plants come from many plant families, the most well-known being Cactaceae, or the cactus family. Many succulents are native to hot, dry, desert ecosystems where sun is plentiful but available moisture is limited. Others in this group come from sub-tropical forests where light conditions are less extreme and moisture is more abundant. These are referred to as jungle cacti and include *Schlumbergera* sp. (holiday cacti), *Rhipsalis* sp. (mistletoe cacti) and *Epiphyllum* sp. (orchid cacti).

Light

Cacti and succulents generally require at least 4 hours of bright, direct light each day. However, some including the jungle cacti, prefer medium light and should only receive direct light in winter.

Temperature and Relative Humidity

Most cacti and succulents tolerate the low humidity of the average home in winter, while jungle cacti prefer higher humidity. Some cacti will do better if presented with a rest period during the winter. Provide these plants with cool conditions and as bright light as possible. Window sills and cool basements are good sites for these plants.

Watering

The most frequent cause of problems with cacti and succulents is due to overwatering. Generally, cacti will need watering every 2 to 3 weeks during the growing season and once a month in winter. It is best to allow the soil to dry out between waterings. Check the soil moisture level using a moisture meter or fingertip.

Jungle cacti should have moderate, even moisture during the growing season, especially during the flowering period of late fall or early spring. When flowering has stopped, water should be withheld to allow the top of the soil to dry out before waterings.

Selected List of Houseplants

Light and moisture requirements are given in a scale of 1-5, 1 meaning low light or moisture requirements and 5 meaning high light or moisture requirements.

High Light

Common Name	Scientific Name	Light	Moisture
flowering-maple	Abutilon × hybridum	****	• • •
urn plant	Aechmea fasciata	***	• •
aloe	Aloe vera	****	•
creeping inchplant	Callisia repens	***	• • •
spider plant	Chlorophytum comosum	***	• • •
croton	Codiaeum variegatum	***	• • •
jade plant	Crassula ovata	***	• • •
gardenia	Gardenia jasminoides	****	• • • •
kalanchoe	<i>Kalanchoe</i> sp.	***	• •
bromeliad	<i>Neoregelia</i> sp.	***	• • •
umbrella plant	Schefflera arboricola	***	• • •
bird of paradise	Strelitzia reginae	****	• • •
boat lily	Tradescantia spathacea	***	• • •

Low Light

Common Name	Scientific Name	Light	Moisture
Chinese evergreen	<i>Aglaonema</i> hybrids	***	• • •
anthurium	Anthurium sp.	***	• • •
cast-iron plant	Aspidistra elatior	**	• • •
dumb cane	<i>Dieffenbachia</i> sp.	**	• • •
fragrant dracaena	Dracaena fragrans	***	• • •
lady palm	Rhapis excels	**	• • • •
Boston fern	Nephrolepis exaltata	***	• • •
baby rubber plant	Peperomia obtusifolia	***	• •
missionary plant	Pilea peperomioides	***	• • •
snake plant	<i>Sansevieria</i> sp.	**	• •
peace lily	Spathiphyllum sp.	**	• • • •
ZZ plant	Zamioculcas zamiifolia	**	• • •

Toxic to Pets

Common Name	Scientific Name	Light	Moisture
elephant's ear	<i>Alocasia</i> sp.	***	• • •
aloe	Aloe vera	****	•
dumb cane	<i>Dieffenbachia</i> sp.	**	• • •
striped dracaena	Dracaena fragrans	***	• • •

golden pothos	Epipremum aureum	***	• • •
fiddle-leaf fig	Ficus lyrata	***	• • •
English ivy	Hedera helix	**	• • •
Swiss cheese plant	Monstera deliciosa	***	• • •
heart-leaf philodendron	Philodendron hederaceum	**	• • •
snake plant	<i>Sansevieria</i> sp.	**	• •
peace lily	Spathiphyllum sp.	**	$\bullet \bullet \bullet \bullet$

Safe for Pets

Common Name	Scientific Name	Light	Moisture
rattlesnake plant	Calathea lancifolia	***	• • •
zebra plant	Calathea zebrina	***	• • •
spider plant	Chlorophytum comosum	***	• • •
red mosaic plant	Fittonia albivenis	***	• • •
Boston fern	Nephrolepis exaltata	***	• • •
bromeliad	<i>Neoregelia</i> sp.	***	• • •
baby rubber plant	Peperomia obtusifolia	***	• •
missionary plant	Pilea peperomioides	***	• • •

Tough as Nails

Common Name	Scientific Name	Light	Moisture
aloe	Aloe vera	****	•
anthurium	<i>Anthurium</i> sp.	***	• • •
dragontree	Dracaena marginata	***	• • •
golden pothos	Epipremum aureum	***	• • •
Indian rubberplant	Ficus elastic	***	• • •
snake plant	<i>Sansevieria</i> sp.	**	• •
umbrella plant	Schefflera arboricola	***	• • •
ZZ plant	Zamioculcas zamiifolia	**	• • •

Interesting Foliage

Common Name	Scientific Name	Light	Moisture
rex begonia	Begonia rex-cultorum	***	• • •
rattlesnake plant	Calathea lancifolia	***	• • •
zebra plant	Calathea zebrina	***	• • •
earth star	Cryptanthus sp.	***	• • •
red mosaic plant	Fittonia albivenis	***	• • •
waffle plant	Hemigraphis alternate	***	• • •
polka dot plant	Hypoestes phyllostachya	***	• • •
stromanthe	Stromanthe sanguinea 'Tristar'	***	• • •
inch plant	Tradescantia zebrina	***	• • •

Climbers and Trailers

Common Name	Scientific Name	Light	Moisture
creeping inchplant	Callisia repens	***	• • •
spider plant	Chlorophytum comosum	***	• • •
golden pothos	Epipremum aureum	***	• • •
English ivy	Hedera helix	**	• • •
wax plant	Hoya carnosa	***	• •
trailing jade	Kleinia petraea	***	•
heart-leaf philodendron	Philodendron hederaceum	**	• • •
satin pothos	Scindapsus pictus	***	• • •
burro's tail	Sedum morganianum	***	•
string of bananas	Senecio radicans	***	• •
string of pearls	Senecio rowleyanus	***	• •
inch plant	Tradescantia zebrina	***	• • •