

# Houseplants and you

1. **Lighting**-insufficient light is a major cause of houseplant decline but too much light can cause them to pale and burn
  - a. High light- bright indirect sun from a south or west window, within 3' of the window
  - b. Medium light-indirect light 3-6' from any window
  - c. Low light- more than 6' from windows or no windows
  
2. **Watering, temperature, and feeding**- plants are just like people they need food and water to live.
  - a. 2 important rules about proper watering are never let the soil dry out completely between watering and never let plants stand in water for an extended amount of time
  - b. Generally, a plant needs water when top 1 inch of soil is dry in pots less than 6" in diameter, and 2" in larger pots
  - c. Water till a little water comes out of the bottom, this ensures the bottom few inches of soil are getting watered
  - d. Water quality is not usually a problem when ordinary tap water is used. The chlorine and fluorine that are often added to potable water do not harm most plants, though dracaenas are sensitive to fluorine. However, water that is artificially softened should not be used regularly to water house plants.
  - e. Temperature- Most house plants tolerate normal household temperature fluctuations. On general, foliage plants grow best between 70 -80 degrees during the day and between 60-68 at night avoid putting plants in areas with widely fluctuating temps.
  - f. Relative humidity- most house plants like a more humid environment, you can increase it by placing gravel trays with water underneath pots. As their moisture around the pebbles evaporates the relative humidity increases. Grouping plants together also raises humidity. Spraying mist on the foliage does not significantly increase humidity
  - g. Ventilation- house plants, especially flowering varieties, are sensitive to cold drafts and heat. Do not place them directly in front of vents
  - h. Fertilization-house plants do not require a specific type of food, but they should be fed every 4 -6 weeks, if it's a flowering variety it might need food every 2-4 weeks
  - i. Soluble salts- accumulate on the topsoil and on pots. In house plants, signs of excess soluble salts include reduced growth, brown leaf tips, dropping of lower leaves, small new growth, dead root tips and wilting. Soluble salts are minerals dissolved in water. Fertilizer dissolved in water becomes a soluble salt, when the water evaporates from the soil, the minerals stay behind as the salts build up more it becomes more difficult for plants to take up water. The best way to

prevent soluble salt injury is to stop the salts from building up. Do not allow the pot to sit in water. If the drained water is absorbed by the soil the salts that are washed out are reabsorbed.

- j. House plants should be leached at least every 4 to 6 months. To leech plants, pour excess water on the soil and let it drain completely. The amount of water used for leaching should equal twice the volume of the pot, if a layer of salts has formed a crust at the soil surface, remove before leaching

### 3. Soil and pots

- a. PH and growing medium- the ph commercially prepared potting soils is usually slightly to moderately acidic, which is acceptable to most houseplants. Quality potting soils should be low in soluble salts, slightly acidic, and capable, of holding essential nutrients for plant growth
- b. containers - a container should be large enough for headroom for proper watering and may be made from ceramic, plastic, wood, aluminum, copper, brass, glass, etc.
- c. Plastic pots are easy to sterilize or clean for reuse and because they are not as porous as clay they need fewer frequent watering and tend to accumulate fewer salts
- d. Repotting-Selecting a pot that is around 2" larger than the one containing the plant and has at least one drainage hole, placing gravel in the bottom of the pot does not improve drainage in fact it will usually impede drainage which can result in root disease. Do not add soil above the original root ball unless the roots are exposed
- e. Training and grooming- House plants can be trained in all manner of ways, trailing plants can be made to grow up a wall, stems can be made to zig zag, twist, or loop. Keeping house plants clean and neat not only improve their appearance but also reduces the incidence of insects and disease problems

### 4. Selection-picking the right plant is hard but here are a few suggestions

- a. ZZ plants(zamioculcus)- low water low light low maintenance, great smallish plants for a desk or shelf, nicknamed "eternity plants" because they last for an eternity, exotic variety called raven is all black!
- b. Pothos (Epipremnum)- low water low- med light, great hanging plant comes in lots of varieties such as n'joy and neon, can also be trained up a wall for a cool indoor wine look
- c. Ficus varieties- medium to bright light, regular water, most people know the fiddle leaf fig(ficus lyrata) which are cool but touchy, lots of other ficus varieties can make for great collectors plants such as Audrey, altissima, ginseng, palmerii, petiolaris

- d. Philodendron varieties- another huge family of plants low to medium light, some are hanging varieties such as the swiss cheese and cordatum, which can be trained up a wall like the pothos, some are free standing forms like selloum, split leaf and Xanadu
- e. Phalenopsis orchids- bright light, well grown orchids are relatively easy plants and adds a delicate pop of color to a room

## 5. Troubleshooting

- a. Common houseplant problems- Most houseplants have issues due to improper care (too much or too little food or water) refer to the table for common issues
- b. Controlling pests and mites- Most common houseplant insects and mites' pests are aphids, scales, mealybug, spider mites, trips, fungus gnats, and whiteflies. These can all be treated by the same kind of insecticides you would use on outdoor plants.
- c. Fungus gnats- fungus gnats infest soil and container media, where larvae feed on organic matter and roots which may stunt plant growth. Management of fungus gnats' centers on cultural control: eliminate standing water and allow the surface soil to dry between watering's, avoid cheap soils, minimize debris in and around pots, insecticides are rarely warranted
- d. Controlling houseplant diseases- Many fungal pathogens can be found on foliage plants and they produce different sizes shapes and colors of lesions, bacterial diseases sometimes appear as oily greasy or water-soaked spots on leaves
- e. Common systemic bacterial diseases can be managed in many cases by sparse watering and low fertilization. The cooler temps of many interior are often the reason bacteria do not grow, splashing water must be avoided when trying to control bacterial disease
- f. Fiddle leaf figs are tropical rain forest natives, accustomed to high humidity, consistent temperatures and well-draining, peaty soil. When the plants receive too little water, new foliage browns and eventually falls off. Conversely, when plants are over-watered -- or heavy soil becomes waterlogged -- damage begins at the base of the plant and the oldest leaves turn brown and drop. Allow over-watered figs to dry thoroughly. Fiddle leaf figs should be allowed to dry out between watering's and then watered deeply until water runs out the bottom of the container.