Healthy Houseplants



By Lisa Johnson Dane County UWEX Horticulture Educator

Tips to Consider When Shopping

- Match plants to the environment you have
- Check roots
 - tug test
 - circling roots
- Check for insects
 - Spider mites on palms, ivies, calatheas
- Do not expose to temperatures below 50°F
 - Have plants wrapped, warm up car if very cold

When you get your plant home

- Acclimation process
 - 8 weeks (2 months)
 - Hibiscus, gardenias: loss of buds and leaves
 - Vanishing variegation
 - Yellowing and leaf loss
 - Brown crispy margins
 - Scorching
- Cleaning
 - Remove pesticide and other residues, plus dust

Watering

- Do those water globes work??
- Globes keep moisture constant; may not be good for all plants.
- How long? Varies widely--may last a week or a few days in depending on how root-bound, type of plant & media.
- The stem can easily clog with debris; insides can grow mold and algae over time. Use a pipe cleaner to clear.
- Make a hole in the soil with a pencil or knife before inserting the globe to help prevent clogs.
- Full water globes are top heavy.



- Overwatering is the number one killer of houseplants!
- Watering tips
- Water by WEIGHT
- Water <u>thoroughly</u>, allowing plants to dry sufficiently between waterings
- Do not allow plants to sit in water a long time
- Use appropriate potting media
- Fluoride, chlorine in water
- Using rainwater is not typically recommended for indoor-only plants, but can be used for out-door summering plants



Soil and Re-potting

- Use houseplant potting soil (it may actually be a soil-less mix).
- Houseplants, especially starter plants may be pot bound when you buy them.
- The new pot should not be more than two inches in diameter larger than the old pot.
- Leave 1/2" to 1" for water collection, ie. don't fill the pot to the top with soil.
- Plant at the same level as the old pot.
- Some plants 'like' to be pot bound. - Christmas cactus, aloe, jade, cacti, etc.



Fertilizer

- Especially if using soilless media, fertilizer is important.
- Fertilize once or twice a month (dilute).
- Avoid over-fertilizing--soluble salt buildup.
- Blooming houseplants may need a 'bloombuilder' fertilizer
- In general, do not fertilize December-February IF using natural light.

Houseplant Maintenance

- Dust on the leaves results in 25% reduction in light interception
- Dusting also helps in insect control
- Wipe the leaves gently with a soft cloth
- 'Bathe' hairy-leaved plants rather than dusting
- Leaf shine products?



When Bringing Houseplants Indoors in Autumn

 Hose off, then after the plant is dry, spray with insecticidal soap if tolerated on that plant species



Houseplant Insect Pests

- Mealybugs
- Aphids
- Thrips
- Spider mites
- Whiteflies
- Scales
- Fungus gnats
- Springtails

Mealy bugs

- Mealybugs can infest all plant parts, including the roots.
- They produce a waxy coating on their bodies and their egg masses that resist insecticides.
- If the infestation is light, use Q-tips[™] dipped in rubbing alcohol, or use sprays with bifenthrin, permethrin or resmethrin.



Aphids

- Aphids are softbodied, sucking insects that feed on plant sap
- They can be controlled on houseplants with insecticidal soap & forceful water sprays or products with bifenthrin, permethrin or resmethrin



Thrips Thrips are 1/16" long and

- fast. They hide in flower & leaf buds, and are hard to find. Thrips cause feeding
- damage and vector plant viruses.
- Washing, bifenthrin, permethrin, resmethrin, pyrethrins, insecticidal soap, neem oil, plant oil extracts (at least two applications sprayed once every 5 days are usually necessary).





Spider mites

- · Spider mites are oval and yellowish. They are very tiny, only 1/50th" long, salt-grain size.
- They feed under leaves, sucking plant sap, causing stippling or bronzing of leaves.
- **Populations increase** rapidly.
- Discard the plant or use products with bifenthrin or insecticidal soap.





White Flies

- · Whiteflies have piercing/sucking mouthparts.
- They feed & lay eggs on the underside of leaves.
- Washing, bifenthrin, permethrin, at least three applications sprayed once every 5 days.
- Neem oil.







Scales

- Often on ferns, orchids, schefflera, zebra plant, weeping fig and ivy
- Have hard shells that repel insecticides
- · Found under leaves on leaf veins and petioles
- · Wash plants, scrape off scales or use sprays with bifenthrin, permethrin or resmethrin.





Fungus gnats

- Often mistaken for fruit flies, but live in soil and eat organic matter
- **Unless large** populations build up, they do very little damage to plants
- Can use the 'potato slice' method to get rid of them
- Also can let soil dry out more between waterings





Springtails

- Springtails are scavengers that eat decaying organic matter in soil. Rarely damage plants
- Named for forked 'furcula' that allows them to jump
- · Like damp places
- Let soil dry as much as possible between waterings to get rid of springtails.





African Violet Saintpaulia ionantha

Gesneriaceae

- The African violet was first discovered in East Africa in 1892 by Baron Walter von St. Paul.
- Best under grow lights
- East window
- · Highly organic soil
- Propagate by leaf cuttings in spring
- Mealy bugs, powdery mildew, cyclamen mite and stem or crown rot can be problems.





Aloe

Aloe vera Liliaceae (Asphodelaceae)

- From Africa
- Maritime sands and rocks
- Medium to high light
- Ave. house humidity
- Few problems
- Do NOT overwater or over fertilize



Chinese Evergreen Aglaonema commutatum Araceae

- From tropical Asia and Africa
- Low light, low humidity ok
- Propagate by division
- Good for air cleaning





Dieffenbachia, Dumb Cane Dieffenbachia spp. Araceae

- From Mexico, Columbia, Brazil, Puerto Rico
- Calcium oxalate caution
- Medium light , low humidity ok
- Too much fertilizer causes marginal leaf burn
- Air layering propagation technique is helpful for leggy plants





Striped Dracaena Dracaena deremensis 'Warneckii' Dracaena deremensis 'Lemon-Lime' Agavaceae

- From tropical Africa
- Leaves narrower than *D. fragrans*, pointy
- Good for air cleaning
- Same cultural care as
 - D. fragrans



English Ivy Hedera helix Araliaceae

- From Eurasia
- Is poisonous
- Stem cuttings
- · Bright to medium light
- Spider mites a big pest
- **Invasiveness on West** • Coast of U.S.

Weeping fig Ficus benjamina Moraceae

- From India, Southeast Asia, northern tropical Australia
- Likes high humidity
- Do not overwater
- Bright to medium light, • but not south
- Does not like drafts ٠
- Scale, mealybugs, spider • mites



Jade Plant Crassula argentea Crassulaceae

- From Africa
- Do NOT overwater
- Bright to medium light
- Leaf or stem cuttings
- Low humidity ok
- Scale, mealybug
- Don't fertilize Oct-Feb., sparingly at other times
- Flowering, maturity and



Peace Lily Spathiphyllum wallisii Araceae

- From Central America, Indonesia, and the Philippines
- Low to medium light
- Shiny foliage
- Best for air cleaning
- Division ٠
- Prefer high humidity for best flower production



Philodendron Philodendron scandens oxycardium Araceae

- From Mexico
- Low light to medium ٠ light
- Poisonous-calcium oxalate crystals
- Stem cuttings
- Few problems





Pothos, Devil's ivy Epipremnum aureum Araceae

- From southeast Asia
- Low to medium light
- Poisonous
- Stem cuttings
- Undemanding
- Few problems
- Keep on the dry side





Sansevieria, Mother-in-law's tongue Sansevieria trifasciata Agavaceae

- From Indonesia, India, tropical Africa
- Do not overwater
- Divisions
- Few problems
- Top heavy
- Undemanding



Spider plant Chlorophytum commosum Liliaceae

- From coastal South Africa
- Medium to bright to low light
- Division, offshoots
- Watering
- Fertilizer cautions



ZZ Plant Zamioculcas zamiifolia Araceae

- Monotypic genus
- Tropical perennial native to eastern Africa, to northeastern South Africa
- Takes low light
- Keep somewhat dry
- No insects or diseases
- Shiny leaves

