



HOUSE PLANTS 101

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BOYLE CO. HORTICULTURE AGENT

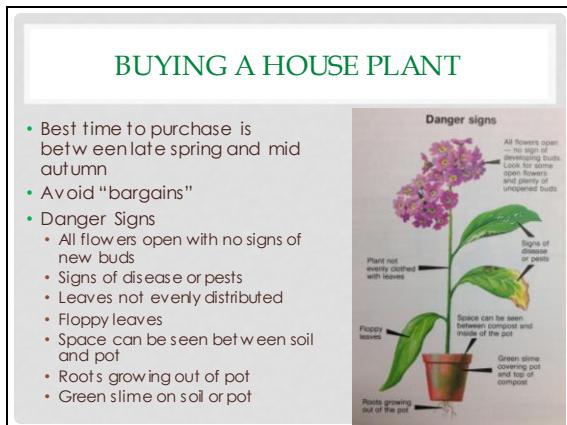




OBJECTIVES

- What to look for when buying a house plant
- Plant care
 - Temperature, light, watering, humidity, fertilizing
- Repotting techniques
- How to increase your stock
- Classifications
- Most common house plants
 - Secrets of success

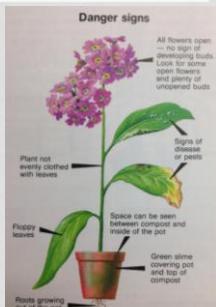




BUYING A HOUSE PLANT

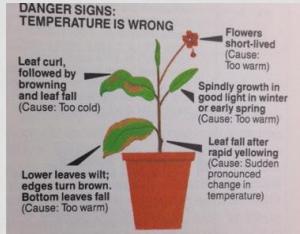
- Best time to purchase is between late spring and mid autumn
- Avoid "bargains"
- Danger Signs
 - All flowers open with no signs of new buds
 - Signs of disease or pests
 - Leaves not evenly distributed
 - Floppy leaves
 - Space can be seen between soil and pot
 - Roots growing out of pot
 - Green slime on soil or pot

Danger signs



PLANT CARE: TEMPERATURE

- Most house plants don't do well in temperatures above 75°F
 - Unless extra humidity is provided
- 55°F minimum temperature for non-hardy plants
- Eliminate temperature fluctuations
 - 5-10°F cooler at night
 - Cacti and succulents exception (desert fluctuations)



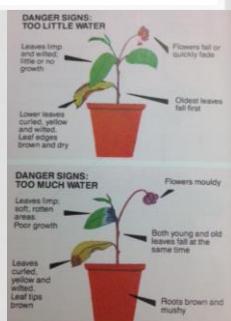
PLANT CARE: LIGHTING

- 2 aspects of light for plant growth
 - Duration:** most plants require 12-16hrs of natural or strong artificial light
 - Intensity:** varies among plants; full sun/full shade
- Full Sun:** within 2 ft of a south facing window
- Some Direct Sun:** brightly-lit area with some sunlight falling on the leaves during the day
- Bright but Sunless:** area close to but not in sunlight
- Semi-Shade:** moderately lit area, 5-8ft to sunlit window
- Shade:** poorly lit area, but bright enough to read a newspaper several hours of day



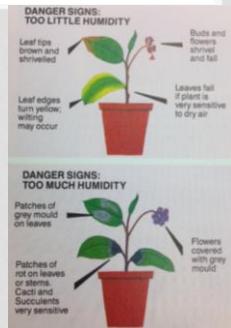
PLANT CARE: WATERING

- More plants are killed by overwatering than under watering
- Remember to reduce watering during winter
- Roots need air as well as water
 - Soil should be moist but not saturated
 - Some plants benefit from drying out before watering
- Make sure water is not running around sides of pot or sitting on surface
- Leaving water in a bowl overnight can eliminate chlorine



PLANT CARE: HUMIDITY

- Central heating your house in winter can produce air with the Relative Humidity of the Sahara Desert.
- Misting:** deposits small droplets over leaves
 - Use tepid water
 - Best to do in the morning
- Grouping:** put several pots together for a microclimate of high relative humidity.
- Double Potting:** put pot into larger container and fill with moist peat.



PLANT CARE: FERTILIZER

- Nitrogen:** the leaf maker
- Phosphates:** the root maker
- Potash:** the flower maker
- Liquid feeds are most effective
- Feed regularly during growing season



REPOTTING YOUR PLANT



INCREASING YOUR STOCK

- Why propagate from your own plants?
 - To have more plants without buying
 - Replace ageing specimens with vigorous new ones
 - To get plants otherwise unattainable
 - To give away 'Friendship plant'
- Propagating aids
 - Rooting hormone
 - Transparent polythene bags
 - Rooting media
 - Rooting bags



PROPAGATION TECHNIQUES

- **Layering**- most climbers with long flexible stems.
 - Takes a long time to root
 - Choose vigorous stem in spring and pin it down into soil. A small nick cut on underside of stem will speed up rooting.
 - Once rooting has taken place fresh growth will appear and the stem can be cut, freeing new plant.



PROPAGATION TECHNIQUES

- **Air Layering**- for thick stemmed plants that have become leggy.
 - Cut should not be more than 2 ft from tip of plant
 - After a couple of months roots will be seen inside of plastic bag
 - Sever stem just below the bottom tie and remove bag
 - Pot up carefully.



PROPAGATION TECHNIQUES

- **Offsets**- some species produce miniature plants as side shoots from main stem

- Should be cut off as near the main stem as possible.
- Preserve any roots which may be attached



- **Plantlets**- some species produce miniature plants at the end of flowering stems

- If no roots are present peg it down in moist soil
- Sever plantlet from parent when rooting has taken place



PROPAGATION TECHNIQUES

- **Division**- some house plants form clumps or daughter rosettes which can be divided.

- Knock plant out of its pot in spring
- Pull off one or more segments



PROPAGATION TECHNIQUES

- **Spore sowing**- ferns produce dust like spores not seeds, and can be a challenge to raise.

- Collect in a paper bag from ripe spores
- Leave them to dry for a couple weeks
- Spread thinly on surface of moist soil
- Pot should be sterilized
- Cover pot and place in shade



PROPAGATION TECHNIQUES

- **Cuttings**- always take several cuttings in case of failures and for aesthetic reasons.

• Stem Cuttings

- Choose sturdy, healthy, non-flowering shoots
- Rooting hormone may be necessary
- Succulents may need to be left to dry for several days before planting



PROPAGATION TECHNIQUES

- **Leaf cuttings**- for those plants that don't have stems and leaves arise directly from crown of plant.
- **Whole Leaf**- standard method for succulents



PROPAGATION TECHNIQUES

• Whole leaf plus stalk

Whole Leaf plus Stalk
Standard method for Sempervivum, Sempervivum, small-leaved Peperomias and some Begonias.



• Part leaf

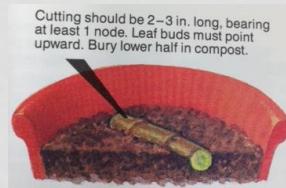
Part Leaf
Standard method for Begonia, Begonia, Sansevieria, Sansevieria and Streptocarpus and Streptocarpus.





PROPAGATION TECHNIQUES

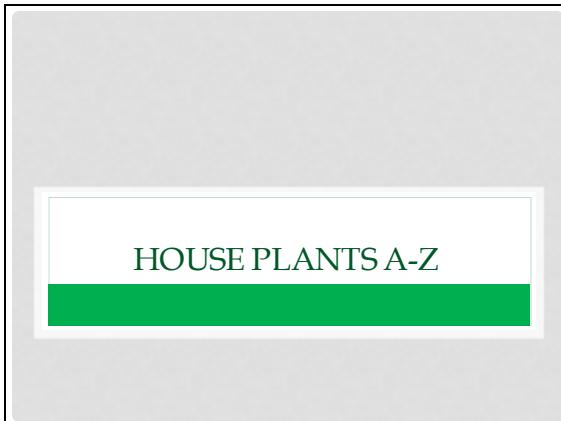
- **Cane Cuttings-** for thick, erect stems.
- Stem is cut into several pieces and inserted into media horizontally.



CLASSIFICATION OF HOUSE PLANTS

- **Foliage house plants-** varieties which live permanently indoors. The foliage remains alive all year round.
- **Flowering house plants-** varieties which live permanently indoors. After flowering, the foliage remains alive
- **Flowering pot plants-** temporary floral display
- **Cacti-** family of succulent plants with woolly tufts (areoles) on thickened stems. Live permanently indoors and can be made to flower.

HOUSE PLANTS A-Z



AGLONEMA: CHINESE EVERGREEN

- **Temperature:** warm in summer, 60°F in winter
- **Light:** semi-shade or bright light
- **Water:** sparingly in winter, thoroughly in summer
- **Humidity:** moist air necessary. Mist leaves regularly
- **Repot:** every 3 years
- **Propagation:** pot up basal shoots with a few leaves and roots attached



ANTHURIUM: FLAMINGO FLOWER

- **Temperature:** warm in summer, 60°F in winter
- **Light:** bright in winter, protect from summer sun
- **Water:** keep moist at all times
- **Humidity:** mist leaves frequently
- **Repot:** every 1-2 years
- **Propagation:** divide plant at repotting time



ARAUCARIA: NORFOLK ISLAND PINE

- **Temperature:** warm in summer, keep cool in winter
- **Light:** bright light or semi shade, protect from summer sun
- **Water:** water regularly in spring and summer
- **Humidity:** mist leaves frequently
- **Repot:** in spring every 3-4 years
- **Propagation:** difficult, best to buy plants



ASPARAGUS FERN

- **Temperature:** warm in summer, 50°F minimum at night. Constant high temps harmful
- **Light:** adaptable, keep away from direct sunlight
- **Water:** water sparingly in winter
- **Humidity:** mist leaves occasionally
- **Repot:** in spring every year
- **Propagation:** divide plant at any time



AZALEA

- **Temperature:** keep cool 50-60°F
- **Light:** bright light, protect from summer sun
- **Water:** keep moist at all times using soft water
- **Humidity:** mist daily during flow ering
- **Care After Flowering:** place in shady spot in garden once frost is past bring in at autumn



FLOWERING BEGONIA

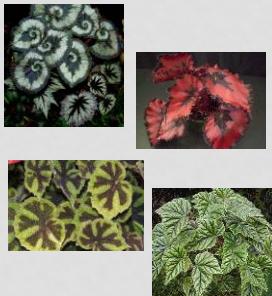
- **Temperature:** average warmth avoid temps over 70°F
- **Light:** bright spot away from direct sunlight
- **Water:** do not keep soil constantly soggy
- **Humidity:** mist air around plant

- Tuberous types- bloom in summer and autumn. Plant tubers in spring.
- Lorraine types-w inter flowering. Need pinched to keep bushy.
- Elatior types- flower year round



FOLIAGE BEGONIAS

- **Temperature:** warm in summer, 60°F in winter
- **Light:** bright in winter, protect from summer sun, turn pots occasionally
- **Water:** allow surface to dry before watering
- **Humidity:** mist surrounding air but never wet leaves
- **Repot:** in spring. Leaves of pot-bound plants lose colour
- **Propagation:** leaf cuttings root easily. Can be divided at repotting.



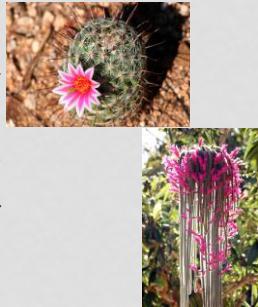
BROMELIADS

- **Temperature:** 70°F to flow er
- **Light:** bright light
- **Water:** let soil dry out before watering. Keep 'vase' filled
- **Humidity:** mist leaves in summer, occasionally use diluted liquid fertilizer.
- **Repot:** rarely
- **Propagation:** offsets appear at base of plant
- Air plants are a bromeliad



CACTI: DESERT TYPES

- **Temperature:** warm in summer, 50-55°F in winter
- **Light:** sunniest spot available
- **Water:** water after soil dries out completely
- **Humidity:** do not mist, requires fresh air
- **Repot:** only when essential, into a slightly larger pot
- **Propagation:** cuttings or offsets. Allow to dry for a few days before inserting into compost.
- Flowering stimulated when plant is slightly pot-bound



CALADIUM

- **Temperature:** warm in summer, 70°F w/ henever possible
- **Light:** w/ ell lit, but aw ay from direct sun
- **Water:** water freely during growing season
- **Humidity:** mist leaves frequently, especially in spring
- **After Care:** foliage dies down in autumn. Stop w/ aeting, keep tubers at about 60°F in pots or peat. Replant tubers in spring.



CHLOROPHYTUM: SPIDER PLANT

- **Temperature:** warm in summer, 45°F min in winter
- **Light:** well lit away from direct sun
- **Water:** liberally spring-summer, sparingly in winter
- **Humidity:** mist leaves occasionally
- **Repot:** if necessary in spring
- **Propagation:** peg down plantlets in soil, cut stem w hen rooted



CITRUS

- **Temperature:** warm in summer, 50°F min in w inter
- **Light:** sunniest spot available
- **Water:** moderately all year round
- **Humidity:** mist leaves occasionally
- **Repot:** in spring if necessary
- **Propagation:** stem cuttings in spring. Use a rooting hormone and provide bottom heat.
- Pollinate flowers by dabbing w ith cottonwool



CROTON

- **Temperature:** warm in summer, 60°F min in w inter
- **Light:** good light necessary, an east or w est facingw indowsill is ideal
- **Water:** liberally in spring and summer, sparingly inw inter
- **Humidity:** mist leaves daily
- **Repot:** in spring if necessary
- **Propagation:** take stem cuttings in spring. Use rooting hormone and bottom heat



COFFEA

- **Temperature:** warm in summer, 50°F min in winter
- **Light:** bright in winter, protect from summer sun
- **Water:** keep moist at all times
- **Humidity:** mist leaves occasionally
- **Repot:** in spring every 2 years
- **Propagation:** stem cuttings in summer. Plants can be raised from unroasted coffee beans.



CYCLAMEN

- **Temperature:** 50-60°F is ideal
- **Light:** bright light away from direct sun
- **Water:** keep moist at all times using immersion method
- **Humidity:** mist air around plant
- **Care After Flowering:** reduce watering and stop feeding. Put in cool spot and keep dry until mid summer. Repot using fresh soil.
- **Propagation:** sow in late summer



DIEFFENBACHIA: DUMB CANE

- **Temperature:** warm in summer, 60°F in winter
- **Light:** partial shade in summer, bright light in winter
- **Water:** frequently in spring and summer
- **Humidity:** mist frequently
- **Repot:** in spring every year
- **Propagation:** tip cutting, rooting hormone and bottom heat. Cane cuttings, daughter plants



DRACENA

- **Temperature:** warm in summer, 55°F min in winter
- **Light:** light shade
- **Water:** keep moist
- **Humidity:** mist leaves regularly
- **Repot:** in spring every 2 years
- **Propagation:** tip cutting, use rooting hormone, and bottom heat. Air layering, cane cuttings.



EPIPREMNUM: POTHOOS, DEVIL'S IVY

- **Temperature:** warm in summer, 50°F min in winter
- **Light:** well lit
- **Water:** allow to become semi dry between watering
- **Humidity:** mist leaves frequently
- **Repot:** in spring when necessary
- **Propagation:** stem cuttings with rooting hormone



EPSICIA: LACE FLOWER

- **Temperature:** warm in summer, 55°F min in w inter
- **Light:** bright in winter, protect from summer sun
- **Water:** keep soil moist during growing season. Use rainwater or distilled water.
- **Humidity:** mist leaves frequently
- **Repot:** in spring.
- **Propagation:** lay runners in spring or summer



FERNS

- **Temperature:** best temperature range is 60-70°F
- **Light:** good indirect light
- **Water:** moist but not soggy
- **Humidity:** mist leaves regularly
- **Repot:** in spring when roots fill pot
- **Propagation:** division, runners, spores



FICUS: RUBBER PLANT, CREEPING FIG, FIDDLE LEAF FIG

- **Temperature:** warm in summer, 55°F min in w inter
- **Light:** bright spot for tree types, partially shaded for others
- **Water:** use tepid w ater as necessary
- **Humidity:** mist leaves occasionally, essential for trailing types
- **Repot:** in spring every 2 years as necessary
- **Propagation:** stem cuttings in spring. Use a rooting hormone and provide bottom heat.



FUCHSIA

- **Temperature:** warm in summer, 50-60°F in winter
- **Light:** bright light away from direct sun
- **Water:** keep moist in warm months
- **Humidity:** mist leaves occasionally during growing season
- **Repot:** in spring every year
- **Propagation:** stem cuttings in spring or summer. Use rooting hormone



FUN PLANTS

- Plants cost nothing to buy
- Avocado
- Carrot
- Pineapple
- Dates
- Citrus
- Coffee
- Pomegranate
- Sweet potato vine



HEDERA: ENGLISH IVEY

- **Temperature:** cool but frost free. Night temps above 60°F can lead to problems
- **Light:** bright conditions away from direct sun
- **Water:** never let soil dry out
- **Humidity:** mist leaves occasionally
- **Repot:** in spring every 2 years as necessary
- **Propagation:** use trimmings as stem cuttings



HEPTAPLEURUM: PARASOL PLANT

- **Temperature:** warm in summer, 60°F min in winter
- **Light:** bright light not direct sun
- **Water:** liberally from spring to autumn. Sparingly in winter.
- **Humidity:** mist leaves frequently
- **Repot:** in spring every year
- **Propagation:** stem cuttings in spring



HIBISCUS

- **Temperature:** warm in summer, 55°F min in winter
- **Light:** sunniest spot available
- **Water:** keep moist
- **Humidity:** mist leaves occasionally
- **Repot:** in spring every year
- **Propagation:** stem cuttings in late spring. Use a rooting hormone and provide bottom heat.



HOYA: WAX PLANT

- **Temperature:** warm in summer, keep cool, 50°F in winter
- **Light:** bright light
- **Water:** liberally in warm months
- **Humidity:** mist leaves regularly but not when in bloom
- **Repot:** in spring if necessary
- **Propagation:** stem cuttings using mature shoots in spring



KALANCHOE

- **Temperature:** warm in summer, 50°F min in winter
- **Light:** east or west window in summer, south window in winter
- **Water:** thoroughly, let surface dry between watering
- **Humidity:** misting not necessary
- **Repot:** every year after spring rest period
- **Propagation:** similar to succulents



MONSTERA: SWISS CHEESE PLANT

- **Temperature:** warm in summer, 50°F min in winter
- **Light:** light shade
- **Water:** allow to become semi dry between watering
- **Humidity:** mist leaves occasionally
- **Repot:** in spring every 2 years
- **Propagation:** stem cuttings just below aerial root in summer.



ORCHID

- **Temperature:** types can vary. General rule is 70F in summer 60F in winter. Drop of 10F at night is important.
- **Light:** 10-15 hrs of good light a day
- **Water:** let surface dry between watering.
- **Humidity:** mist leaves occasionally
- **Repot:** only when growth suffers
- **Propagation:** divide plants at repotting time



PALMS

- **Temperature:** warm in summer, 50°F min in winter
- **Light:** light shade
- **Water:** good drainage is a must, keeps slightly moist
- **Humidity:** mist leaves occasionally
- **Repot:** only after plant is thoroughly root bound
- **Propagation:** difficult 80°F is required



PEPPEROMIA

- **Temperature:** warm in summer, 50°F min in winter
- **Light:** semi shady. Thrive in fluorescent light
- **Water:** allow to become semi dry between watering. Use tepid water after.
- **Humidity:** mist leaves occasionally in summer only
- **Repot:** avoid unless necessary
- **Propagation:** stem cuttings root easily on all varieties



PHILODENDRON

- **Temperature:** warm in summer, 50°F min in winter
- **Light:** light shade no direct sunlight
- **Water:** thoroughly and regularly
- **Humidity:** keep air moist year round
- **Repot:** in spring every 2-3 years
- **Propagation:** stem cuttings
- Philodendron vs. Pothos
 - Pothos: leaf sheath against stem of previous leaf
 - Philodendron: leaf sheath against main vine



POISONOUS TO PETS: ASPCA

- Alocasia
- Aloe
- Amaryllis
- Cala lily
- Arrow head vine
- Asparagus fern
- Azalea
- Begonia
- Bird of paradise
- Ivy
- Cardboard palm dieffenbachia
- Aglonema
- Dumbcane
- Philodendron
- Cyclamen
- Pothos
- Dracena
- Fig
- Anthurium
- Jade plant
- Kalanchoe

SAINTPAULIA: AFRICAN VIOLET

- **Temperature:** warm in summer, 60°F min in winter. Avoid cold draughts and sudden changes in temperature.
- **Light:** bright light, 14 hrs for blooming year-round
- **Water:** keep moist using tepid water. Don't water foliage
- **Humidity:** high humidity essential
- **Repot:** if necessary in spring
- **Propagation:** leaf cuttings



SANSEVIERIA: SNAKE PLANT/MOTHER-IN-LAW'S TONGUE

- **Temperature:** warm in summer, 50°F min in winter
- **Light:** bright light preferred but will grow in shade
- **Water:** allow to become semi dry between watering. In winter every 1-2 months
- **Humidity:** misting not necessary
- **Repot:** when growth cracks pot
- **Propagation:** offsets, dividing, leaf cuttings (green varieties only)



SPATHIPHYLLUM: PEACE LILY

- **Temperature:** warm in summer, 50°F min in winter
- **Light:** light shade
- **Water:** keep moist
- **Humidity:** mist leaves frequently
- **Repot:** repot every year
- **Propagation:** divide plants at repotting time



SUCCULENTS

- **Temperature:** warm in summer, 50-55°F in winter
- **Light:** sunniest spot available
- **Water:** generous watering in summer, once a month in winter. Use tepid water
- **Humidity:** do not mist, requires fresh air
- **Repot:** only when essential into a slightly larger pot. Use a shallow pot rather than a deep one
- **Propagation:** cuttings or offsets. Allow to dry for a few days before inserting into compost. Germination temperature 70-80°F
- Typically plants used for dish gardens



QUESTIONS?

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