

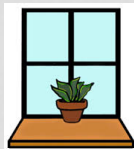
HOUSE PLANTS 101

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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



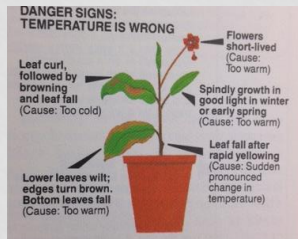
BUYING A HOUSE PLANT

- 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



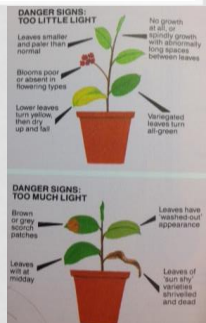
PLANT CARE: TEMPERATURE

- 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)



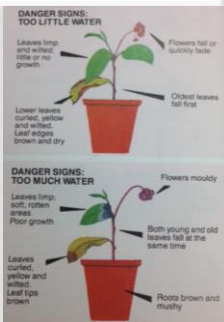
PLANT CARE: LIGHTING

- 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-Shadow:** moderately lit area, 5-8ft to sunlit window
- Shadow:** poorly lit area, but bright enough to read a newspaper several hours of day



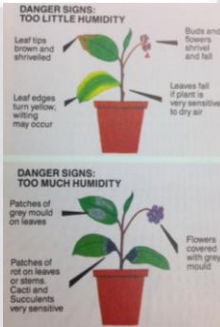
PLANT CARE: WATERING

- 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



Is the plant pot bound?

NO

Return pot to its home.

YES

Is the pot less than 10in across?

NO

Top dress

YES

Do I want the plant to grow bigger?

NO

Repot after root pruning

YES

Repot

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



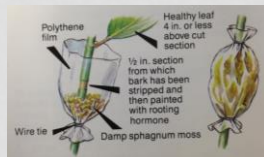
PROPAGATION TECHNIQUES

- **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 not roots are present peg it down in moist soil
 - Sever plant let 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 incase of failures and for aesthetic reasons.

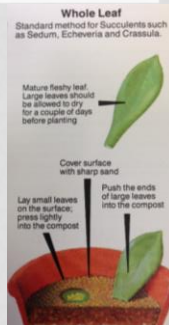
- **Stem Cuttings**

- 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 Sansevieria, Gloriosa, small-leaved Poinsettias and some Begonias.



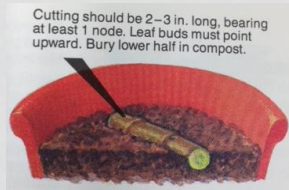
- **Part Leaf**

Part Leaf
Standard method for Begonia rex, Begonia maculosa, Siniperla and Siniperla.



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 in spring every 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



A. plumosus



A. meyeri



A. densiflorus sprengeri

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 flowering
- **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- winter 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 between 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 flower
- **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 herever possible
- **Light:** well lit, but away from direct sun
- **Water:** water freely during growing season
- **Humidity:** mist leaves frequently, especially in spring
- **After Care:** foliage dies down in autumn. Stop watering, 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 when rooted



CITRUS

- **Temperature:** warm in summer, 50°F min in winter
- **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 with cotton wool



CROTON

- **Temperature:** warm in summer, 60°F min in winter
- **Light:** good light necessary, an east or west facing window sill is ideal
- **Water:** liberally in spring and summer, sparingly in winter
- **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: POTHOS, 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 winter
- **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:** layer 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 winter
- **Light:** bright spot for tree types, partially shaded for others
- **Water:** use tepid water 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 IVY

- **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 70°F in summer 60°F in winter. Drop of 10°F 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
- **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
- Philodendron
- 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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