College of Agricultural, Consumer and Environmental Sciences

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Houseplants

John R. Garlisch 2021

The College of Agricultural, Consumer and Environmental Sciences is an engine for economic and community development in New Mexico, improving the lives of New Mexicans through academic, research, and Extension programs.

CONGRATULATIONS

- You just received a new house plant, what am I going to do next?
- How do I take care of it?
- What is it?
- What about pets and small kids? Are the plants poisonous?





Selecting Plants





- Choose healthy plants
- Look for insects, damage, disease, root, + pot bound
- Look for placement in pot (centered or even spaced)
- Gift baskets- multi plants



Selecting Plants buyer beware





- Spray painted
- Dyed-plants
- Hot glued attachments
- But they look soooo pretty... and will never grow that way!



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New to Home

- Quarantine Plants
- Check for insects, diseases, roots, etc...
- Flush out salts in soil
- Clean pot and plant
- Repot if necessary





Placement



- Bright indirect light best
- Avoid drafts, air-vents, direct heat sources, cold windows
- Avoid direct sunlight
- Avoid proximity to stove, fryer, coffee maker, water heater,



Potting Medium "Soil"

- STERILE potting medium
- NO Garden Soil
- NO Top Soil
- Check "Potting Soil"
- Use a Potting Mix
- Create your own sand, perlite, coco fibers or peat
- NEEDS GOOD DRAINAGE





Watering

- Water as needed
- Water thoroughly
- Allow to dry out in between
- Avoid treated or softened water with salts
- City water let sit for 24 hrs
- Rain water good
- Bottle water let sit open 24 hrs
- Water at room temperature



Fertilizing

- Only when actively growing
- Use based on size of plant
- Follow label directions
- Minimal or reduced during dormant or winter period



Salt Build-up



- White Cream crusty layer atop soil or along the edge of the pot
- Fertilizers
- Dissolved salts in Water
- Flush soil with steady stream of water at room temp
- Clean pots with mild vinegar solution



Cleaning

- Gentle Shower
- Gentle cloth with warm water (mild dish soap)
- Clean stems and underneath leaves
- Avoid feather duster
- Avoid plant shine
- Gentle paintbrush for sensitive plants



Re-potting

- Signs: Quick wilting, exposed roots, crackedpots, water runs out
- Next size up not a small plant in a huge pot
- Trim out dead roots, girdling roots
- Clean soil mix (don't reuse)
- Clean pot





Containers

- NEEDS GOOD DRAINAGE
- Many shapes, sizes, colors, materials
- Double potting method for those "cute deco" with no drainage





Disease vs Cultural issues



- Disease Triangle Susceptible Plant, Pathogen, favorable condition
- Insects
- Plant migration
- Cultural Issues –
 Temperature, lighting,
 watering, air-vents,
 fertilizers, pollutants, root
 bound, humans, pets



SYMPTOMS

- Wilting: over water, under water, rootbound, excess salts + fertilizers, cold, insects
- Yellow leaves: nutrient, over water, insect, soil or water pH, salts, normal aging
- Sudden leaf drop: sudden change in temperature (furnace or AC vents) or light
- Finely speckled leaves: spider mites, dust, overhead water on leaves, water mist



SYMPTOMS

- Brown tips + margins:
 heat damage, dry air,
 cold damage, chemical
 burn, excess salts,
 flouride, insects
- Small, pale, spindly: lack of light, nutrient, pot bound
- Bronze-red leaves

 (abnormal): cold
 damage, phosphorus or
 potassium deficient
- White bleached leaves: sun burn, nutrient deficient, household chemicals + sprays



SYMPTOMS

- Leaf spots: fungus, bacterial, insects, animal, water on leaf, sun burn, kitchen grease, aerosols, cleaning solutions
- Plant distortions: household chemicals, fertilizers, insecticides, herbicides, contaminated soil
- White atop soil: excess salts, soil-borne fungus
- Scab on leaves and stems: excess water, excess salts, scab and scale insects



Common Insects

- Aphids
- Fungal Gnats
- Mealybugs
- Mites
- Scale
- Springtails
- Thrips
- Whiteflies



Houseplant Insect Control: Iowa State Extension http://www.extension.iastate.edu/Publications/PM1595.pdf



Common Pests

- If outdoors... all insects, birds, rodents, machines, people, pets, etc...
- Indoor pets
- People and kids playing



Control

- Be Observant
- Good Sanitation
- Heavy Infestations quarantine, remove, destroy
- Chemical control sparingly inside





Pets and Plants

- Normally most cats and dogs will not eat your house plants.
 Curious may sniff, play etc...
- If plants ingested, seek help from a vet immediately
- Symptoms vomiting, diarrhea, loss appetite
- All plants may have some toxicity levels to pets. Some plants more harmful than others
- https://www.aspca.org /pet-care/animalpoison-control/toxicand-non-toxic-plants



Propagation

- Leaf Cuttings
- Layering
- Stem cuttings
- Dividing
- Plantlets
- Offsets





Credits and Resources

- Search "Houseplant care" + 'Extension.edu'
- "Orchid care" + extension.edu
- Publications and Videos links change often



Thank You

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