



Houseplants for Everyone

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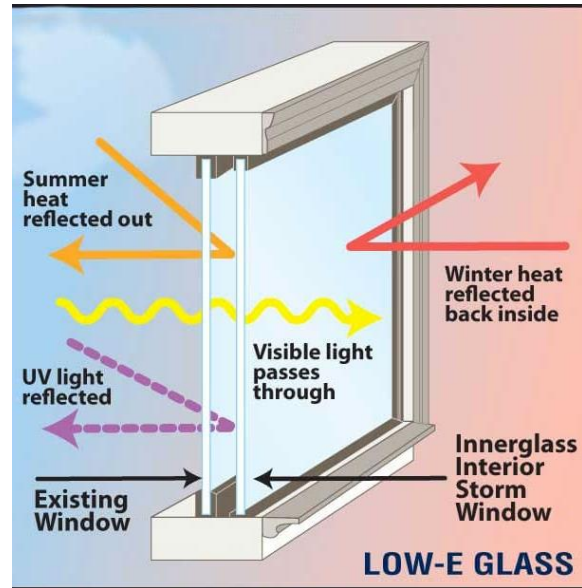
Following our webinar on
January 9...

- How do energy efficient windows affect plant growth?
- What is the term that best describes our love of plants?

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Energy efficient windows (Low E glass)

- Up to 90% percent of light from the sun will be blocked from entering the home through these windows
- Low E prevents UV light from entering homes, which plants don't use
- These windows keep homes cooler in the summer, but warmer in the winter, because they block UV from going in either direction



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Wavelength (nm)		Effect on Plant Growth
UV (ultraviolet)	280	Significantly reduces quantum yield and rate of photosynthesis.
	315~400	Promotes pigmentation, thickens plant leaves, and may be used to prevent harmful insects.
Visible Spectrum	440~470	Chlorophyll absorption peaks at 439nm and 469nm. The blue spectrum is the most efficiently absorbed spectrum, promoting mainly vegetative growth.
	510	Quantum absorption in the green spectrum. Little absorption in the yellow spectrum.
	610	No chlorophyll benefit. Efficiently absorbed by algae phycoerythrin and phycocyanin receptors.
	640~660	Chlorophyll absorption peaks at 642nm and 667nm. 660nm is the most vital wavelength for flowering. Speeds up seed germination and flower/bed onset.
	740	Emerson Enhancement Effect - quantum yield of red light and far red light, when shone simultaneously on a plant, increases the rate of photosynthesis.
Infrared	1000~1400	No plant activity detected at this wavelength. Heat generated.

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Bottom line with Low E glass

- They are just fine for indoor plants!
- They may actually increase the growth of plants sensitive to UV light, like African violets
- And better for us, too



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Biophilia

- *Noun*: a love of life and the living world; the affinity of human beings for other life forms
- ORIGIN OF BIOPHILIA: 1960–65; New Latin; extended by Edward O. Wilson in *Biophilia* (1984) to mean “the rich, natural pleasure that comes from being surrounded by living organisms.”
- Humans love plants and it makes us feel good to coexist with them

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Houseplants for all!

- Today we'll cover:
 - Tried and true favorites
 - Some of my loves
 - Those not as common



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Houseplants for horses?!

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Awesome Araceae

- A large plant family of herbs, vines, shrubs, and epiphytes
- 'Silver Queen' Aglaonema
- Pothos
- Philodendron
- **Dumb cane**
- Peace lily

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Pothos (*Epipremnum aureum*)

Also called: devil's ivy, golden pothos, pothos vine

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Pothos



Philodendron

Pothos
(*Epipremnum aureum*)

- Commonly confused with philodendron

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Pothos

- Glossy, heart-shaped leaves that naturally vine



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Pothos

- Incredibly easy to grow and a great plant for beginners
- Allow media to dry slightly between waterings
- Many cultivars
- Low to medium light levels



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Heart-leaf philodendron (*Philodendron scandens* 'Oxycardium')

- The world's easiest houseplant?
- Vining, dark-green, heart-shaped leaves
- Prefer lower light levels; bright light can burn leaves
- Genus translates to "fond of trees"

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Heart-leaf philodendron

- Keep temperatures above 50 degrees
- Tolerant of neglect
- Allow media to dry slightly between waterings
- If you prune the vines, put them in water to root!



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Split-leaf philodendron (*Monstera deliciosa*)

- “Swiss cheese plant”
- Closely related to philodendrons, but a different genus
- As the leaves mature, they form the cuts and holes; new leaves are entire
- Needs higher light levels for leaves to develop cut-leaf patterns

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'Albo-variegata

Split-leaf philodendron

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Peace lily (*Spathiphyllum floribundum*)

- A very reliable flowering indoor plant...and will bloom in low light
- Can become large, up to four feet tall and wide
- Leaves rise directly from the soil



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Peace lily

- Needs regular moisture—she will tell you...but forgive you just as quickly
- Leaves will need to be dusted
 - Wipe down with a damp cloth
 - Hose them down
 - Avoid leaf shine



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Peace lily cultivars

- 'Sensation': largest of all cultivated peace lilies, 6'
- 'Flower Power': tall, strong flowers above the foliage
- 'Supreme': large blooms (7")
- 'Wallisii': compact and petite for small spaces

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Meet the Moraceae

- The figs
- Important both agronomically and for indoor plant cultivation



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Weeping fig (*Ficus benjamina*)

- Thin, glossy green leaves
- Often the backbone of interiorscapes; can reach heights of over 80 feet!
- Prefers medium to high light
- Does not tolerate drought stress
- Easy-ish to grow...but will take some trial and error

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Weeping fig

- Absolutely *detests* being moved, drafts, inconsistent watering, and air pollutants
 - Results in leaf drop
- Prone to scale and mealybugs



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Fiddle leaf fig (*Ficus lyrata*)

- Thick, dull green fiddle-shaped leaves
- Leaves up to 15" long and 10" wide
- Absolutely necessary to keep the leaves dusted
- Can get very tall! Important to make sure you have adequate space in the home...or do some extensive pruning
- Only replot this plant with the roots are busting out of the previous container

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Fiddle leaf fig

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Note!

- All *Ficus* have milky white sap that could be a skin and eye irritant
- Sap from some *Ficus* species is used to make rubber
 - *F. elastica*—also a great houseplant!



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The Lovely Liliaceas

- A huge plant family and mostly herbaceous
- Economically important (onions, garlic, leeks), but mostly known for its ornamental plants (tulips and lilies)
- Houseplants include:
 - Cast iron plant
 - Aloe
 - **Spider plant**



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Cast iron plant
(*Aspidistra elatior*)

- My mom's #1 favorite plant
- It's pretty much indestructible
- Thick, tough, leathery leaves, up to three feet long
- Can be used as a focal point or in mass plantings
- Adores part to full shade—bright light will cause the leaves to yellow and burn

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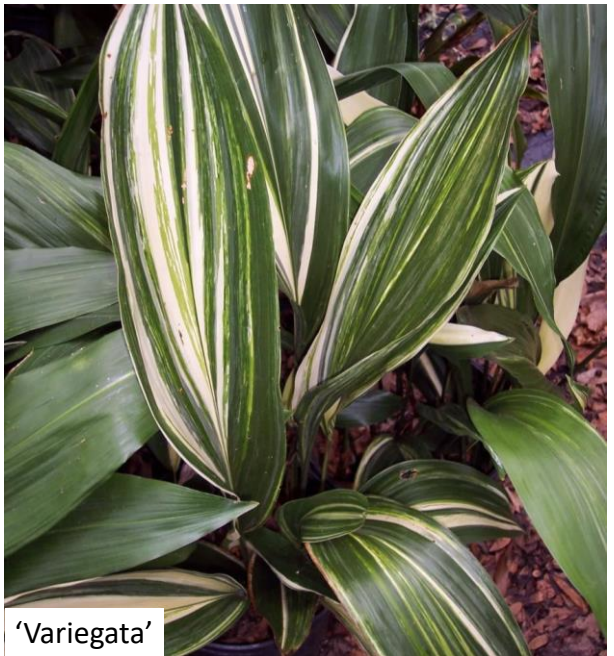
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Cast iron plant

- Do not overwater! Prefers some drought
- The best approach is to pretty much ignore this plant—just water it occasionally



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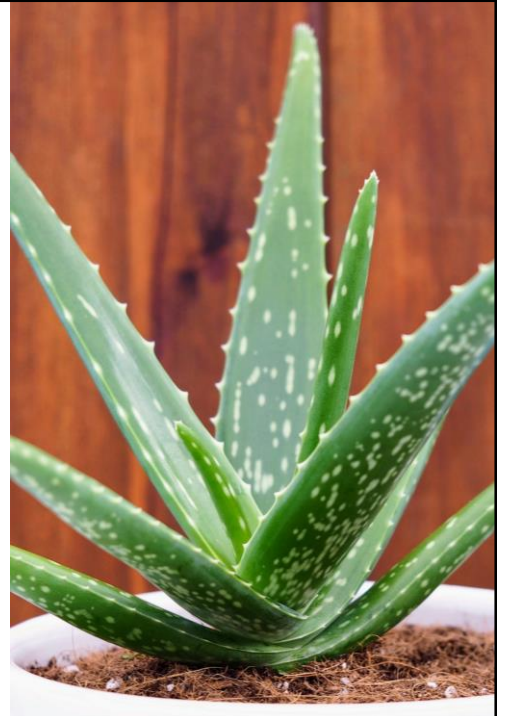


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Aloe

(*Aloe barbadensis* or *A. vera*)

- Beautiful succulent plant
- Thick, fleshy sword-shaped leaves up to 7-9" long
- Soft spines on the outer leaf margin
- Plant can reach heights of 24" tall
- Aloe is an Arabic word meaning "lather with water"
- Used a lot in beauty products and to treat minor burns



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Aloe

- Easy to grow, but needs high light levels (not necessarily direct light)
- If light levels are too low, the plant will droop and turn pale
- Very drought tolerant—overwatering can be a problem

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Using aloe

- Grows in a rosette
- Remove oldest leaves close to the base, which will scab over

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Aloe can be confused with Haworthia
(Zebra cactus)

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Spider plants, briefly (*Chlorophytum comosum*)

- Great for containers
- Very easy to grow, and prefer partial shade
- “Babies” form mostly when plants are pot-bound
- Plants are usually variegated

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‘Variegatum’

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Amazing Agavaceaes

- Usually succulent plants with fibrous leaves
- Economically important for medicine, fiber, and beverages
- Houseplants include:
 - Snake plant
 - **Ponytail palm**
 - Corn plant

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Snake plant (*Sansevieria trifasciata*)

- Another indestructible option
- “If all else fails, grow *Sansevieria*” (Dr. Peg McMahon, Ohio State)
- Long, stiff, leathery leaves with variegation patterns
- Leaves are up to three feet tall
- Can tolerate low light and dry soils
- The genus is derived from **Raimondo de Sango**, Prince of Sansevero, a faithful patron of horticulture in the 1700s

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Snake plant

- The plant is more likely to suffer from overwatering, rather than underwatering
- Tolerates low humidity
- A perfect Colorado plant?

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Corn plant

(*Dracaena fragrans* 'Massangeana')

- Looks like corn
- Can reach heights of 15 feet
- Higher light will result in better leaf variegation (yellow/green)
- This is the mostly widely grown and most popular *Dracaena* in the world

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Corn plant

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Other outstanding indoor plants

- Dwarf umbrella plant
- Jade
- **Lipstick plant**
- Rope hoya



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Dwarf umbrella plant (*Schefflera arboricola*)

- Multiple stems and a shrub-like appearance
- Leaves have 7-11 leaflets
- This plant will not grow if it's below 60 degrees F, so it needs a warm spot in the home
- Very tropical look



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Dwarf umbrella plant

- It cannot be water stressed; will drop lower leaves
- Medium to bright light levels
- If in the right spot, it can reach heights of 15 feet
- Branches are very pliable when young and can be braided or twisted

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Schefflera arboricola
'Variegata'

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Jade (*Crassula ovata*)

- Glossy, thick, fleshy oval leaves
- Leaves become tipped in red when exposed to high light levels
- Usually a cute little plant when you first buy it, but it can reach heights of 10 feet!
- Succulent



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Jade

- Needs high light levels and prefers warmer temperatures
- Careful with watering; it's going to be a careful balance
- If plant wilts, it retains a droopy appearance
- Flowers are small, pink and happen with short days and cooler temperatures

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'Gollum'

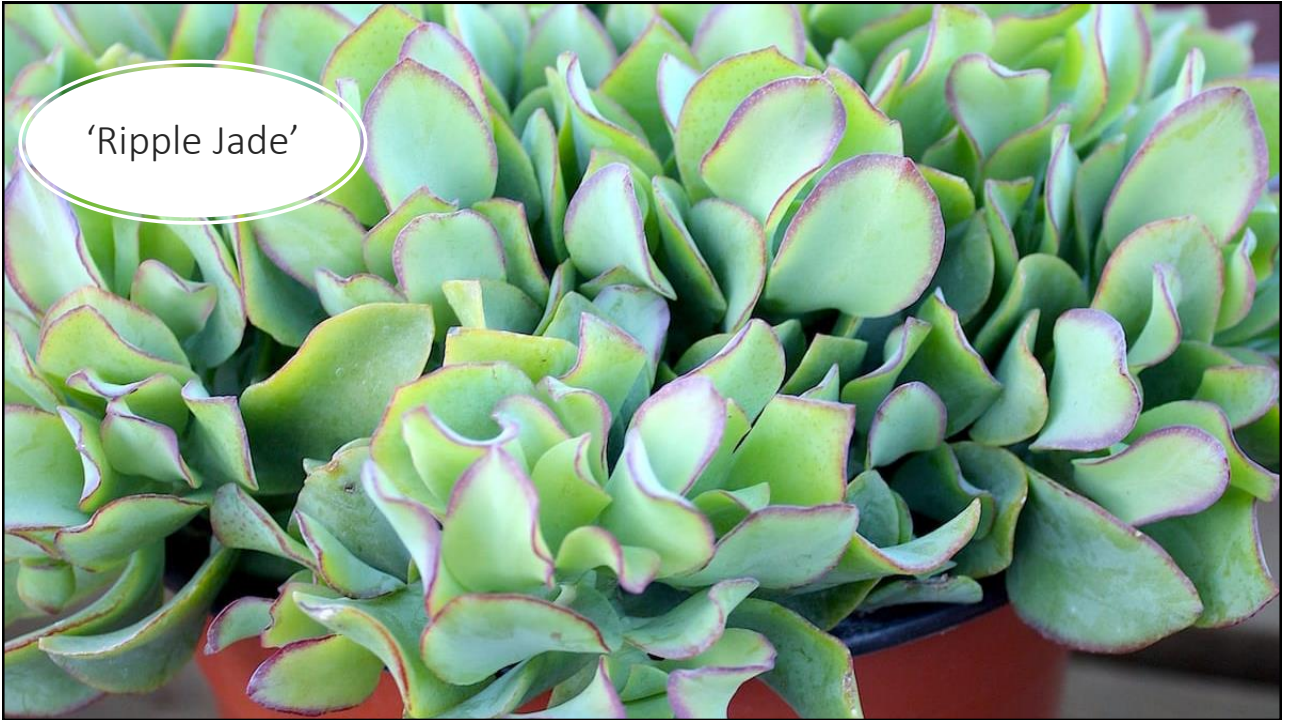


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'Hobbit'

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Lipstick plant
(*Aeschynanthus radicans*)

- Trailing, vine-like, with fleshy ovate leaves
- Flowers emerge from leaf axils and are scarlet in color, resembling tubes of lipstick
- The plant will naturally trail and cascade



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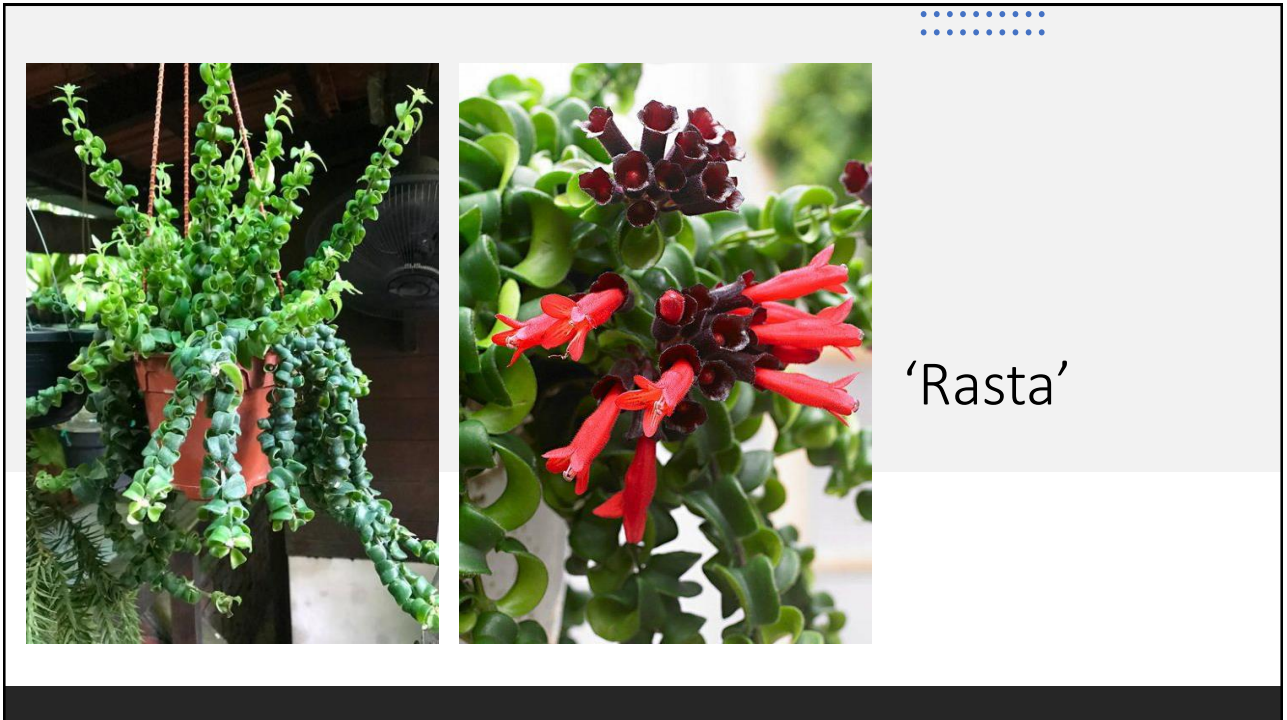
Lipstick plant

- Very reliable flowering plant
- Needs higher humidity levels
- Do not allow plant to become water stressed!
- Cold water on the foliage can cause leaf discoloration

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'Rasta'

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Hindu rope hoyo
(*Hoya carnosa* 'Compacta')

- My favorite plant!
- A classic houseplant
- Can live to be very old
- Curly, thick green leaves that cascade down
- Very easy to grow; water and let the soil dry out. Repeat.

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Hindu rope hoyo

- The flowers are incredible!
- Very fragrant at night
- Convex umbels 2-3" wide with up to 20 star-shaped flowers



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Hoya flower sap

- Yes, sometimes the flowers do ooze “sap” that can be sticky (but is often more watery)
- The sap forms to attract pollinators in nature
- The sap usually doesn’t fall, unless the plant is bumped or disturbed
- If problematic, then when the plant flowers, place a plate or tray under the flowers to catch drips

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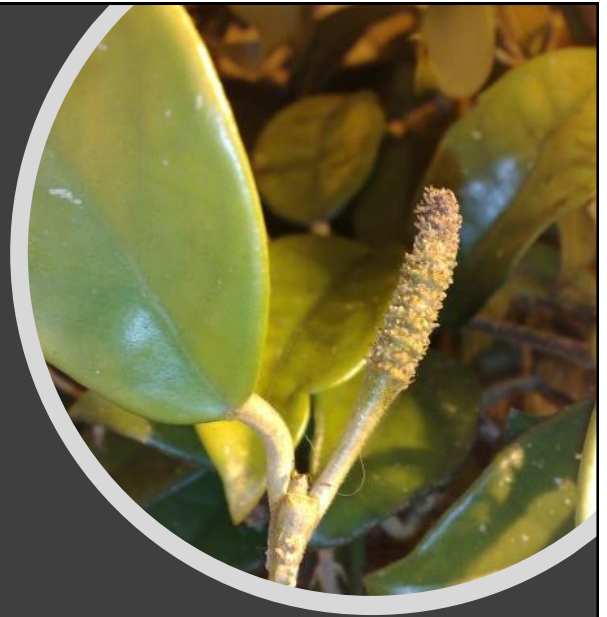
Getting hoyas to bloom

- Hoyas need bright, indirect light to encourage blooms
 - This means bright light, but the light should not be too intense to damage the foliage (move the plant away from the light source)
- Maintain humidity levels of 40-60%
- Do not repot the plant...hoyas really like being potbound
- Some hoyas will not bloom until they are older (3-5+ years)
- During the winter, water hoyas only sparingly
- Blooms are most common in spring and summer
- Use diluted fertilizer in spring, summer, and fall only
- **NOTE: There are non-blooming hoyas!**

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Hindu rope hoya

- Never cut off a flowering “spur”
- The new blooms will form on these with the “spurs” growing longer and longer with each bloom



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'Variegata'

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Too many other plants to
discuss!

- Holiday plants (poinsettia, holiday cactus, amaryllis)
- Orchids
- Bromeliads
- Succulents and cacti
- Hundreds of other worthy indoor plants

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To wrap it up...

- You do have natural talent to grow indoor plants!
- Brush up on basic diagnostic skills to help our customers
- Come up with your own list of 3-5 easy plants to grow to recommend to others
- Watch your watering!