







About Orchids and Orchid Growing

Facts on Orchids

- Over 25,000+ species (everywhere except the north & south poles) – largest family of flowering plants. Exceed 150,000+ registered hybrids.
- *Cypripedium reginae* – Minnesota State Flower, lady slipper. About 45 species are found in the state of Minnesota. All are perennial, terrestrial growers. They are temperate growers that are somewhat difficult to grow and it is illegal to remove them from their habitat.

General Types of Orchids (easier to difficult left to right, general or typical conditions for hobby plants):

Conditions	Phalaenopsis moth	Paphiopedilum slippers	Cattleya corsage	Dendrobium Hawaii, lei	Cymbidium corsage	Botanicals
Appearance						
Growth Habit	Monopodial, up	Sympodial, out	Sympodial, out	Sympodial, out	Sympodial, out	Varies
Temp Range	Best 85F / 65+ F	80F / 60F	80F / 55-60F	90F / 65F	75F / 50F	Varies, 80F / 60F
Light	Lower 2,000 FC	Low 1,500 FC	High, 2-3,000 FC	High, 3,000 F	Full Summer Sun	Bright, 2,000 FC
Water & RH	Always moist	Slight drying	Dry bt'n watering's	Wet when growing/dry winter	Wet outdoors, dryer winter	Varies, water 2-3 times/week
Potting	Wetter bark or New Zealand Sphagnum Plastic pots	Small to med wetter bark Plastic pot	Larger bark, perlite, good drainage, Plastic or clay	Medium size bark, loves to stay wet when growing	Coarser bark, deep pot for root growth repot infrequently	Mounted on cork/wood, small to medium bark
Peculiarities	<ul style="list-style-type: none"> - Night temp in fall to 65F couple of weeks induce blooming - Smaller species & hybrids produce keiki's on stems - Cut back stem at 3rd node to rebloom if tip dries - Can repot almost any time - Medium feeders (fertilizer) - Individual flowers last 1-3 months 	<ul style="list-style-type: none"> - Usually bloom once per year (seasonal) - repot when new growth appears but almost anytime, use lasting mix - Flowers last 2-6 weeks 	<ul style="list-style-type: none"> - Repot with new growth - Heavy feeders - Try not to wet new growths until they harden - Good ventilation - Some bloom in specific seasons as they do in nature as with species in their background - Flowers last 2-3 weeks 	<ul style="list-style-type: none"> - Water & feed EXTENSIVELY when growing (summer) - Seek to 'terminate' canes - Dryer fall/winter rest induces blooming - Can rebloom from old canes - Flowers last 3-4 weeks up to 3 months in succession 	<ul style="list-style-type: none"> - Beautiful, but need outdoors in summer and keep cold in winter - If temps too high, buds drop - Could bring into cold room or cold basement under lights - Flowers last 4-6 weeks if kept cool 	<ul style="list-style-type: none"> - Need to understand conditions and potting preferences - can be very rewarding and have many great miniatures to try - Usually, higher humidity demanding - Water purity more a factor

General guidance on Growing and reblooming your orchid:

Acquiring	Caring	Troubles	Enjoying
<ul style="list-style-type: none"> - Buy the best, unblemished, insect free, strong plant you can find. - See that the leaves are firm not limp - Read up on the basics for your plant type in websites and blogs (American Orchid Society grow sheets, or specialized websites like www.orchidspecies.com) - Adapt the plant slowly (1 to 2 week steps) up to the strongest light it can take and the new growing area - Keep apart from other plants for a month or two to enjoy blooms and make sure it does not have any issues or pests. - Most common pests are scales, mealybugs, and spider mites - DON'T lose that name tag and if possible, have a register record of your plants (names etc.) 	<ul style="list-style-type: none"> - When watering water thoroughly and drain. No 'softened' water - Provide a balanced fertilizer (use less % Nitrogen to "<u>no urea</u>" Nitrogen) - Mostly 'Nitrate' Nitrogen better - Repotting suggestions ("when in doubtREPOT") when plant starts to grow if possible - When to repot is important (before or at growth stage, wrong time can kill - i.e., Cattleyas) - Never use pot/mount larger than needs to be - Buy quality mix – decomposes slower, lasts longer, keeps roots alive - Soak and drain media (bark etc.) before using, let sit in drainer for a day or so before using so it's wet but not soggy. - Soak plant to soften roots before repotting if possible - Sterilize and use clean cutting instruments (viruses can spread) - Clean plant & roots from old mix, trim off dead roots & spikes - Can use (non-dissolving) peanuts to fill bottom 25% 1/3 of azalea pots, break peanut size for smaller pots - Plastic Pots for Phalaenopsis and Paphiopedilums - If Phal is already in New Zealand Sphagnum (NZS), it is probably best to repot in NZS and let dry a bit between watering's - Make sure plant is firmly potted (care that over pressing mix in place will destroy roots) - Write repotting date or month and year on tag - Today LED lamps that come in 5000K white light are perfect for shelves, care to not burn leaves! 	<ul style="list-style-type: none"> - Mist early to evaporate, avoid rot, and have good air circulation. - Avoid cold water (unless growing cold growers) - Ideal room temp for water is about 75F - All orchids benefit from a 15 to 20-degree daily temp drop (sometimes Cattleyas don't bloom if they don't have this drop and under 12 hours of light for a month in the winter) - Weak growth usually due to too low light levels - Careful with emerging growth, they are prone to rot is water falls on them AND can break off - No blooms? Seasonal species, might need a temp lowering, or put in a dryer 'rest' cycle for a couple of months - Careful with the furnace, & signs of dehydration/wrinkles - Predict decomposing media and repot (whether in pots or mounted) - Go see orchids in nurseries, friends' houses or window grow areas, and ask, ask, ask! 	<ul style="list-style-type: none"> ❑ Visit your Arboretum Greenhouses & Como Park Conservatory ❑ Join the Orchid Society of Minnesota (OSM) or the Northland Orchid Society (NOS) ❑ Local Shows: State Fair – usually Friday and Saturday of Labor Day weekend - Hort. Building ❑ Local Shows: Winter Carnival Show – see Orchid Soc. of MN site ❑ AOS/American Orchid Society – Largest affiliation, 'Orchids' magazine. www.AOS.org ❑ AOS has great free info & grow sheets ❑ Orchid Digest Corporation – West coast organization, quarterly publication. ❑ Local Businesses – Orchids Limited (Plymouth, MN), have other local sellers ❑ Local Businesses – Bachman's sells plants and supplies, Trader Joes also sell plants ❑ Visit gardens, friends, and Botanic Gardens around the US and the world!

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