



CLUB NEWS



Nicholas Rust

June 3 Meeting

by Janis Croft

Welcome and Thanks.

Tom Sullivan was unable to attend tonight's meeting so Laura Kissee graciously stepped up to handle the meeting which was called to order at 6:50 pm with 50 attendees. She then thanked Julie, Mary, Kym, Christine, Ann and Charlie for the treats and reminded all to remember to "Drop a Dollar" if you enjoyed them.

She invited all to bring their plants to the next repotting clinic this Saturday at the SE Branch Library.

Club Business. – Rachel welcomed our guests and new members Amybeth Berner, Carol Bond, Tina Casazza and Melinda Dixon. If you know of anyone in need of a cheering up or a get-well card, let Maria know by emailing her at info@staugorchidsociety.org.

Birthdays This Month - Linda asked for those with June birthdays to raise their hands for their free raffle ticket.

Supplies - Potting supplies and fertilizer were available on the back table. To preorder, email info@staugorchidsociety.org.

Virtual Show Table - Courtney will conduct the Virtual Show Table starting at 7 pm on Wednesday, June 11. An email invitation will be sent with link and details.

Show Table Voting. Christine reminded all to vote for Members Choice during the break. Winners are announced at the end of the presentation.

Library – Howard brought in the AOS book on Orchid Pests & Diseases. If you would like a book or light meter from the Library list on the website, send Howard a request to info@staugorchidsociety.org and he will bring the item(s) to the next meeting.



Show Table. Courtney started the Show Table by asking all who grow *Laelia* (now *Cattleya*) *purpurata* to send in photos of

theirs in bloom as the July Virtual Show Table will feature a discussion about their use in hybridizing. Then with Sue and Dwayne's helping hands, Courtney started with two *purpuratas*, one an indigo lip and the other a pink lip. A selfing of *C. leopoldii* var. *coerulea* 'Kathleen' displayed *coerulea* coloration on the lip and some on the column. Steve Hawkins brought in *C. maxima* in full bloom. Courtney felt this plant was from low elevation because of the shorter height and many flowers. *C. leopoldii* 'San Bar Giant' had bronze spotted coloration with a deep purple lip. It was pointed out that they don't like to be repotted and Courtney showed how the grower had turned the pot sideways in a bigger container instead of repotting. There was an old hybrid between the miniature *Sophranitis* (*Cattleya*) *coccinea* and *Epi. radicans*. Dwayne brought in a large mount with four varieties of *Cattleyas* growing on it. The beautiful *Zygonisia* hybrid is easy to grow and blooms with a high flower count. Sue brought in a *Neofinetia* (*Vanda*) *falcata*, which had grown out of its basket and had numerous flowers and spikes. *Ascofinetia* (*Vanda*) *Twinkle* was well grown since the purple spots on the leaves showed it was getting enough light. Remember to bring your blooming orchids to the Show Table next meeting



SAOS Program. Sue introduced our guest speaker, Nicholas Rust, of Rusty Exotics to talk about Beautiful, Unique and Weird Orchids. He is a young, up and coming hybridizer in the orchid community who studied biochemistry and molecular biology in college where he started experimenting with hybridizing in his dorm room. He specializes in terrestrial orchids especially *Habenarias*.

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Upcoming Orchid Events

June

- 6-8 Central Florida Orchid Society Show
Florida National Armory, Orlando
- 7 SAOS Repotting Clinic, 10 am til noon
Southeast Branch Library
6670 US-1 N, 32086
- 14 FL North-Central AOS Judging, 10 am
Clermont Garden Center, 849 West Ave
- 10 JOS Meeting, Picnic on 1st in Lieu of Mtg
- 11 SAOS Virtual Show Table, 7:00 pm
Courtney Zooms into Cyberspace
Invitation Will be Sent by Email

July

- 1 SAOS Meeting, 6:30 pm
Epicatts
Jim Roberts, Florida SunCoast Orchids
- 5 SAOS Repotting Clinic, 10 am til noon
Southeast Branch Library
6670 US-1 N, 32086
- 8 JOS Meeting, Topic TBA, 6:30 pm
Thanh Nguyen, Springwater Orchids
- 9 SAOS Virtual Show Table, 7:00 pm
Courtney Zooms into Cyberspace
An Invitation Will be Sent by Email
- 13 Florida North-Central AOS Judging, 1 pm
Clermont Judging Ctr, 849 West Ave.

August

- 2 SAOS Repotting Clinic, 10 am til noon
Southeast Branch Library
6670 US-1 N, 32086
- 5 SAOS Meeting, 6:30 pm
Mounting Workshop
SAOS Members
- 9 Florida North-Central AOS Judging, 1 pm
Clermont Judging Ctr, 849 West Ave.
- 12 JOS Meeting, Topic TBA, 6:30 pm
Speaker TBA
- 14 SAOS Virtual Show Table, 7:00 pm
Courtney Zooms into Cyberspace
An Invitation Will be Sent by Email

September

- 2 SAOS Meeting, 6:30 pm
Summer Blooming Phal Breeding
Phillip Hamilton, Bredren Orchids
- 6 SAOS Repotting Clinic, 10 am til noon
Southeast Branch Library
6670 US-1 N, 32086
- 9 JOS Meeting, Topic TBA
Speaker TBA
- 10 SAOS Virtual Show Table, 7:00 pm
Courtney Zooms into Cyberspace
An Invitation Will be Sent by Email
- 13 Florida North-Central AOS Judging, 10 am
Clermont Judging Ctr, 849 West Ave.
- 13-14 Fall JOS Orchid Festival
Mandarin Garden Club, Jax 32223

St. Augustine Orchid Society Organization

President	Tom Sullivan tomjs91@gmail.com
Vice President Communications	Janis Croft croftie1984@gmail.com
Vice President Events	Dianne Batchelder ladydi9907@aol.com
Vice President Membership	Linda Stewart bindstew@hotmail.com
Vice President Programs	Sue Bottom sbottom15@hotmail.com
Treasurer	Cathy Mayo allatoonalady@gmail.com
Directors	Judie Armstrong, 2025 judiearmstrong@yahoo.com Rachel Biello, 2025 rachelbiello28@gmail.com Kay Payne, 2025 paynekay113@gmail.com
Exhibit Committee Chair	Janis Croft croftie1984@gmail.com
Librarian	Howard Cushnir hscushnir@gmail.com
Newsletter Editors Webmasters	Sue and Terry Bottom sbottom15@gmail.com bottom406@gmail.com



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Nicholas started by describing what makes an orchid an orchid. He pointed out the column, lip and the bilateral symmetry. All orchids have small, dust-like seeds and warned us not to get fooled by someone selling orchid seeds that are large enough to see clearly. The orchid family, Orchidaceae, is potentially the largest family of flowering plants in the world with nearly 800 genera, over 28,000 species, and over 100,000 hybrids. He then showed a chart listing over 90 species with an additional note of 700 he couldn't fit on the slide. For examples of "the beautiful", he started with Phalaenopsis and described the culture they prefer. He did this with every example and mostly he described light needs, watering preferences and suggested medium for either light or heavy waterers. He then showed flowers from the Cattleya, Oncidium, Vanda, and Dendrobium Alliances and described the culture for each that he finds works best for him.

Next Nicholas moved on the "the unique" with unusual slides of the Cypripedium Alliance including Paphiopedilums and Phragmipediums. His next slide showed his favorites, Habenaria Alliance. The first slide of Habenaria rhodocheila and its hybrids showed seven color varieties. He then moved on to the Stanhopea relatives showing how the flowers grow hanging from the bottom of the plant. He described the "bucket" orchid, Coryanthes elegantium, whose flower looks like a bucket and it collects the nectar, which attracts a specific fly who gets stuck in the bottom of the bucket. The fly's only way out is by the pollinia

so it gets covered in pollen and flies on to the next plant and proceeds to pollinate it unknowingly. The Catasetum Alliance followed with slides of both the female and male flowers from the same plant.

Then, Nicholas introduced "the weird" by showing Bulbophyllum examples, of which there are over 600 species. He described their often-discussed putrid fragrance and showed an example of Bulb. beccarii which he grew just so he could smell how bad it was. He did say that when you cross some bulbophyllums, you oftentimes breed out the bad smell. Then he showed the orchids that got his hobby started, Porpax, commonly referred to as the baby bird orchids because of their small, hairy shape. He ended with Micro-miniature orchids, e.g. Lepanthes telipogoniflora, which when viewed up close have amazing detail. Nicholas then ended by stating his two most important cultural practices. First, use good medium such as Kiwi or Orchiata bark and long fiber New Zealand Sphagnum moss. Second, provide lots of airflow from either outdoor winds or using ceiling fan or oscillating fans. He invited all to email him with any questions at rustyexotics@gmail.com



Meeting Conclusion. Christine announced that the Members Choice was a tie between Steve Hawkins C. maxima and Laura's NoID Encyclia. The evening concluded with the Raffle table. Thanks to the helpful hands that stayed to help clean and store the tables, chairs and room.



CLUB NEWS



July 1 Meeting

Epicatts

Jim Roberts, Florida SunCoast Orchids



Jim will talk to us about Epicatts, those hybrids between Encyclias and Cattleyas that produce charming sprays of colorful flowers on tallish stems. Jim strives to grow and sell the best quality orchid plants, building a lasting reputation in the industry as one of the very best.

Jim has been growing orchids over 25 years in climates ranging from cold Minnesota to hot SW Florida. In 2001, he moved to Florida with a small collection of plants and the dream of operating an orchid nursery became a reality. In 2019, Jim received the Norito Hasegawa Award for Excellence in Hybridizing from the American Orchid Society.

When: Tuesday, July 1, 6:30 til 9 pm

Where: Memorial Lutheran Church

3375 US 1 South, St. Aug 32086

American Orchid Society Corner

Webinars

June 3, 8:30 pm, Everyone Invited

Greenhouse Chat - Ron McHatton

June 10, 8:30 pm, AOS Members Only

Growing Indoors - David Vandenbroek

Orchids Magazine this Month

Why Will It Not Bloom, Part 2 – Ron McHatton

My Favorite Orchid – Brenda Tucker

Stanhopea – Olivier Turina

Culture Notes

June in St. Augustine

Spring's mild days are gone. The late spring-early summer growing conditions induce vigorous vegetative activity. Orchids repotted earlier should be showing abundant root development and new growth. With the sun higher and more intense for more hours each day, higher day and night temperatures, excellent air circulation and a fresh growing medium, orchids will consume more food for high quality flowers next season. If you switched to nighttime watering during spring, it is time to resume morning watering so the leaves will be dry by evening.



INSPIRATION



Blc. Durigan 'Draco'

© Terry Botton



CULTIVATION



Orchid Questions & Answers

by Sue Bottom,
sbottom15@hotmail.com

Q1. I have treated this *Brassia jipjiapensis* for fungus with Daconil and Serenade. It has at least 10 new leads and nice healthy roots. Your thoughts?



A1. I would guess that is bacterial rather than fungal. I would think spraying with hydrogen peroxide or one of the copper biocides would prevent further spread. You may think about what conditions were conducive to the bacterial growth and consider what options you have to prevent it from recurring, usually this would involve more air movement and less leaf wetness.

Q2. I just cut these leaves off a plant. The confusing thing to me is that all this puffy brown damage is on the top side of the leaf. The bottom part of the leaf is bright green. I didn't cut off all the leaves that have the symptom. Do you think I should cut out more? The leaves are all turgid and not mushy. What do you think?



A2. The puffiness makes me think about edema and the grayish stippling on the leaves makes me think about mites, although I don't see any mites on the leaves and the leaf undersides look clean. I wondered if the damage occurred when the plant was wintering in an enclosed space and possibly got too hot and the puffiness is from heat damage.

Q3. This *Oncostele* has some mostly older leaves with slits in them. There is also a weird looking bulb. Is this a disease problem?



A3. I don't think that's a disease problem, looks like mechanical damage. I asked if there are any cats in the house. Jan says yes, but the cat is not allowed in the greenhouse. In any case, it looks like some critter with sharp nails or teeth is the culprit.





Getting Orchids Ready for Your Vacation

by Dr. Courtney Hackney

Leaving on vacation always involves some extra work in the greenhouse, even if it just a short vacation. Even under-lights growers must prepare their orchids and growing area. The good news is that orchids handle being left

alone just fine, with just a few exceptions. My rule of thumb is that leaving more than 7-8 days requires someone to check in or to water some of the more sensitive orchids in the collection, but leaving less than a week is OK with just a few precautions. In nature, orchids frequently go through dry periods, so a little drying is not generally a concern for most orchids that are well established. However, orchids with fine roots that lack pseudobulbs or small seedlings need some special treatment before you leave.

The evening before leaving soak all orchids with just water, no fertilizer. Early the next morning soak all the collection thoroughly again with just water. I then spray all orchids, including side walls and floor of the greenhouse with a general fungicide. The objective is to allow orchids to be well hydrated when you leave and to eliminate bacterial and fungal spores that may cause problems should the weather be moist and humid. Orchids that are vulnerable to drying are placed in very shady locations or under benches. This group includes those mounted. As long as



Relaxing under a palm is the preferred vacation mode, rather than worrying about your orchids

there is good air circulation there are rarely rot problems. This time, I had some seedlings just out of flask. They were placed under a bench and the entire flat was set into a shallow pan and $\frac{1}{4}$ " of rainwater was added to the pan to provide humidity to the new seedlings and also to allow some water to wick up into the medium. When I returned after eight days, the water was gone, but the medium was still damp and the seedlings starting to put out new roots.

Newly repotted orchids with pseudobulbs will often respond to a dry period with a flush of roots. Traditionally, orchid nurseries would confine newly repotted orchids to a separate bench or greenhouse and withhold water until new roots appeared. This provided good roots for the future as well as limited rots that often develop when damaged roots and rhizomes are allowed to stay moist after repotting.

For windowsill growers, leaving your orchids for an extended period of time leads to the same problems, although rots are seldom an issue. If you are growing under lights or the heat/air conditioner is running while you are gone, drying can be far worse than in the greenhouse. Some growers who use high intensity lights in basements or dark rooms simply turn off lights. While that may limit the drying problem the lack of light can confuse your orchids who rely on day length to stimulate growth and flowering. A few 60 w bulbs on a timer can solve this problem. It is also recommended that the thermostat be changed to limit the time heat or air conditioning will be delivered.

The biggest potential problem is a power failure when it is hot and the greenhouse is closed in summer. A similar problem with freezing can occur if there is a power failure in winter. This is a problem that can lead to the loss of an entire collection. Every greenhouse should have a backup system that works automatically when you are away.

Note: Dr. Courtney Hackney wrote a monthly column of his orchid growing tips for about 20 years; we are reprinting some you might have missed, this one from June 2013.



Back Up Plan of Last Resort - Your Neighbor's Kid



CULTIVATION

Leafless Orchids

by Betty L. Schmidt, courtesy of AOS

The orchid family has always been known for diversity and deviation from the conventional form. Not only do the plants come from all parts of the world - from tundra to equator, mountains to seaside, rock outcroppings to lush rain forest, but they show some of the most sophisticated evolutionary adaptations.

"Leafless?" you ask. Yes! Not the result of overwatering, cold, darkness or other cultural malpractice, but of evolutionary forces to produce the most efficient means of perpetuating plant life using the most scanty resources.

One of the most unusual adaptations to the environment is that of leafless orchids. This has happened in about a dozen epiphytic genera of both Old and New World, mostly in subtribe Sarcanthinae (the Phalaenopsis group).

Normally plants produce their energy for growth during daylight hours by photosynthesis. In this process water is absorbed through the vascular system, and carbon dioxide enters the leaf cell in gaseous form through the stomata by simple diffusion from the atmosphere, since the rate of diffusion is always greater from an area of higher concentration toward one of lower concentration. After carbon dioxide passes through the stomata and into the air spaces of the spongy mesophyll, it is used in photosynthesis.

The process of photosynthesis can be summarized as: carbon dioxide (CO_2) + water (H_2O) + energy (light) = sugar (CH_2O)_n + oxygen (O_2). This equation is reversed at night when the plant does not photosynthesize, and the high-energy compounds or sugars are depleted through respiration. In daylight, photosynthesis and respiration occur simultaneously, but the rate of photosynthesis is as much as 30 times greater than the rate of respiration.

A remarkably successful variation of "normal" photosynthesis involves a temporal separation of the light reactions and dark reactions of photosynthesis. Plants showing this phenomenon are known to science as CAM plants (which stands for crassulacean acid metabolism). CAM plants are widespread, found in 18 plant families, including bromeliads such as *Tillandsia usneoides* (Spanish



Without a leaf in sight, Dendrophylax lindenii 'Glade Spirit', the Ghost Orchid, flowers quite well. This plant, which used to be called Polyradicion lindenii, was grown and photographed by Keith Davis. It was awarded an FCC and CCM by the AOS.



Chiloschista parishii 'Evergreen' grows well under cattleya conditions. Grown by Sue Bottom and photographed by Terry Bottom

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Moss), cacti and succulents. In these plants the guard cells of the stomata open at night (instead of during the day as other plants), thereby preventing excess water loss in dry habitats; the carbon dioxide that flows through the stomates is then converted into organic acids, which are stored in the cells until daylight when photosynthesis can take place.

The leafless orchids, examples of CAM plants par excellence, are special not only for the niche in evolution they hold but for their special charm. Any plant that can live on next to nothing in my greenhouse has a special place in my heart. While not being found in profusion anywhere, they can be found in a surprisingly large number of private collections, especially in the collections of those of us who like to grow the "weird and strange." The flowers are charming, usually not fragrant, and the plants are diminutive in size. They are almost always grown mounted.

These wonders should be mounted on small pieces of cork bark, tree fern or driftwood; some will form plantlets and spread. These can be removed carefully from the mother plant and slatted on their own. They can be mounted directly on the slab without any pad of moss. A few pieces of monofilament will hold the plant in place until it adheres to the slab surface. Then it can be removed. These plants cling tenaciously to whatever surface is used. Since prying the fleshy roots from the slab can be fatal to the plant if not done carefully, the least amount of disturbance is

recommended. Roots are best moved after a thorough soaking for at least 10 minutes to make them as pliable as possible. Then wiggle each root as carefully as you would remove a loose tooth.



Dendrophylax funalis, also called the Ghost Orchid, is native to Jamaica.
Beautifully grown and photographed by Suzanne Susko.

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Microcoelia exilis 'Gold Country' is an African native that produces multiple offshoots.
Grown by Sue Bottom and photographed by Terry Bottom.

Leafless orchids are well adapted to swing in the treetops. While we do not have to duplicate the swing from the rafters of the greenhouse, duplicating the sparse water and food supplies in their native habitat will prevent a lot of deaths. When they are unhappy they will sulk like most other orchids and not bloom. We have found that if they bloom every other year, in most cases we are being too kind to them. Fertilizer and light watering coupled with diffuse, bright light and good air movement makes blooming more consistent. Species of *Campylocentrum*, *Dendrophylax* and *Polyradicion* usually like more shade than others. If you grow *Ornithocephalus* (which are not leafless), these would make good companion plants. Species of *Chiloschista* grow happily with the cattleyas. These orchids have no resting period but grow very slowly all year.

Three genera I would recommend trying are, first, *Chiloschista*, native to Southeast Asia. These are

small, compact plants with half-inch, showy flowers on graceful inflorescences. Another genus is *Polyradicion*. *Polyradicion lindenii* (Ed. Note: now considered by Kew to be *Dendrophylax lindenii*), native to Florida, is a larger plant with large flowers that open successively, pure white in color. *Polyradicions* are stubborn and do not adapt to different cultural practices as easily as others, but they are worth the effort. Species of *Microcoelia* are not as easily found, but specimens of these African epiphytes are easily flowered and have many bell-shaped, white flowers on multiple inflorescences.

Taeniophyllum and *Microtatorchis* are very similar genera from New Guinea and are not widely grown. Each time I have tried they have lived from one to two years and gradually gone downhill. In nature they grow in dense foliage on small twigs. Some suggest that they need to grow on a live tree, but I think it's just a matter of producing the exact cultural conditions.

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These charming little plants cling tenaciously to life in the highest canopies of trees, eking out an existence with very little sustenance. They may even survive in our greenhouses if we provide them with tender, loving neglect.

This article appeared in the American Orchid Society Orchids magazine in October 1989 (Vol. 58:10, pp 978-980).



Chiloschista lunifera purchased from Tomas Bajza of the Tarzane group when he spoke to SAOS. Grown by Sue Bottom and photographed by Terry Bottom



Chiloschista shanica is a newly described species grown and photographed by Suzanne Susko



Taeniophyllum obtusum (syn. *pusillum*) has completely filled its mount. Grown and photographed by Suzanne Susko.



CULTIVATION

Summer Orchid Care

by James Rose

AH! The summertime blues. All the joys of spring, the active new growth and abundant blooms are tapering off, and, believe it or not, now is the time when growers will really be tested as this is the most difficult time for their plants. Summer is definitely the surest test of a grower's abilities.

Consider the possible reasons for failure. Temperature is the first thing we will be noticing over the next few months. Wow, is it hot. Most orchids come from intermediate mountain regions and they do not like it really hot. Who does? Only the very tropical orchids such as vandas, dendrobiums, phalaenopsis and species from the lowlands tolerate high temperatures. Others will appreciate some sort of relief.

It is easier to heat a growing area than it is to cool one. Cooling may be accomplished in various ways. In many areas, just moving your plants out of doors will suffice. Greenhouse growers will need some kind of artificial cooling methods, such as wet pads (swamp cooler). For those growing in the home, summer temperatures will not be a primary problem, but you will have your own worries. Read on.

Repotting should be held to a minimum; it should have been done in the spring. A recently potted plant takes time to establish a strong root system, and until then it cannot absorb sufficient water and nutrients immediately. Due to the longer days and higher light and temperatures, the rate of transpiration is at its peak. An unestablished plant will show definite signs of stress and become quite weak. With the exception of a few cattleyas that may initiate root growth, refrain from potting until autumn.

Humidity can be a factor in the summer. For those of you who move your plants out of doors in the Midwest and eastern United States, it is actually a beneficial move due to the increased humidity. Watch for the insects that seem to awaken with the breath of summer. No body recommends preventive spraying. Be observant and act quickly.

As the days get hotter and longer, you may need to apply a little more shade if you did not take care of that as spring closed out. This is in the form of greenhouse shading compound (paint) or shade cloth. If your plants are outside, do not expose them to full sun or the leaves may burn.

Certain fungal and bacterial diseases love the hot and humid months of summer. It is always best to have any problem diagnosed by your local agricultural department before you treat the plant(s). An informed grower is a good grower. You can find the number for your County



June marks the end of the repotting season for most orchids.

Cooperative Extension Service in the white pages of the telephone directory under the name of your county.

Strive to keep air moving around your plants. Moving them outdoors is an easy way to accomplish this. Greenhouses will need extra air exchange and ventilation.

Be careful about watering. It will be different for everybody depending on growing conditions, but do not allow your plants to go dry. They are going to be struggling and will need ample water. For most orchids, less fertilizer will be necessary once the new growths have matured.

So it is that, for the grower, this is the opposite of the winter season. Then, it seemed that nothing much was happening in terms of growth, and there were plenty of flowers. Summer is the flip side of that scenario. One must be sure that plants have all their needs provided during this stressful season: a balance between light, temperature, fertilizer, water and humidity is a must. Good luck. Nobody has said growing orchids is simple, but the rewards to be seen in good solid growth and spectacular blossoms certainly make the work worthwhile.

Excerpted from an article that appeared in the American Orchid Society Orchids magazine in July 1994 (Vol. 63:7, pp 804-805), reprinted with permission.



SHOW TABLE



Grower Deborah Fox
Lc. Time-Life



Grower Suzanne Susko
Ornithocephalus suarezii



Grower Courtney Hackney
Pot. King Tut 'Hackneau'



Grower Leasa Codner
C. dolosa var. alba



Grower Elen Fay
Bc. Island Charm 'OC'



Grower Deborah Fox
Blc. Malworth 'Orchidglade' FCC/AOS



Grower Sue Bottom
C. Mareeba Tiger



SHOW TABLE



Grower Suzanne Susko
Neof. falcata* var. *Shutennou



Grower Steve Dorsey
***Mps. Breathless* 'Florence'**



Grower Courtney Hackney
***Tolu. Kitty Crocker* 'Rose Giant'**



Grower Sue Bottom
Phal. Blue Ridge Quartet



Grower Suzanne Susko
Mps. Keiko Komoda



Grower Bob Schimmel
Ctism. Don Ricardo

