

Orchid Growing Tips from the MEOS Meetings

by Suzanne Hamilton, Secretary

September 2012 - David Sparks - Fighting Pests on Orchids

In commenting about the show table, our president, **David Sparks**, reminded everyone to watch for scale, mealy bugs, spider mites, snails and slugs when bringing in our orchid plants from the outdoors. He said it is good to swab the pests with rubbing alcohol and clean as many of them off the plants before you spray. If you spray the plants two or three times, you will get successive generations of pests. **Sevin** is a good spray to use. He also cautioned to pay careful attention to the growing medium and the plants' roots as that is a place where pests can hide. **Horticultural Oil** or **Neem Oil** are also good. The oil smothers the pests. David advised to be careful when cutting off any bad leaves from the plants. Don't cut off too many leaves and be sure to sterilize your cutting instrument between plants.

Another tip David mentioned is to not be afraid to order orchids from some of the **Hawaiian growers**. They generally provide large plants which are healthy and adapt well to our home environment. The Hawaiian growers want our business and take good care of you.

Bob Cleveland - Paphiopedilum Care:

Cultural information on Paphs is that they like to be repotted frequently (annually). A rule of thumb is the larger the pot, the larger the potting mix used. Flood the pot weekly with water for at least ten minutes to dissolve the salts that accumulate. Most Paphs prefer a warm climate. Add calcium to the potting mix because Paphs grow in limestone in the wild. Mealy bugs can be a problem.

April 2013 - Bob Cleveland's Greenhouse:

Bob Cleveland presented a slide show and recounted the details as well as the trials and tribulations of constructing a greenhouse on the back of his house. He built the greenhouse year before last from a western red cedar kit he purchased for approximately \$7-8 thousand dollars. The greenhouse is 12 x 14 with 8 mm twin wall polycarbonate glazing and rigid foam insulation. It faces south/southwest and is attached to the house. Since it is attached to the house, Bob had to pour a full foundation for the greenhouse. This cost another \$7-8 thousand dollars. Before he could begin construction, his town (South Portland) required him to get a survey of his lot.

During the presentation, we were treated to photos of the whole process from start to finish. The new greenhouse is really nice. Bob reported that he uses 50% shade cloth and has an automatic ventilator. For heat he uses a propane heater called the "hot dog." It is mounted

over the door. Last year it cost him approximately \$700 to heat the greenhouse. He uses some special bubble stuff on the ceiling that keeps the heat in and also shades the plants in the summer. This stuff is similar to the bubble wrap used in packing, but is really different stuff that can be purchased from greenhouse supply companies. The floor is made of sand and gravel and Bob just hoses it down to create more humidity in the greenhouse.

To water his plants, Bob likes to dunk them in a bucket of warm water each week. The advantage to that is you are personally looking at each plant every week. He has done this for years and has never had a problem with disease transmission from the dunking.

October 2013 - Holger Perner - Paphiopedilum Culture:

We learned about the different kinds of orchid media which are used in orchid cultivation. For many decades **Sanders Nursery** used a medium of osmunda and sphagnum. **Franz Lanze** in Germany used a bark and perlite mix to grow his Paphs and Phrags. We learned about leaders in orchid growing in Taiwan at the **Hung Sheng Orchid Farm**, and a man named "Bear." In Japan, they bought all of the best clones from Europe and the USA and now Japan has the best Paphs available. They use a medium of bark and granite mixed. Other growers prefer to use small bark with sand and lava gravel. They water the plants with silica salts, which ward off fungi. Mr. Perner has found that coconut husk chips retain a lot of salt from the water and, after time, the threshold is reached and the orchids' roots can actually be killed by the salt. Holger Perner favors a mix of bark, sponge rock, perlite, and charcoal for his Paphs.

Paphs in the wild like to grow in open shade, with direct sun only briefly. They can grow lithophytically, which means on rocks rather in soil or other support. When orchids grow on bare rocks, their root mass forms sort of a basket and debris from above gets trapped between the roots and the rock.

Growing temperature is important to Paphs. A drop in temperature at night is beneficial. A chart Mr. Perner showed us on one of the slides gave recommended daytime and night time temperature ranges as follows:

Cool Growing Paph Species

Summer	60 - 70° F	during the day
	57 - 64° F	at night

Winter	54 - 60° F	during the day
	40 - 50° F	at night

Intermediate Growing Paph Species

Summer	64 - 75° F	during the day
	59 - 68° F	at night
Winter	54 - 60° F	during the day
	40 - 50° F	at night

On propagation from seeds, Mr. Perner described the seeds as tiny and dustlike. They have a tiny embryo and no endosperm. The embryo is only a few dozen cells in a tiny paper bag like covering. They weigh only one to two micro grams (a millionth of a gram). They are only able to germinate on a fungus, which actually feeds the growing embryo with sugars produced in their juice. Mr. Perner indicated that GD medium is still used today to grow Paphs from seed.

Finally, Mr. Perner described the growing cycle and time frame for growing the Paphs from pollination of the flowers through the second repotting, and on to market, which takes a total of six to seven years.

Polination of the Flowers)	
Seeds Formed) plants)
Germination medium) are in) about five years
Second Medium) flasks)
Final Medium))
Community Pots))
Plants in Individual Pots)	about a year or two more
Second Repotting))
To Market))

November 2013 - Fred Clarke - Mini Cattleyas Breeding & Care:

Fred Clarke is from **Sunset Valley Orchids** in California. This is Fred’s first visit to Maine. The lecture tonight is entitled: “Today’s Mini and Compact Cattleyas” During the presentation, Fred sent a sign-up sheet around for his informative e-mailings. By being on the list, you will also be the first to learn of plants available for purchase from his greenhouses.

Fred told the group that the mini cattleyas have the greatest diversity in colors, shapes, etc. Their potential as a breeder is unlimited.

Orchid Breeding

For Orchid Breeding, the Species is the starting point, the raw material. The species orchids have known bloom size, and characteristics.

Sophranitis coccinea is a major species used in breeding. It is challenging to grow because it wants to be bright, yet wants to be cool. It has a red coloration, with wide, flat petals. These are dominant traits for breeding.

Cattleya walkeriana is a miniature growing plant with large flowers. It has a spade shaped lip and the petals have a midline which is high. According to Fred, it is a “happy looking flower” and has an exposed column.

Laelia pumila is a miniature orchid with dark purple color.

Cattleya luteola has a bright yellow flower with two red eyes, which are very dominant in breeding.

Laelia alaorii (pronounced uh-lor’-eye) is a miniature Cattleya. It is very tiny and grows in very tall trees. It is a frequent flowering plant with a flower which is a little starry shaped, but has a nice lip.

Cattleya intermedia is a very tough growing, tolerant plant, but not a real great looker. Fred Clarke feels it has a bow legged looking flower. This plant brings good vigor to the hybrids.

Cattleya intermedia v. aquinii is a mutation

Laelia brigeri is a rupicolous Laelia, which means it is rock-growing. It is used to growing in not very bright, cold, windy growing conditions. This tolerance to extreme environments can be a valuable trait in breeding.

Tetraploid plants are ones where you have doubled the chromosomes from the diploid (which is the normal form). Tetraploid forms have changed the game in breeding. They originally occurred accidentally. The extra chromosomes make their traits much stronger. *Secretary’s note: check out “A Brief Look at Polyploidy” on the AOS (American Orchid Society) website for more on this interesting topic.*

The Essential Primary Hybrids

These are formed by crossing two species to get the primary hybrid
(species x species = primary hybrid)

You start from there; it is the backbone to your breeding program

It establishes the breeding traits, provides predictable results, and hybrid vigor

To get a fragrant mini Cattleya orchid, you don't want the flower to be red, yellow or orange because flowers of those colors are pollinated by hummingbirds during the daytime. The hummingbirds are not attracted to scent. However, the light colored and white flowers are generally pollinated by moths at night, who are attracted to the plant by its fragrance. So, in breeding for fragrance, you would strive for a light colored or white flowered plant.

Compact Cattleyas

Compact Cattleyas are bred to be one-third the size of standard size Cattleyas, however they are also bred to have flowers which are almost full size. These plants (such as Potinara Little Toshie) have proportionately more flower for the size of the plant, which is very desirable.

Advanced Hybrids

These build on known traits
Develop size, color, and shape
Often have a species orchid as one of their parents
Offer a wide range of possibilities in breeding
Define plant habit
Are easy to flower

Fred believes that it costs you more to grow a bad plant than a good one. You still have to tend it, water it, fertilize it, repot it, etc. Therefore, he culls his plants often, throwing away four plants to get just one good one. He selects plants with the best genes. One thing he looks for in a good orchid is perfect bilateral symmetry, which happens to be a sign of beauty in people as well as plants.

Fred recommends having hybrid orchids in your collection to spice it up. A collection of only clones is pretty vanilla.

Fred Clarke encourages anyone interested in orchids to subscribe to [The Orchid Digest](#) magazine and also to become a member of the [American Orchid Society](#), which also publishes a beautiful magazine. Fred even subscribes to several orchid magazines in foreign languages. Reading about orchids and talking with people about orchids are very good ways to learn.

Mini Cattleya Culture

Watering – The secret to your success with orchids is good irrigation practices. These are key.

When to water? The plant does not tell you by wilting, so pick it up each day and feel the pot's weight until it feels out of balance to you. Learn the plant's weight. Look at the plant for

subtle changes. Clay pots make it harder to tell when a plant needs watering because of their weight. Water the plant just as it is drying out. It does not have big pseudobulbs to store water.

How much water? Orchids need air movement in the roots. They like to be watered fast and heavily. Fill the whole pot with water and let it drain out. When you do this, the water will be replaced with fresh air. If you dunk your plants, be cautious because this can transmit disease.

Leaching practices? The water in New England is really good. We don't have to worry about leaching. Some areas have water which leaves salts and other minerals in the potting mix, which needs to be leached out periodically.

Fertilizer – The best fertilizer in Maine is 13-3-15 or 15-5-15 because the water is good in Maine. Use ½ teaspoon of fertilizer to a gallon of water. If the tip of the plant's new growth is browning off, this indicates a lack of calcium. For municipal water, you should use a balanced fertilizer such as 15-15-15 or 20-20-20. A small amount of fertilizer all the time will give you better results than a larger amount once in a while.

Potting Media – Fred likes a well drained media. He uses a three to one mix of bark and perlite. For a smaller pot, he uses a finer mix and for a larger pot, a coarser mix. This keeps the air spaces in between the mix in proportion to the pot size. You can use sphagnum moss in clay pots. Also, Aliflor (a lightweight expanded clay aggregate) combined with an organic material can be used. He recommends you add a small amount (10 to 15%) of organic material to all types of potting mix.

Repotting – You should repot as new roots begin to show. Select a pot size allowing for only three years of new growth. Fred cautions not to overpot, by choosing a pot way larger than needed, because this does not work. Fred refers to it as the “kiss of death.” It is better to underpot the plant. Once the new roots begin to grow, be careful of the root tips when repotting. Carefully remove any dead roots that you find as well as the old medium from the plant, but don't worry about removing all of the old potting medium in the front of the plant (the direction in which the new roots are growing). Place the oldest part of the Cattleya against the edge of the pot, leaving room at the front (growing edge) of the plant for three years of new growth.

When adding the new potting mix to your pot, gradually add a little bit, then shake the pot to help settle it down around the roots. Then gently press the medium down around the plant, using the thumbs. Be sure to press only around the sides of the plant so you don't injure the new growing tips at the front of the plant.

Once you have repotted, be sure to always write a new tag and always mark the tag with the date. This date should not be the date you have repotted, but the date when it grew the new

roots. This will help you the next time you need to repot. Most species orchids only grow their roots one time per year. It is important to know when this happens for each plant.

Fred advises to never soak the roots when repotting in order to make them more pliable, as is sometimes advised by others. Fred recommends that you always work dry when repotting. Dry plant and dry medium. Then, once repotted, leave it dry for two to three days before resuming your watering schedule. This allows any damaged roots to heal over.

More Tips from Fred Clarke:

Misting does not have much benefit to a healthy plant which has been properly watered. 80% of your success with growing orchids comes from how you water.

Roots which form in a certain environment want to stay in that environment, so it is not a good idea to switch back and forth between bark and sphagnum, etc.

June through August is generally (almost always) the best time to repot your Cattleyas, but be on the lookout for the new roots to develop before repotting.

Fred uses the pour-through watering method, where you pour lots of water through the plant's medium and let it drain away. The submerging method, where you would dunk the whole pot in a tub of water will work, however it is a "communal bath" and can subject the plant to pests and diseases from previous plants which have been dunked in that water. If you choose this method, be sure to change the water frequently. This may be OK for someone with a small collection they are very familiar with, but Fred prefers the flow-through watering method for his plants.

January 2014 - Orchid Mounting Session:

Some orchids do way better on mounts than they do in pots. **Bob Cleveland** passed around a foot-long mount with Spanish Moss on it and lots of small orchids growing happily on the mount. Many materials can be used to mount orchids, including cork and many other things. Bob also passed around an antler he planted with orchids. **David Sparks** admitted that he has been known to plant orchids in a pig skull. Now there's a conversation piece!

For the mounting session, Bob brought in some native shag bark hickory, which is really nice to use for mounting orchids and gives a more rustic presentation. He also brought in some Cypress Bark, which never rots and makes a much neater looking mount than the hickory. In addition to that, we used New Zealand Sphagnum Moss, which you only need a small amount of, fishing line in 6 and 12 pound test weights, and an assortment of plants to mount.

Bob and Dave then demonstrated the basic mounting technique:

Pick a slab which you like, then place the orchid towards the bottom of the slab because it will grow up once it starts growing on the mount. Make sure you give it some room to grow. Wrap a very small amount of the moss around the roots, but don't overdo it. You want to encourage the roots to search for water and get out of the moss as they grow. Using too much moss will cause the roots to stay in the moss. Wrap the moss and the orchid in place snugly with the fishing line and secure the line in the back of the slab. Make sure you have a hook at the top of the mount to hang it. Don't forget the label, which can be tucked in the back underneath the fishing line, or you can make a small hole in it and thread the wire hanger through the label. A good place for mounted plants is hanging right over a sink where you will have lots of opportunities to water and/or mist it.

January 2014 - Tips from MEOS Members:

David Sparks told the group that his **mounted plants get watered every day** or at least a mist every day. That is how they grow in nature. Orchid roots like to get air, so growing them on mounts gives them the air the like. Orchids can often be grown on a mount for years and years-you don't have to keep repotting them so much. You don't have the medium breaking down on you because there is none, and the roots don't get confined by a pot that has become too small.

Mike Wagner said that **some orchids need a dry rest** in the late fall. He brings his orchids in just before the first frost and then does not water them until about December. If you water them too soon, they will produce a bunch of **keikis** (In [horticulture](#), a **keiki** (/ˈkeɪki:/ **KAY-kee**) is a plant produced [asexually](#) by an [orchid](#) plant, especially [Dendrobium](#), [Epidendrum](#) (*sensu lato*), and [Phalaenopsis](#) orchids. The baby plant is an exact [clone](#) of the mother plant, sometimes flowering while still attached to the mother. The word *keiki* is [Hawaiian](#) for "baby" or "child", literally "the little one".instead of flower spikes.)

Tips for Transporting Orchids in the Cold:

Put plastic over them and keep them covered. Many people use a styrofoam cooler or a Rubbermaid type tote to keep the cold air off of them. Cheap, thin plastic drop cloths work well too. Use sticks to prop the plastic up so as not to break the blooms. Be sure you don't leave your orchids in the car even if they are wrapped up. If you must leave them in the car, do so only for a very short few minutes and leave the motor running and heater on.

February 2014 - Bob Cleveland - Paphiopedilums:

Bob brought in a slide show featuring many slides of his own plants he has been collecting for many years. Some of the plants were ones that Bob had imported himself back in the day. Of course, you cannot do that now.

It was a very interesting slide show with many examples of beautiful and unusual Paphs. Some of the things we heard about were the warts that Paphs tend to have on the petals, with hairs sticking out like “hairy little moles,” ciliated petals are ones which have hairs. The warts and hairs are all part of the plant’s charm and do not signify any problems with the plant.

Bob also talked to us about how breeders are doing “line breeding” for certain characteristics in the flowers, as well as multi-floral Paphs., which require more light than the rest, complex hybrids. The Cochliopedilum group flowers over and over on the same stem until you can’t take it anymore. The Brachypedilum group have small, round flowers.

We also learned about how to grow Paphs. They require lower light than many orchids, but a bit more light than Phalaenopsis does. If they are planted in coconut husks, Bob recommends annual repotting. Also, for optimum results a day/night temperature difference is recommended.

February 2014 - Tips from MEOS Members:

Phalaenopsis with weak leaves means they are not getting enough water to the leaves. However, if the leaves are limp, it may be due to too much water.

Orchids which are mounted tend to grow much better than those in pots. They are a bit more work, but worth it.

Suzy Massey said that she has her small mounted plants living over her kitchen sink, hanging on bars. They do well there where it is easy to water frequently.

Orchids in the window: should it be an unobstructed windows or sheer curtains? They can get burned if they have not been receiving much light and you stick them in a very sunny window suddenly. Move them into a sunny location gradually as you would when moving plants outdoors in the springtime. Light requirements all depend on the plant and its preferred growing conditions in the wild. Always research where your plant comes from and what type of conditions prevail there. Window screens can cut light by up to 40%. Many of us remove them in the fall/winter months to let in more light.

Pat Martin reported that she is growing orchids under lights in her basement. She brought in an *Epilaeliocattleya* to show.

An advanced grower brought in a very nice plant, but it did not get a ribbon because the flowers were not all the way open yet.

It was noted that *Paphs.* with mottled leaves look good even when they are not in bloom. One on the show table had been owned for over eleven years and was in bloom with three flowers.

A way some growers keep their *Masdevallias* cool is to grow them in a clay pot and then place the clay pot inside of a plastic pot. You can then put moss on top.

June 2014 - Tips from MEOS Members:

THINGS WE TALKED ABOUT DURING THE SHOW TABLE:

- Mounted orchids will tend to dry out more in winter when it is dry in the house; in summer there is more humidity, so you may need to water them less. However, they are actively growing in summer and will need more water due to that. Growing mounted orchids is not harder, but it is more work to grow them that way due to the frequent watering required.
- Growing species orchids: to be successful, be sure to study, research and learn where they come from and what the growing conditions (weather, temperatures, humidity, rainfall, altitude, etc.) are in their native land. Try to duplicate those conditions.
- Sphagnum moss: if you grow with this medium, be sure to change it every year whether you think it needs to be changed or not.
- *Sobralia macrantha*: we were lucky enough to have a fine specimen of this orchid on the show table tonight. It is tall (3.5 feet), the plant looks somewhat like bamboo, has beautiful large purple flowers and needs lots of sun. When it blooms, the flowers only last for two days, so it is much more difficult to get it to be actually blooming on the day of a particular show. It is not often that these are awarded because of this. Thank you **David Sparks** for bringing it in.
- Tags: **Vicki Fisk** reported that she coats the tags with clear nail polish and it seems to help them to last.
- **Bob Cleveland** advises that as you repot, you should always make out a new tag because they get crispy with time.

October 2014 - Alan Koch - Tips for the Home Grower:

Alan Koch of Gold Country Orchids came from Sacramento, California, and spoke at our meeting tonight. The topic was “Growing Tips for the Home Grower.” The talk was really good and very informative. We all learned a lot and Alan’s slide show was wonderful to see. Alan also brought some nice plants for us to purchase. Among the things we learned:

Alan started learning about orchids in 1969 with three cymbidiums he received from his aunt. Orchids have kept his attention ever since.

Orchid plants can bloom themselves to death, unfortunately. If a plant has been blooming for a really long time, you can cut the spike and give it a rest.

Be willing to throw plants out if they are just not making it. Sometimes you just have to do it.

Water: Know the quality of your water and water the orchids thoroughly. Water is key-the most important thing to growing orchids. When the plant is dry and you water it, you need to water it three times. The first time the surface is being watered, the second time the media is being watered, the third time you are leaching out the salt buildup from the media. Orchids do not like salt buildup. Alan recommends letting the water run through the medium as this brings the air through. He does not favor watering by putting the orchids in the sink or by dipping in a bucket. If one plant is sick, they all catch it this way. Calcium in the water is a good thing. If you add acid to the water it will release the calcium. Use a ph test strip from the fish (aquarium) store to test for acid content of your water. A ph reading of 6.2 is the ideal acidity for orchids, but a range between 6 and 7 ph is fine. Using rain water is a good thing to do.

Feeding: Always use a more complete fertilizer. The more light a plant is getting per day, the more fertilizer it will need. This will maximize growth for better flowering. In winter months, back off on the fertilizer because the orchid is getting less light. Do not use a water softener. With Foliar Feeding the nutrients enter the leaves through macro pores (found in the stomata underneath the leaves). Cal Mag fertilizer has micro nutrition. A ph reading of 6.2 is the optimum for assimilating nutrients. Calcium is critical for flowering, but has to be added along with magnesium. When new growth on Cattleyas blackens off at the tips, it is not a disease, but a sign that there is a lack of calcium. Iron can be key, too. Some orchids grow directly in iron ore in the wild. Alternate between foliar feeding (feeding through the leaves) and drench feeding (when you pour the nutrients through the media). Fertilizer: 20-20-20+ (the + stands for enhanced nutrition). Hydroponic stores are a good source for fertilizer. Ask for a “total foliar food.” Seaweed extract is a good food for orchids. Always water well prior to using fertilizer. The plant will absorb all the fertilizer it can within 20-25 minutes. So, flush with plain water after about 25 minutes. Deep leaching can be accomplished by putting the orchid in the shower for 45 minutes using tepid water.

Growing Media:

1. Use the media that suits you.
2. Use a humidity tray if you have a wood stove.
3. Moss-only use New Zealand sphagnum moss. It is of the highest quality. Don't fill the pot with moss. Just collar it. As the roots grow down, they will pull the moss down with them while pulling the moss apart to make air spaces.
4. Use clear pots so roots can photosynthesize.
5. Black spotting in leaves means the media is going bad.
6. When to mount your orchids? When they have stomata in their roots (such as vandas).
7. Mounted plant: get a one liter bottle of coke and cut it 5 inches tall. Then put a hole $\frac{1}{4}$ inches up from the bottom so that a reservoir of water forms in the bottom. This becomes a mini greenhouse. Mount your orchids with panty hose to help the roots stick to the mount. The panty hose will rot away in about six months.
8. When to use a basket? When a plant needs to dry out for a period of time.
9. Repot when you have elongating root tips (the plant is in "total active growth"). If the green or bronze root tip is outgrowing the velamin (white part of the root), it is in active growth. If the opposite is true, it is going dormant.
10. Tall pots dry out faster than shorter pots. Any plant that stays wet in nature is salt sensitive. If you have no evaporation, you will have no salt build-up. A plant's physical structure can tell you how it grows.

Light Matters: If you give the plant too much light, it will need to use its energy to cool itself and it won't have that energy available for flowering. How a plant grows in the wild tells you how to grow it at home.

Air Movement: This is important.

Notes on Types of Orchids: Calcium is the trigger to flower Oncidiums. Most Bulbophyllums benefit from lower light and constant moisture. Dendrobium micro chip is a super plant. Paphs. love to be repotted and don't like sour mix. Phal. Lobii (from Viet Nam) likes constant moisture.

Disease Problems: You can use Hydrogen Peroxide (use 3% only) to kill fungus. It will not burn the leaves of thin leaf plants. Only use it when you actually have a problem so as not to kill the beneficials. Be sure to use a fresh bottle each time as it loses its strength once opened.

The bottom line is to watch your plants for changes and give them what they want and need.

(Note: per Alan Koch, when a plant has been in bloom for a really long time and you repot it, you will have to cut off the spike or you will stress the plant. Make sure you get enough water to the roots. Orchidata orchid growing medium is hard to keep moist when it is new, so be aware of this when watering.)

November 2014 - Jason Fischer - Japanese Orchids:

The Japanese have special pottery designed to hold Cymbidiums, which are also popular. There is a leafless Cymbidium (Cymbidium macrorhizon). Cymbidium goeringii is the most predominant Cymbidium in Japan. It is a natural hybrid of calanthe x takane.

Cymbidium goeringii is the first orchid documented by mankind. Confucius (Chinese philosopher 551-479 BC) even wrote about them. The rarest can sell for really high prices of up to one million dollars. Some of the common varieties go for as little as \$30 and up. They can even be grown in pumpace, but need to be watered daily in summertime.

In Japan, they look at the orchid plants like they are Bonsai. At the orchid shows, charts are kept of the winners, carefully ranking them. In general, the greener the plant, the easier it is to grow because more green means the plant has more chlorophyll and can photosynthesize (use the sun's energy, converting it to chemical energy that can later be used to fuel the plant) more than a variegated plant.

Neofinetia: Jason spoke a lot about Neofinetia and showed us many images. He even had brought a few for sale, which were snapped up eagerly by the MEOS members.

Jason spoke about the yellow kinkabuto, which is an easy to grow Neofinetia with yellow variegation on the leaves. They are expensive because you can't breed them and can't clone them. Neofinetias come with various types of leaves: "princess leaf," which is thin and delicate; "bean leaf," which is very stout; "needle leaf" types which bloom off the apex and this terminates the growth; and "contorted leaf." There is even a flowerless variety that forms buds, but they never open.

Neofinetia are also collected for their root tip colors, the "ruby" being the most desirable. Neofinetia flowers are very fragrant, more so at night. Jason thinks they smell like jasmine. They are Vandacious and have the characteristics of both monopodial (meaning "one foot," the plant growth is upwards from a single stem) and sympodial (plant growth is lateral and branching, with new growth beginning at the base of mature growth) growth.

The Neofinetia falcate fuukiran is known as "the orchid that grew in the wind." The Japanese name for it is furan (wind orchid).

Secretary's Note: There is a group of orchid enthusiasts called the Fukiran Society of America, which is free to join. Their website contains a lot of information on this very interesting orchid: <http://fukiransoa.weebly.com/> (check out their history, how to repot them, types of pots, upcoming shows and events, vendor/links, books-but only if you can read Japanese, etc.)

Potting Neofinetia, a Special Technique:

Grow them in a moss mound. Form the mound on an ordinary water bottle so that there will be a hollow air space in the center of the mound. Once the mound has been formed, wrap the roots around that and then secure with wire. The outside portion of the mound can be dense and tightly packed, however the inside must be loose. This mound is then removed from the water bottle and put into a small pot, with most of the mound protruding above the pot. The plant will end up looking like a mini pineapple. You can train the leaves with wire or drink straws.

Jason showed us slides about the beautiful orchid pots made especially for Neofinetia. They are made in a mold, then glazed black. Then they are hand-painted and fired again. Finally the gold is hand-painted on and fired at a lower temperature so the gold does not melt. These pots can be very intricate and indeed are works of art.

Neofinetia Culture:

Don't let them dry out once the spikes start to grow. In the wintertime, water them sparingly. They are OK down to 40°. They prefer medium light from an east/south window. Morning sun if they are outdoors, but shade by noontime. The "white tiger" varieties tend to burn easily. They grow best in sphagnum moss and are best potted in springtime.

Orchid Tips:

The secret to growing any orchid is use lots of water and get lots of air to the roots. Don't fertilize more than once for every three times you water. It is important to not overfertilize. It is best to use rain water rather than tap water. Look for "Oregon Green Moss" from the west coast. It is Ph neutral and does not break down like other mosses. It is great for Vandas.

November 2014 - Tips from MEOS Members:

Tom Carter reported that he has had the Epicattleya Don Herman 'gold rush,' for about four years. He had it in a clear pot which was nice, but after a year or two algae started to form. It was noted that this does the same as when the medium breaks down and is not healthy for your orchid. **Dave Sparks** gave a tip that you should get a two inch net pot and place it upside down in the bottom of the orchid's pot. This creates an air space and makes the medium real shallow all around, allowing in more air. An air cone pot works the same way. Usually, with a solid pot of medium, the roots in the center of the medium will get rotted and die and only the roots around the edges remain. This technique eliminates that problem.

Experimenting with what we have learned from recent meetings:

President **Glenn Martin** asked the group if anyone had had a chance to try out some of the tips we learned from last month's speaker, Alan Koch. Several people quickly popped up to report the following:

Suzy Massey got a Ph kit and tested her town water she uses on her orchids. She found that it was a seven point something, which is pretty neutral. (6.2 is the ideal recommendation for orchids, but anything between 6 and 7 is good)

John Mattor purchased some foliar feed and is giving feeding through the leaves a try. A food meant for foliar feeding needs to be really soluble so it can pass through the pores easily.

Vicki Fisk got courageous and cut some spikes from an orchid that had been blooming way too long. She also recommends going to the Urban Gardener and getting the liquid CalMag.

Pat Martin put some oyster shell in her Laeliocattleya to give it more calcium.

Glenn Martin reported that he visited a hydroponic store and got a Ph test kit. He found that his water was really acidic. He then treated the water and found that 16 of his orchids immediately got new growth when he applied the less acidic water. Glenn said that along with the Ph test kit, you need to get the other stuff to make the corrections to your water. The hydroponic people insisted that he get the 2-2-2 fertilizer instead of the 20-20-20. The 2-2-2 is really the same as getting the 20-20-20 and diluting it before feeding. Glenn also purchased some "insect frass," which is really just another name for insect poop. Glenn said the frass worked really well on his orchids and it was "like flipping a switch."
