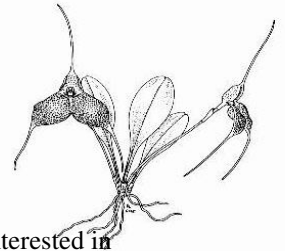




**OCTOBER MEETING – Thursday, October 16<sup>th</sup>**  
**Beginners' Corner 7:30 p.m.**  
**Regular Meeting 8:00 p.m Franklin Park Conservatory**



Wayne Roberts of Roberts Flower Supply will be giving a talk on Cypripediums (some of which are native to Ohio). In addition to their talk, Roberts will also be selling potting materials and plants. If you are interested in putting in a pre-order, check out their web site at: [www.orchidmix.com](http://www.orchidmix.com). and contact Mr. Roberts so he can bring your order to the meeting. Roberts Flower Supply is well known for their wide variety of orchid mixes, growing supplies, as well as plants, including Cypripediums.

**INNISWOOD, AFFAIR OF THE HORT**

A special thank you to Cathy Willis for all of her hard work in organizing our participation in this event, to Jim Harper for giving a talk on orchids, and to all of the volunteers who helped with the information and sales table. This was a well attended event and was a good opportunity for letting the general public know about the Central Ohio Orchid Society. In addition to providing information about our society and general orchid care, we also sold members' plants and most of the plants from Norman's Orchids that we purchased for this event. We will bring the Norman's Orchids plants to the October meeting – bring your check books!

**SAD NEWS** – It is with true sadness that we have learned of the death of Margaret (Marg) L. Baker, co-author with her husband Charles of many informative orchid related texts, including *Orchid Species Culture: Dendrobium*; *Orchid Species Culture: Pescatorea, Phaius, Phalaenopsis, Pholidota, Phragmipedium, and Pleione*; and a wonderful website devoted to specific cultural requirements and natural environmental conditions of specific species. Both of the Bakers are known throughout the international orchid community as kind, knowledgeable, and important figures in the world of orchids. Marg's generosity in sharing her knowledge will be sorely missed. Our sympathy goes out to Charles and their family.

**WELCOME TO OUR NEWEST MEMBERS:**

Frank Lerner  
Bill and Kate Ruth

Please take a moment during the next meeting to welcome these new members to our society.

**FALL MINI-SHOW AND SALE** - November 2<sup>nd</sup> and 3<sup>rd</sup>, Franklin Park Conservatory – Mark your calendars.

If you have plants that you would like to sell at the Fall Mini-Show, please contact Dale Glassburn to let him know. Also, Dale would like to know if any of these will be in bloom. Please contact Dale Glassburn by October 15<sup>th</sup> at: (614) 889-8015.

As a reminder, members of the Central Ohio Orchid Society are welcome to sell extra plants or divisions at our fall and spring mini-shows. The Society will retain 20% of all sales. If you are selling plants, you are asked to please help by volunteering time at the sales table during the show weekend.

## NOTES FROM THE SEPTEMBER MEETING:

The September Meeting included an introduction of each of the members and brief mention of how we all came to our mutual interest in orchids. The upcoming election of officers was also discussed.

Among the plants of note on the show table were the following:

### Cattleya Alliance

Screll Jones	<i>Cattleya walkeriana</i> x Slc Asswan	1 <sup>st</sup>
John & Cathy Willis	<i>Brassavola nodosa</i>	2 <sup>nd</sup>
Sue Dervin	Bc. Bryce Canyon 'Splendiferous' AM/AOS	3 <sup>rd</sup>
Tennis Maynard	Bc Mt. Anderson	3 <sup>rd</sup>

### Dendrobium

Dave Evans	<i>Dendrobium christyanum</i>	1 <sup>st</sup>
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### Oncidium Alliance

Screll Jones	Brassidium Longlen 'Bill Switzer'	1 <sup>st</sup>
Screll Jones	Mitrassia Olmec	3 <sup>rd</sup>

### Phalaenopsis

Tennis Maynard	<i>Phalaenopsis violacea</i> 'Borneo' (aka P. bellina)	2 <sup>nd</sup>
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### Phragmipedium

Screll Jones	<i>Phragmipedium</i> Robert Palm ( <i>besseae</i> 'Lemon Drop' x <i>czerwiakowianum</i> )	1 <sup>st</sup>
Screll Jones	<i>Phragmipedium</i> Noirmont (longifolium x Mem. Dick Clements)	2 <sup>nd</sup>

### Vandaceous Alliance

Tennis Maynard	Aranda Thailand Sunspots	1 <sup>st</sup>
Tennis Maynard	<i>Vanda</i> Jennifer Tokuno 'Nishiguchi'	2 <sup>nd</sup>
Tennis Maynard	<i>Ascocenda</i> Tubtim Velvet 'White Angel' x Rhy. Coelestis Alba	3 <sup>rd</sup>

### Other

Screll Jones	<i>Plectrophora triquetra</i>	1 <sup>st</sup>
Ken Mettler	<i>Ludisia discolor</i>	1 <sup>st</sup>
Ken Mettler	<i>Platanthera clavellata</i> var. <i>clavellata</i>	1 <sup>st</sup>
John & Cathy Willis	<i>Bulbophyllum lobbii</i> 'Kathy's Gold'	1 <sup>st</sup>
?	<i>Stanhopea oculata</i>	1 <sup>st</sup>
?	<i>Stanhopea reichenbachia</i>	2 <sup>nd</sup>

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## GROWING TIPS

Now that cool temperatures seem to have settled in, we should probably have the majority of our plants inside. A few that require truly cold temperatures to help initiate flowering, such as *Cymbidium* and some *Dendrobium* species (*nobile*, and *kingianum* among others) may still be outside. For the vast majority of orchids, these have most likely been brought indoors by now. Many growers note that orchids take on a real growth spurt during their summer out of doors. This is due, in part, to warm days combined with cool nights, fresh air, good light, and good quality water. It is our job to do our best to mimic the best conditions indoors through the winter. It is important to be aware of the natural growing habit of each plant. Many require cool, bright, and dry conditions through the winter. Others do well with environmental conditions similar to their summer out of doors. Among the components of the growing environment we should try to control are the following. Good air movement – try to have enough fans so that there is slight movement in the leaves of all of the plants. Fresh air – even though winter air is cold and dry, try to bring in fresh air into your growing area. This will help to minimize fungal and bacterial infections. High quality water – in general, lower mineral content is better; be aware that typical well water is high in dissolved solids and is detrimental to orchids. Consider blending tap water with rain, distilled, or de-humidifier water (all generally low in dissolved solids). Do what you can to get at least a ten degree temperature drop in the evening. A min-max thermometer will help you know if your plants are experiencing this kind of temperature variation. In general, winter is not a great time to be repotting. However, some plants such as *Paphiopedilum*, *Phragmipedium*, and *Phalaenopsis*, which all continue to grow, will benefit from repotting (typically at least once a year, depending on your cultural techniques).

# An Orchid Judging Overview

The Society's most prestigious flower award was granted to this *Paphiopedilum* Prince Edward of York 'Robert Weltz', FCC/AOS, which scored 90 points. S. Robert Weltz, Jr., grew this specimen that is a cross between *Paph. rothschildianum* and *Paph. sanderianum*. Photograph by Richard Clark.



Change is characteristic of all living things. The American Orchid Society's system of judging has been developed to grant recognition to new and superior forms of orchid species and to improved forms of orchid hybrids. Under this judging system, recognition is also given to plants of superior culture. Ideal flower form and optimum cultivation are elusive goals that hybridizers and growers strive to achieve. Judges receive a minimum of six years training before they are accredited. They must be knowledgeable of basic species used in hybridizing and the expected results of their use in breeding, and they must keep current on developments in modern hybridizing.

Orchids and orchid exhibits may be judged in two ways. In one type of judging, orchid plants and cut flowers, either singly or in groups, compete within classes defined by the show schedule for first, second and third place or prize for each class. In the other type of judging, orchid plants or cut flowers, usually singly but occasionally in groups, are evaluated against a standard of hypothetical perfection together with the empirical experience of the judges participating and/or a comparison with similar types previously awarded. The former is show judging, also called ribbon judging, since blue, red, and white ribbons are commonly used to designate first, second or third place; the latter is termed award or merit judging since worthy plants or exhibits are granted specific awards in recognition of their intrinsic merits.

American Orchid Society judging is primarily concerned with award or merit judging, although the awarding of the show trophy involves show judging as well. Further, since American Orchid Society judging is frequently conducted at orchid shows, American Orchid Society judges often serve as show judges.

The Society's rules and regulations for judging are presented in its *Handbook of Judging and Exhibition* (available from the AOS BookShop) which is divided into two parts. Part 1 (judging) governs the American Orchid Society Judging System. Part 2 (exhibition) offers guidance for affiliated orchid societies planning and staging orchid exhibits and shows. The contents of each part are divided into chapters that consist of sections and subsections numbered according to a decimal system to facilitate reference and cross reference.

## The Benefits of Judging Orchids

Bringing an orchid to bloom is an achievement of which every beginning grower can be proud. And, at first, each plant seems worth its weight in diamonds. After several years' experience in the orchids world, the beginner comes to realize that there are some orchids more intriguing, more treasured and more beautiful than others. These "better" orchids -- compared to those of previous years -- represent the attainment of certain standards of form and color and, as such, are singled out for certain honors.

These standards are determined and applied by the American Orchid Society. The organization has developed a system for judging better orchids that seeks to grant recognition to superior forms of orchid species and hybrids; recognize the development of improved hybrid forms; encourage meritorious trends in hybridizing; and reward horticultural skill in orchid growing. Highly trained and experienced American Orchid Society judges conduct monthly judging sessions throughout the United States to which orchid growers may bring any orchid. The judges carefully evaluate each plant and flower from many different aspects, offering a final collective opinion. If an entry fulfills any of the above requirements to an outstanding degree, the judges may award it one or more of nine awards.

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## RESULTS OF OUR SURVEY

The following are the results of last month's survey of our members. Of 91 members surveyed, we received 27 responses. 15 respondents indicated interest in receiving the newsletter by e-mail. If you are interested in receiving the newsletter by e-mail, please contact the editor at: [tbellgames@burnip.com](mailto:tbellgames@burnip.com). This gets the newsletter to you sooner, saves the society money so we can devote funds to programming and education, and enables you to see the photographs with better resolution and in color.

The following topics for guest speakers were mentioned:

Keeping orchids alive and thriving.  
General orchid care.  
Window-sill growing for orchids.  
Orchids from exotic locales.  
Orchid diseases; water chemistry.  
Orchid housing.  
Conservation of native (Ohio) orchids.  
Identifying varieties.

The following topics for slide presentations were mentioned:

Information on orchid care.  
Orchid pests and diseases.  
Orchids from exotic locales.  
Variety comparisons.  
Field trips.

The following topics for hands-on demonstrations were noted:

Watering and light care.  
Dividing and repotting.  
Any.  
Plant care and how to identify various ailments.  
Potting – slowly.

Window-sill growing for orchids.  
Growing techniques.  
How to divide orchid plants.  
Anything!

The following general comments were received:

- We haven't gotten to attend. I work 2<sup>nd</sup> shift. Hope to start when I retire.
- Have some members who bring orchids for show table explain their conditions for successful blooming.
- If important items (deaths, etc.) cannot make notification, what makes you think a list for this would be utilized? Doesn't seem to make any difference [topics for programs] since interests have been requested for the last two years to no avail.
- New Board designated committee to handle show table judging.
- I like the monthly "checklist". I love to experiment, apply what I have learned, and see if it leads me to a blooming orchid. I feel that the loudest voices at the meetings do not tolerate this attitude. This is very intimidating, so I have not come back. I do not need stress; I do this for fun and enjoyment.
- My friend and I both have to get up at 5:00 a.m. How about moving the meeting time up by an hour?
- I enjoy the Beginner's Corner greatly and all of your programs that instructed about orchid growing and general information. Less interested in showing. Thanks for all your work to bring us high quality programs.
- It is hard for me to get to meetings but I enjoy my membership and newsletter.
- Remember the newcomers and inexperienced!!!

While only a small portion of the survey cards were returned, a number of points are clear. Many of our members are newer growers; a proportional degree of our efforts should be devoted to basic techniques of orchid culture which should be of interest for these newer growers. If you are a more experienced grower, please take time during upcoming meetings to introduce yourself to some of the newer growers and share your knowledge. Currently, the majority of members are new growers. Although we received one or two negative comments, this was a sincere effort to get your input in order to help shape our programs to meet your interests. If you have not yet responded (or even if you have) please contact our program chair (either the current chair or the new chair to be voted-in at our October meeting) with suggestions for how we might improve our meetings. Possibilities are endless and include potential out of town speakers, hands-on demonstrations, slide presentations (free from the AOS – check their website). As editor of the newsletter, I will make every attempt to include articles of interest (we can only guess what you are interested in if you don't let us know!). If you know of some bit of information that might be of interest to others, please pass this on so we can include it in the newsletter. Your articles would be more than welcome. If you would like to see our society change or improve in some fashion, please consider becoming more involved and run for office or come to one of the Board Meetings to give your welcome input.

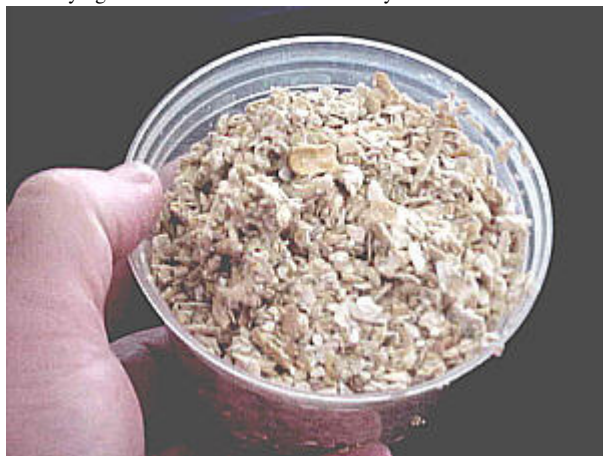


The following is the second part of a two-part article on basic care for Paphiopedilums. This is reprinted by permission of AnTec Laboratory, P.O. Box 65, Candor, NY 13743. Antec specializes in orchid propagation. They can be found on the world wide web at: <http://lady Slipper.com>

## Growing

### Watering

Watering is probably the single biggest factor that will dictate your success with a Paph. Generally, we don't like to use common catchy statements and phrases in culture advice, probably because so many of them are wrong. But, "you can never water a Paph. too much, but you can water it too often" is one of the better ones we've heard. Simply stated, when you water, really water that plant. You want water quickly running out the bottom of the pot and you want several pot volumes of water to run through the pot each time you water it. This not only makes sure that you properly rehydrate the medium each time you water, but that you do not have any excess build up of salts in the pot. However, overwatering in the sense of watering too frequently, and not letting the plant's medium dry out somewhat between waterings, is probably the number one reason Paphs die an early death. There has been, and unfortunately still is, a large misconception that even allowing the potting medium to approach drying will kill a Paph's roots. This is probably based on the use of poor quality water, which would form salt deposits on the roots of plants if the pot were allowed to dry out. This has led to a second misconception that the plants should be grown wet all the time, which in turn has probably killed far more plants due to root loss than a little drying would ever have done. Not everyone has such bad water.



If you do have extremely hard water (indicated by residue in tea or coffee pots, or if your hot water heater builds up scale interiorly), you can minimize salt build up by using very little

Calcium carbonate precipitated from hard water in a water heater. This is the stuff that makes water "hard".

fertilizer and water copiously when you do as just explained. It also should be noted that most of the Paphs we've listed as beginners plants here are not among the more sensitive in the genus to water quality---that was one of the key issues we used in selecting them. If it turns out that you have sufficiently bad water to cause problems for even these plants, there are other ways of dealing with this problem explained in the water quality and mineral nutrition chapters. The signs you will look for are obvious, whitish mineral deposits on the surface of the medium, or Paphs with burned as opposed to rotted roots, or Paphs that have roots that are not rotted but do not have active growing tips. The plants will also be slow to form new growths and 'sulky'. If you are unsure of your water quality, take a shallow bowl, fill it with your tap water, and allow it to evaporate over several days. Look at the residue in the bowl; if it is easily visible, then you very likely have 'hard' water, or water that has a high content of total dissolved solids (TDS), designated in PPM (parts per million). You should you get your water analysis from your department of public works, or done by a private company if you have a well. Water with a very high TDS can prove problematic to growing your first Paph, but in this case, with a single plant, you can purchase bottled distilled or reverse osmosis water, and use this for irrigation every second watering. This should help flush from the roots any minerals accumulated from your tap water. The final point on water is do not use water that has been 'softened', as this will kill the plants. If you are interested in more information on water and water quality, please read "[Water Quality Issues for Slipper Orchid Growers](#)".

### Fertilizing

Fertilizing is the second most important aspect of Paph culture. We have

detailed information in the chapter on mineral nutrition, but for simplified purposes of getting you going with your first Paph, the suggestion is to fertilize very weakly. If you don't know what your water quality is, or suspect that it is pretty hard, then fertilize only every second or third watering, and use about 1/4 of the recommended dosage on the label of the fertilizer. If you know you have pure water, or are using rain water or distilled or otherwise purified water, then you may consider fertilizer every two or three times out of four that you water, and possibly slightly increasing the amount to as much as half the recommended dosage. If your tap water is hard (see description in the above paragraph) and you are using rain or otherwise purified water instead, consider watering with a fifty-fifty mix of your tap water and the pure water once a month to insure adequate calcium supply. Also consider substituting Epsom Salts for the fertilizer at the same level you'd use the fertilizer about once a month, regardless of your water source. The above program is basically a compromise program to put you in a situation under which the beginners Paphs listed will grow under a wide range of possible water qualities; it is meant to simplify things until you get to the point where you want to learn the more intricate details of water quality and fertilizing that will allow you to become a master Paph. grower. If you want more details on fertilizing, see "[Mineral Nutrition Issues for Slipper Orchid Growers](#)".

### Light

The first point to consider with light is that it is better to err initially on the side of too little than too much. It is easy enough to slowly increase the light level to the proper level with no trauma to the plant, whereas placing it where it may suddenly get direct sun or too close to a high intensity discharge light may damage the plant. Under fluorescent lighting, it would be difficult to give the plant damaging light levels, although you can certainly cause unsightly but not fatal burning of the leaf tips if they touch the bulbs.

One can gauge the light intensity of greenhouse or HID grown plants by placing a hand about 10 inches above the plant and looking at the shadow cast upon the plant. You should see a slight shadow; if it is a very pronounced shadow, then your light levels may be too high, whereas no shadow would suggest a light level that is too low.



Checking light levels by judging the intensity of the shadow cast by your hand.

Paphs that are growing in too strong light will generally exhibit bleached looking leaves, i.e. very light green or approaching whitish green, and will mature smaller and smaller growths, and may put out multiple, tiny growths at the base of the plant. Inflorescences will also tend to be short, and the flowers may be small and hard. Too little light, and the leaves of your Paph will be relatively dark green in color, overly long, perhaps floppy and/or lacking substance. Growths will mature slowly, and the plant will take longer to flower than if it were grown in higher light---perhaps the plant will take 1.5 years to mature a growth to flowering size, for example, rather than the

expected 10 months. If you believe that you have too much light or little light for your Paph after a period of time, make the changes to the correct conditions slowly and over a period of time so that the plant can become accustomed to the new conditions. This way it will not suffer trauma during the transition---in other words, don't take a dark green, floppy plant and place it in a bright south window and hope that you can thereby speed up its growing and flowering. It will only burn in this too high light, and you may end up losing the entire plant in a very short period of time. Generally, you can expect the species Paphs to flower every year, pretty much on a set schedule, with the exception of the previously mentioned cochlopetalum species and hybrids, which can flower successively over several months. The Maudiae types can easily flower twice a year under the right conditions.

Windowsill growers need to be aware of the amount and duration of light

available at the window, as well as the temperature fluctuations where they plan to grow their plants. Some people have had limited success with northerly facing windows, and this can work if the window is large, or there are sliding glass doors at this site, and there are no trees further obstructing the sunlight reaching the plants. If the Paph is placed on the windowsill, and you live in the north where the winters are frigid, you will have to maintain extra distance between the pot and the glass of the window. Bear in mind that temperatures next to the window glass can be close to freezing if that is what the outdoor temperatures are! Be careful not to overly chill the roots of the plant, which might just slow down the plants growth, but could also freeze it to death if the temperatures plummet. If possible, it might be best to place the plant during the cold winter months on a table close to the window where it will get sufficient light, but will also stay closer to the temperature of the room itself. If the north facing window is less than large, supplemental lighting could be added in the form of a 'shop light' with 2 fluorescent bulbs hung over the plants on the windowsill or table placed next to the window. Single bulbs sold as 'grow lights' are, in our opinion, not worthwhile. Generally, quality and quantity of light is better for Paphs at east or west facing windows. South facing windowsills can be a challenge to grow in, because of the light intensity and accompanying heat from mid day sun, especially in the summer. Growing in a south window is possible, though, if you can place the Paph back some distance from the window, say around 12 inches or so. When the sun is strongest at this location, place your hand on the leaves: if they have become warmer than your hand temperature or feel hot, then the light (and the heat) may be too strong and the plant will need to be moved back. Alternatively, if it is not excessively hot, increasing air movement may help dissipate the heat at the leaf surface. If these solutions are not possible or successful then it may be necessary that the plant be moved to a different window. Alternatively, you could place your Paph in this window if there is a plant in front of it that can withstand this stronger light and heat, and will thus shield the Paph somewhat from the harsh conditions. Use of sheer curtains may also work as long as they do not excessively limit the total amount of light that reaches the plants leaf surface. You may have to experiment with the curtain for several days, pulling it several inches either way, before you feel that you have it arranged 'right', so that the plant's leaves will not get hot to the touch, but it will also get enough light so that you will get flowers.

Under a two 40 watt bulb fluorescent light set up with standard bulbs, you will want to get the plants leaves within a few inches of the bulbs. We prefer C50 (5000K) bulbs, but you will probably be able to do fine with almost any of the commonly available bulbs. When you are ready to optimize you fluorescent set up, we suggest Philips C50 Ultralume bulbs, which have a substantially higher lumen output than standard C50s and will allow you to do better with some of the higher light requirement Paphs, such as Paph philippinense and other multiflorals. If you have a 4 bulb fluorescent set up you will probably be able to place the plants 6 to 8 inches below the bulbs. Remember that the bulb output is greatest near the center and diminishes towards the ends, so arrange your plant placement accordingly. Also, growing under fluorescent lights will automatically provide some of the day/night temperature differential of several degrees that most plants appreciate, as the lights go on and off.

HID  
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so care  
must be  
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plant  
placement



High Intensity Discharge light fixture.

with them. It is indeed possible to burn a Paph if placed too close or directly under one of these lights, so using the light shadow rule, start below and to the side of the light, gradually moving the plant into higher light until you have it in a position where the leaf color is ideal.

Paphs do not appear to be particularly photoperiod sensitive and the plants suggested for starting with are not among those that require higher light intensities. A photoperiod of 12 to 14 hours should work very well with these plants. Windowsill growers unable to provide this longer photoperiod in the

winter months may not experience as rapid growth without supplemental light, but the plants suggested here nevertheless should grow and flower for them.

## What to do with long inflorescences

Some Paphs, both species and hybrids, can produce extremely long inflorescences that can be difficult to deal with especially if you are growing under fluorescent lights. Also, as the inflorescence grows in length, it will at some point actually touch the bulbs, which will inevitably kill the bud by drying it out. Therefore, any Paph in spike must be moved out from under the lights when the bud starts to get too close to the bulbs. 'Too close' is a bit difficult to define, because humidity, and air movement, and density of potting mix and its speed of drying, will have some affect on the outcome, but for safety's sake, remove the plant from under the fluorescents by the time the bud is within a few inches from the lights. Now, what to do with the plant? Well, the inflorescence and the resultant bud will grow in the direction facing the source of the light (think back to grade school science experiments and sunflower seeds and closets and light bulbs). You have basically 2 choices at this point. You could move the plant off to the side on a table, or on to a crate, or some other stable object, and place the developing inflorescence facing the closest fluorescent light. Place it probably not more than 24 inches from the light source, as you do not want to encourage the plant to produce an outrageously long inflorescence. You want the plant to funnel the majority of its resources into the flower, not the stem length. Or, you could place the plant close (but not too close!) to a bright window and allow the inflorescence to develop there.

## Temperature & Humidity

We are fortunate that most of the Paphs on the beginner's list will grow just fine at temperatures and humidity levels with which we ourselves are comfortable. Ideally, Paphs probably would like maximum temperatures not above the 85F range, but can tolerate much higher temperatures with minimal stress, and can go down into the higher 50's F if necessary without suffering leaf or flower damage. The Paphs listed as beginner plants would prefer to stay mostly in the 60-80F range, preferably with a day night differential of 8-10F, but again for this particular group this is an ideal, but not an essential at all. The day/night differential is fairly easy to attain, either when growing under fluorescent lights when the lights go off, or on a windowsill when the sun goes down. Again, ideal relative humidity would be in the 70 to 80% range, but these plants if otherwise cared for properly (i.e. you've maintained a good root system through having an open potting mix, and a reasonable watering schedule) will tolerate lower humidity in the 40% range very well. Do keep a careful eye out for spider mite damage if you do grow in the lower humidity range, and especially if you grow under fluorescents. Spider mite damage will appear most often on the upper sides of the leaves, and will look like fine red dust, and you may also see a dull grayish minutely pitted surface to the leaves and slight webbing on the undersides of the leaves

## Air movement, etc.

Air movement accomplishes many things in orchid culture. In warmer, high light conditions, it helps prevent heat build up on the leaf surface. In cooler conditions, it dries leaf surfaces after watering and thus limits pathogen growth capable of flourishing on wet surfaces, and under all conditions it helps limit a plants' pathogen exposure by keeping spores from settling on leaf surfaces. A few well-spaced plants on a windowsill will probably do fine without supplemental air movement, as thermal currents should provide enough. However, this gentle sort of air movement is easily disrupted as more and more plants are crowded together. Under these circumstances, or when plants are clustered together especially under fluorescent lights, it is a good idea to provide a small fan to keep the air moving around the plant foliage. Care should be taken in placement of the fan so that it does not force air directly onto the leaves of the plants, but rather pushes the air around and adjacent to the plants. The problem of direct air flow from a fan in windowsill and underlight cultivation is that the closest plants may dry out extremely fast due to their proximity to the fan, while plants that are somewhat shielded from the fan, or are further away, may take considerably longer to dry out. This condition could make figuring out when and what to water difficult. An ideal situation is when you can place 2 fans that blow the air circularly around the plants, perhaps with one fan placed higher than the other, with the upper fan tilted slightly down to push the warmer air down, and the lower fan tilted up to push the colder air up into the warmer air, thus making the temperatures in the growing area more uniform. There are some cases, when you are growing certain Paphs, that you will actually want the warmer or cooler microclimates that are created in your growing area, either by proximity to a window or light source where the temperatures are warmer, or closeness to the floor on a table or lightstand, where the temperatures are cooler. The fan(s) should be run both day and night.



## Repotting

When and how often should a Paph be repotted? The short answer to this question is an easy one: you repot the plant when it needs it, whether it's spring, summer, winter or fall. Unquestionably, ideal times for repotting are when the weather is going to be warm for some time to encourage new growth, but if the plant needs repotting, it's best not to postpone it.



A proper repotting job in an appropriate mix is essential to good root growth.

Most plants appreciate, and need, repotting annually if they are in standard bark mixes. Plants that are grown in the 'new' coconut husk mix probably can go longer, perhaps up to 2 years or more if necessary, as the coconut husk chips do not break down at the same speed as the bark mix does. Seedlings can benefit from twice yearly repotting if you have the time, as they definitely experience a growth spurt in the new medium. Generally, it's helpful, but not absolutely necessary, to water these newly potted adult plants (not the seedlings) a little less often than your other plants, to encourage roots to grow and seek water and nutrients in the mix.

Any Paph that looks unthrifty, sickly, wilted, is falling over in the pot, is starting to grow up and out of the pot, has overgrown its pot with an excessive number of growths, has any sort of wet or damp rot visible on the leaves, has extremely pale leaves, or has excessively wrinkled leaves should be repotted. These conditions can be strongly correlated to poor roots and/or poor growing conditions that caused root loss, with the subsequent loss of ability of the plant to absorb water and nutrients. If the plant does have evidence of bacterial or fungal problems, remove these infected areas either by tearing off the affected leaf or leaf area, or use very carefully a small, sharp knife to excise the infected area. Wash your hands before handling the plant after you have done the 'surgery'.



Small Coconut Husk Chips (CHC). We have found a mix based on CHC and a light aggregate (in our case Aliflor) and charcoal works best for us.

What should you use for a potting mix? The one that works best for you and your conditions! You can grow Paphs in any number of different types of potting mix; you can even grow some of them mounted if you have the right conditions. The basic needs are ample ability for holding air and water, ability to stabilize the plant, and not too high a salt retention. The most traditional mixes for the past several decades have been based on fir bark, with various additives such as perlite, aliflor, sphagnum moss or rockwool. Mixes utilizing coconut husk chips and lightweight aggregates are becoming more popular, and are our preferred mix. For more information see "[Use of Coconut Husk Chips as a Potting Mix Base Superior to Bark](#)" and "[Coconut Husk Chips Followup to FAQs](#)".

Next you need to choose a pot. To a certain extent, determining pot size will take into consideration your growing conditions, growing medium and watering habits, but as a general rule you do not want to 'over pot' Paphs. Rather, pot them so that the roots just comfortably fit into the pot, like a hat on your head: snug enough to stay on but not uncomfortably tight. The other consideration in a pot for Paphs is that it has sufficient drainage. Many pots designed for other types of plants do not drain well enough, so it may be necessary to enlarge existing or cut new drainage holes in your pots. The choice between clay and plastic also depends on your circumstances. Plastic pots are available readily in more sizes, lightweight and relatively inexpensive, and are easily modified to increase drainage if necessary. Clay pots dry faster and are more stable on the bench, but also tend to accumulate salts. They also tend to cool the root zone a bit, which can be either a benefit or a detriment depending on your climate.

Now that you have your mix and your pot, you're all set to repot. First, to unpot your Paph: firmly hold the pot upside down, and with one hand hold onto the pot, and with the other hand grasp the plant at its base, and slowly pull it out of the pot, allowing all the old mix to fall into the trash. If you have difficulty removing the plant, you can carefully squeeze the pot all the way around before turning it upside down, which should loosen the roots sufficiently so that the plant can be removed. Any of the old mix that adheres to the roots of the plants can be gently removed. If you have to struggle to remove it, you will probably do more harm than good by removing it, as you will damage the roots. Now, carefully hold the plant in the proper position in the pot with one hand (so that the base of the plant---where the roots come out---is just below the lip of the pot), and start to gently work mix in and around the plant's roots, gently packing it in place with your fingers. Make sure that as you add the mix, you get the mix all the way to the bottom of the pot. Once you have the mix in place, press down very firmly with your fingers all the way around the top of the pot, making sure that there are no empty spaces that could be occupied by mix. It is not likely that you will press with enough force to seriously injure the roots. If the mix condenses with the pressure of your fingers to considerably below the base of the plant, you'll want to add more mix so that newly emerging roots will have something to grow into. You want the mix level to come up just to the junction of the base of the plant with its roots. If mix is built up higher onto the base of the plant, you will be inviting rot. If the plant is not stable in this position, you can fashion a wire into a U and insert it over the crown of the plant and into the pot to add stability until the plant grows more roots and anchors itself. Now, let the plant rest a day, and then you can water it.

Finally, don't be afraid to take a plant out of its pot, once you own it, to check on the condition of the roots at any time. It's better to have to unnecessarily repot a healthy plant, than suffer the consequences of waiting until you have a serious problem with your plant, and have to nurse the plant back to good health and good roots.

## Finished Flowering

When your plant is done flowering, generally, it's fine to let the inflorescence fade on its own ---it will slowly dry out and turn a brownish color after the flower has dried up and fallen off the plant. Simply snap the stem off, using your first 2 fingers and the thumb on opposite sides of the stem, close to where the inflorescence emerges from the plant. Another way to remove the stem, especially if hasn't turned completely brown and dry, is to grasp it close to the base and your first two fingers and thumb, and give it a quick twist in one direction. Most stems will be easy to remove, but there are some plants, *Paph*.

*venustum*, *Paph. tigrinum*, and *Paph. fairrieanum* come to mind, that have very fibrous stems and they really need to be severed from the plant with a knife or razor blade. Remember to flame sterilize your instrument of choice after you have removed the stem. If you've chosen one of the cochlopetalum beginners plants, you will want to wait until the stem is definitely showing signs of turning brown before removing it, as these are sequential bloomers and can surprise you with another flower. If there is any question in your mind as to the health of your Paph and/or its root system, and it is in flower, it is best to cut the flower stem off. This will allow the plant to concentrate its energy in growing new roots and new growth for the next flowering.

Paphs only produce one inflorescence per growth (there have been recorded instances of 2 inflorescences growing from the same growth---we had 2 grow out of a single growth of a *Paph. fowliei*, but it is quite rare), so now it up to you to grow the next growth up to flowering size. When you have grown a Paph and flowered it, the plant is "yours". Do not be discouraged if you are not completely successful with your first plant, it may take a little while to get the hang of growing them properly, but it will come if you carefully observe your plants and how they are growing. If you are observant enough, the plants will start to "talk" to you and tell you what is going on. Also remember that all plants are individuals, and it is possible to get the occasional clone that is just a stinker to

grow.

Finally, an important concept to keep in mind is one of balance or harmony with regards to the amount of light, fertilizer, heat, pot size, and water that your plant receives. All aspects of orchid culture are closely interrelated. As you may have noticed in the information we've presented, a change in one set of conditions will probably result in the necessity to change other aspects of culture. A complete understanding and appreciation of this concept develops with experience with your Paphs, and attention to detail in your growing.

It is our hope that we have given you enough information in this article to get you a quick and easy start into growing Paphs. If you have further questions, you may be able to find the answers in our Paph. FAQ. As your interest and collection of Paphs grows, you will want to delve deeper into their culture needs, and read our more detailed articles on various aspects of culture. It is our hope that we can help you be a successful Paph grower, and as a result gain greater joy from this hobby.

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**UPCOMING MEETINGS:** If you know of a good speaker or have an interest in a particular topic for one of our monthly meetings, please forward your suggestions to Chuck Hill. Drop Chuck a note at: 2211 Lytham Road, Columbus, OH 43220.

**NEWSLETTER ARTICLES:** Please contact Tom Bell-Games at: [tbellgames@burnip.com](mailto:tbellgames@burnip.com) if you want to contribute an article to the newsletter or have an announcement to be included in the newsletter.

**REGIONAL SHOWS –** The following are upcoming orchid shows within a reasonable distance from Columbus.

October 18-19      Greater Cincinnati Orchid Society Show. Krohn Conservatory, 1501 Eden Park Drive, Cincinnati, OH. Contact: Stephen Helbling (513) 321-3702. [orchiddevil@aol.com](mailto:orchiddevil@aol.com)

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