



# The **Slipper Orchid Alliance Newsletter**

Volume 6, Number 4

Winter 2005

## Election of Officers for 2005

In accordance with the By-laws of the Slipper Orchid Alliance, we would like to present the slate of officers for 2005 whose terms will be 2006-07.

President - Barbara Tisherman, PA

Vice-president - Steve Drozda, PA

Secretary - Russ Tyler, MN

Treasurer - Linda Thorne, NC

Directors: Al Svobda, CA; Tom Larkin, AR; Sam Tsui, IL

The By-laws for the nomination and election of officers reads:

(A) Annually the Nominating Committee shall propose to the Board a candidate for each open elected position, in a timely manner so that the officers and directors may take office as of January 1 of the following calendar year.

(B) The slate will be published in the SOA Newsletter. If no new nominations presented in writing by ten members in good standing and accepted in writing by the nominee are received within one month of publication, a single ballot will be filed and those persons will be declared elected. If a new nomination is received, the election will be repeated for that office in the next newsletter.

Respectfully submitted,

Nancy Mountford, Chairman

Committee members: Lois Dauelsburg, Sam Tsui, Jean Metcalf, Janette Harris.

## SOA Membership

If you receive a membership renewal form with your newsletter, your membership is up for renewal within the next three months. Please fill out the form and mail it to our membership secretary, Jean Metcalf, 2323 Edinboro Rd. GH#6, Erie, PA 16509. Questions about your membership? Jean can be contacted at [orchidiva@yahoo.com](mailto:orchidiva@yahoo.com).

## A Checklist for the Newer Paphiopedilum Hobbyist January - March

(Northern Hemisphere)

**PLANT GROWTH AND BLOOMING CYCLE:** The growth slows and nearly stops during winter, but the plants are never completely dormant. This is the height of the blooming season for paphs. Many complex standard hybrids and Barbata (Maudiae-types) are in bloom by January. The flowers have a good substance and often last three to four months. Parvisepalums come into bloom slightly later, extending the season into early spring. An occasional multifloral or Brachypetalum may be in bloom, but most are still forming spikes for spring and early summer bloom.

**WATERING:** Paphiopedilums need regular watering and should never be allowed to dry out. Always apply plenty of water, letting it drain freely from the drainage holes. Your watering schedule depends on your mix, pot size, greenhouse temperature and the weather. To determine if it's time to water a plant, test the mix with your finger: it should always feel slightly damp one inch below the surface. Keep in mind that seedlings in small pots dry out faster than mature plants and may need frequent spot-watering. It's easier to take care of plants that are grouped by type and pot size.

During cold winter weather the plants dry slowly and need less frequent watering. Water in the morning to allow the leaves to dry by nightfall. Letting the plants stay wet and cold overnight encourages bacterial and fungal diseases. By March the days get longer and warmer, and you may need to water more frequently.

**FEEDING:** Use a balanced, water soluble orchid fertilizer (such as 20-10-20 or 20-20-20) diluted to one quarter or one eighth strength of manufacturer's recommendation for cattleyas or cymbidiums. Paphs do not need much fertilizer and high concentrations may cause salt burn. Always water plants before fertilizing to dissolve residual salts in the mix. For optimum growth, fertilize frequently with a weak solution.

During winter, fertilize the plants after every second or third watering. Parvisepalums and some cool growing species benefit from a winter “rest” (no fertilizer in January). As the days get longer, gradually increase the frequency of application (but not the fertilizer concentration).

**LIGHT:** Winter days are short and light levels low. Dark green, limp leaves and long, weak flower stems may be indicators that the plants are not getting enough light. Remove any extra shading applied during previous summer, if you have not done so last fall. Closely placed plants tend to shade each other – avoid overcrowding! Consider supplementing natural daylight with artificial lights developed especially for agriculture.

By March the plants should be getting plenty of light. Watch them closely on sunny days and apply shading as needed. Sudden exposure to bright light may cause sunburn (symptoms are large, dark, dead areas on uppermost leaf surfaces).

Do not move or turn the plants while the buds are developing. This can cause crooked and twisting stems, since flower buds tend to “stretch” towards light.

**TEMPERATURE AND AIR MOVEMENT:** Use a min-max thermometer to monitor the temperature in your growing area. Ideal temperatures for paphiopedilums range between 58°F to 62°F (14°C to 17°C) at night and 80°F (27°C) in the daytime. Most paphs, with the exception of warm-growing multiflorals, Brachypetalums and Barbata (Maudiae-types), tolerate cooler growing conditions, with nighttime temperatures in the fifties and occasionally dipping below 40°F (4°C). Increasing the temperature by a couple degrees on watering days helps keep bacterial and fungal diseases at bay. Invest in an extra heater and a low temperature alarm for emergencies (equipment failure or extremely cold weather).

If your plants take a long time to dry after watering and some buds suddenly “blast” (turn brown and rot), add an extra fan to eliminate “dead spots” and improve air circulation. Heaters tend to dry the air. A sudden drop in humidity can affect the flower quality, or dry the developing buds causing them to abort. Rather than misting the plants, wet down the greenhouse floor to increase humidity.

**GROOMING AND PEST CONTROL:** The most serious cold-season problems are fungal and bacterial diseases, resulting in spotting or rot. Tell-tale signs of rot are rapidly spreading, large, moist, brown areas on leaves, with droplets of foul smelling liquid forming on the underside. Peel away all infected leaves or remove an entire growth if the rot has spread to its center. Liberally sprinkle the plant with cinnamon (a natural fungicide). Isolate all affected plants to avoid rapid spread of disease. You can greatly reduce or eliminate outbreaks of disease by implementing good cultural practices: using good air circulation, providing proper spacing between

plants and watering early in the morning.

A few yellowing old leaves that slowly turn brown and dry are generally signs of the normal aging process. It may also be a sign that the plant is dehydrated, because it either lost its roots or was allowed to get too dry.

By March the pests such as aphids and mealy bugs become active. Promptly remove individual insects with a q-tip dipped in alcohol, or treat larger infestations with an insecticide recommended for orchids. If you notice slimy trails on the greenhouse walls or plants, put out snail bait.

#### **HIGHLIGHTS:**

VISIT SHOWS AND PAPH GROWERS to see the plants in bloom. This is a good time to buy a first-bloom seedling or a division of a plant you like (paphs may be divided any time, even while in bloom).

*Helen Congleton*

## **Fun with Orchid Names**

Latin and Greek, or Latinized Greek, are the languages of botany and especially for us the languages for naming orchids. Understanding these sometimes strange sounding and confusing names need not be a dreary burden that makes our lives difficult. In fact, it can be very interesting and fun. It is amazing how orchid names lend themselves to some interesting combinations when one lets the mind wonder to ponder.

Take the names for the “**Slipper Orchids**” we so dearly admire and hope to get to bloom.

In two “**Slipper Orchids**” the names refer to the shape of the lip, a shoe- or slipper-like structure – *Cypripedium* and *Paphiopedilum*. However, *Phragmipedium* has a different derivation. In naming these orchids the responsible persons used names or name parts of mythical personages, mostly ancient Greek and Roman.

You might note that in Latin and Greek mythologies, the beautiful goddess **Venus** was known by several names. It had to do with where and how she was supposedly born. Venus itself gives us “**venustus**,” meaning lovely or charming. The epithet “**venosus**,” however, is Latin and means “with veins.” There could be a connection, in that to have visible veins, especially in the face, was considered to be beautiful in Roman times, especially for women. To achieve this, the rather suntanned Mediterranean Latinas consumed cyanide. This would make them anemic and give

## Upcoming Events

### Paph Guild

Saturday and Sunday, January 14 and 15, 2006

The Inn at Morro Bay, 60 State Park Road, Morro Bay, CA

For more information, email for Patti James –

[flowergirlpj@charter.net](mailto:flowergirlpj@charter.net)

### European Orchid Conference and Show in Padua

(about 20 kilometers from Venice),

Italy, February 15-19, 2006; for details refer to their web-site,

[www.eoc2006.org](http://www.eoc2006.org).

### Paph Forum

February 18, 2006, National Arboretum, Washington, D.C.

### American Orchid Society Members Meeting

Orlando, Florida, April 5-9, 2006;

web-site [www.aosorchidmagic.com](http://www.aosorchidmagic.com); registration: Emily Clarkson, 4713 Foxshire Cr., Tampa, FL 33624; 813-968-3402

(Of particular interest to SOA members are the following speakers: Terry Root, Orchid Zone – “West Coast Paphiopedilums”; Norito Hasegawa, Paphanatics – “Paph Species and Their Influence on Their Hybrids”; Alan Moon, formerly of the Eric Young Foundation – “The Changing World of Orchids”; Christopher Purver, Director of the Eric Young Foundation – title of talk not announced yet; Harold Koopowitz, Editor in Chief of the *Orchid Digest* – title of talk not announced yet.)

them a pale, veiny complexion, considered beautiful in their world; “**venustus**” and “**venosus**,” perhaps are linked.

**Venus** was supposedly born on the island of **Cyprus** (Kypros), therefore her other name, **Cypria** (Kypria). Add the name for shoe, “**pedilon**,” and you have **Cypri-pedilum**, the shoe of Venus. The German speaking world calls this plant “*Venus - Frauen - Schuh*,” translated as Venus - Woman/Lady - Shoe/Slipper.

The other name for Venus is “**Aphrodite**”; it is related to the old Greek word “**Aphros**” which means foam. It means “**the one of the foam**” and refers to her being born of the foam of the sea. One could call her “**Foamy**.” The word “**Aphros**,” by dropping the “**A**” and pronouncing the “**ph**” as “**f**,” gives us the word fros, “**froth**” or foam in English.

While there are no Orchids named with “**Aphrodite**,” the well known herb “**Rosemary**,” or by its scientific name, *Rosmarinus officinalis*, has its origin in that name. The “**Ros**” part of the name is Latin-based and refers to foam. The “**Marinus**” part is derived from the Latin word for sea. *Rosmarinus*, therefore, is not named for some enamored botanist’s lady-friend, but rather it describes where the plant likes to grow, that is, near the seashore, in sight of the “**Foam**”

of the sea (in this case the Mediterranean Sea) where the lovely “**Rosemary**” has its, or dare I say, her home.

**Paphiopedilum**, where “**pedilum**” again means slipper, is based on yet another name for **Venus**, **Paphina**. It refers to a temple on Paphos where Aphrodite was worshiped.

**Phragmipedium**, the South American member of the slipper orchids, has its name not making reference to its unequally shaped shoe-like lip, but rather to a part of the ovary. “**Phragma**” means broken or apart, referring to a separation wall in the ovary. “**Pedilon**” is shoe. Therefore, “**Broken-Shoe**” with a separated ovary.

If you disagree with my twisting of words, please drop me a line or two, at [wbischoff@telus.net](mailto:wbischoff@telus.net).

William Bischoff  
Vancouver Orchid Society

## Brachy and Parvi Hybridizing and Culture

When I first started growing Paphiopedilums back in 1973, I was immediately attracted to the big and beautiful complex hybrids. At that time, seedlings were difficult to acquire and they didn’t breed readily. After several years of trying to build a collection, I realized that I had to grow hundreds of seedlings to get a handful of hybrids that were an improvement over their parents.

It seemed that great strides came at about 20-year intervals and usually produced hybrids that were poor or reluctant breeders. I decided I could do better, but first I needed to take a hard look at the past so I could avoid those same pitfalls.

It turns out that in the beginning there were four species of *Paphs* that became the backbone of most complex hybrids. They were *insigne*, *barbatum*, *villosum* and *spicerianum*. These four species are probably some of the most poorly shaped *Paphs* that I can think of for developing a long-term breeding line. They also have different chromosome numbers which means they are not very closely related. Since these four species were all they had to work with 200 years ago, I am very impressed with the outcome. This is a great lesson in the power of selection that Darwin tried to tell us about.

But, being an “idealistic” young man, I thought that I could do better. I went on a search for new species that could build a long-term breeding line and avoid the pitfalls of the lines based on “The Fearful Four”. I wanted a group that was closely related to avoid the infertility of the complex hybrids. I also wanted a group that already had good shape, size, and color because I wanted to shorten that 200 year process so I

could maybe live to see the outcome.

I chose *Brachypetalums* and *Parvisepilums* to be the species that would build the backbone of my breeding line. They all have a chromosome number of 26; which just means that they are probably closely related. This should solve the fertility issue. This group also has good shape, size and color and with the Parvis, great stems!

Lets run through the species and take a look at what characteristics they impart to their progeny, and then we will look at some of their hybrids that just keep showing up in the background of the best hybrids that exist today.

### ***Brachypetalum* species:**

***Paph. bellatulum***: passes on great size, shape and color. Its weakness is the short stem that it passes on.

*Bellatulum* makes big, flat red as well as white hybrids and is probably in over half of the Brachy hybrids out there. It always adds great substance to its progeny.

***Paph. concolor***: great color, good shape, good stem but it can reduce size. *Paph. concolor* is best used via hybrids with yellow *bellatulums* and yellow *leucochilums*. *Paph. Conco-bellatulum* makes hybrids like James Bacon which opens yellow and stays yellow unlike Wellesleyanum hybrids that usually open yellow but soon turn white.

***Paph. niveum***: great color, great shape, breeds big size and great stem. Even though this species is just about 2 inches across, it breeds big. It is in the background of almost all of the big white complexes of today. It really breeds big when you use it via Psyche and Greyi which you'll see popping up over and over in the parentage of great Brachy hybrids.

***Paph. leucochilum***: great on everything except its medium stem. This is probably the backbone of my backbone. *Paph. Skip Bartlett*, which has led to so many great complex white hybrids, is half *leucochilum*. This is probably the species that has produced the best Brachy hybrids as well.

### ***Parvisepalum* species:**

All of the parvis have great size, color and stem, but their shape isn't desirable because of the narrow dorsal sepals

which they tend to pass along to their hybrids.

***Paph. armeniacum***: great color, good size, good shape, great stem but it can reduce the substance of its progeny. A good breeder but does have a tendency to produce serrated edges on the top of the petals in the hybrids.

***Paph. micranthum***: great color, breeds big, tall stem, and although its shape isn't that good, it does make well-balanced progeny even in the first generation. *Micranthum* has made some of the reddest hybrids available. The challenge is to find hybrids of *micranthum* that breed readily to pass along the great color and stem.

***Paph. malipoense***: great all-around. This is the most primitive species in this group. You can tell by the earth tones of color in green and brown.

Because it is so primitive, it tends to not pass on its recessive hereditary traits. It also makes big flowers. For a hybridizer, it is comparable an artist having a big, blank canvas in that you can add color and form at will. I believe this will turn out to be the greatest Parvi species parent.

***Paph. delenatii***: great color, good size, good shape, great stem but it can reduce the substance of its progeny. Since this species has been around for so long, there have been many hybrids made with it. The hybrids made with *delenatii* tend to be reluctant breeders, but maybe that will change with all of the new Chinese clones.

***Paph. emersonii***: passes on great size, shape, color and a good stem. Its weakness is the progeny can be difficult to grow and it also seems to shorten the life span of the flowers. I think *Paph. hangianum* will end up being a better parent than *emersonii* if it ever becomes legal to obtain.

### ***Brachy X Brachy* Hybrids:**

***Paph. Wellesleyanum*** (*concolor X leucochilum*): registered in 1875, makes nice big yellow hybrids of good size but many of the progeny don't hold their yellow color to maturity.

***Paph. Greyi*** (*leucochilum X niveum*): registered in 1888, is a great parent and is a wonderful tool for introducing the good traits of *niveum* without losing size. You will see this often in the background of the great hybrids we have today.

***Paph. Conco-bellatulum*** (*concolor X bellatulum*): registered in 1891, makes big and beautiful yellow hybrids on good stems that tend to hold their yellow color to maturity.

***Paph. Psyche*** (*bellatulum X niveum*): (1893) Another way to introduce the good qualities of *niveum* without shrinking the size. You will also see this often in the background of the



great hybrids.

**Paph. S. Gratrix**  
(*bellatulum* X

*leucochilum*): (1898)  
The original clones that were awarded and painted were not that impressive but, when remade recently with *leucochilum*, this is a gorgeous hybrid and breeds very nice big, flat and colorful flowers.



**Paph. Virgo** (*leucochilum* X *Psyche*): (1921) Virgo is a great Brachy parent. I can't think of a bad Virgo hybrid. This is a hybrid that shows you the power of introducing *niveum* traits via *Psyche*.



**Paph. Otegozen**

(*bellatulum* X *S. Gratrix*): (1987). I don't understand the 66- year drought of Brachy X Brachy hybrids, but I would guess it has something to do with people thinking they had seen all of the possible combinations of these four species. I think it also has to do with the introduction of other *Paph* species that hybridizers were attracted to with their toothpicks. *Paph. Otegozen* hasn't been a great or prolific parent, but it should be after it has been around awhile.

**Paph. Bella Lucia** (*bellatulum* X *Wellesleyanum*): (1988)  
This cross is already one of the best Brachy parents and you'll see it in the background of several great hybrids. It makes some of the reddest hybrids I have ever seen.

**Paph. Muriel Constance** (*Greyi* X *bellatulum*): (1991) Has been used extensively in breeding and has produced many fine hybrids. This is a hybrid that shows you the power of introducing *niveum* traits via *Greyi*.

**Paph. James Bacon** (*Conco-bellatulum* X *leucochilum*): (1993) *Paph. James Bacon* has made some beautiful yellow hybrids that hold their color. This is one of the best *Paph. Conco-bellatulum* hybrids around.

**Paph. Double Trix** (*Double Shot* X *S. Gratrix*): (2000). "Double Shot" refers to two shots of *Paph. Psyche*. It is *Paph. Virgo*, which is half *Psyche*, back onto *Psyche*. So it has *bellatulum*, *niveum* and *leucochilum* all mixed up in a complex way.

**Paph. Triple Trix** (*Double Trix* X *Psyche*): (2004). Now we add another shot of *Paph. Psyche* and stand back. This straight Brachy has a 6 inch stem that doesn't even need to be staked up. Oh, it's also big, flat and shapely with great color and substance.

**Unnamed** (*James Bacon* X *Greyi*): This is a very well-shaped hybrid. The dorsal sepal is very wide and the flower looks like a complex hybrid even though it is only three generations away from the species. Here we see the influence of *niveum* via *Greyi* and the power of *leucochilum* via *James Bacon*.

**Unnamed** (*James Bacon* X *Virgo*) This breeding is similar to the previous cross, but it's *niveum* via *Psyche* via *Virgo*.

**Parvi X Parvi Hybrids:**

**Paph. Armeni White** (*armeniicum* X *delenatii*): (1987). Although this cross seems reluctant to breed, the few crosses that have come out of it are very nice and worth pursuing.

**Paph. Magic Lantern**  
(*micranthum* X *delenatii*): (1990) A beautiful flower but it is plagued with the infertility of *delenatii* hybrids.



**Paph. Lynleigh**

**Koopowitz** (*delenatii* X *malipoense*): (1991) This hybrid is lovely, has a very tall stem and seems to breed more readily than the previous two *delenatii* hybrids.

**Paph. Joyce Hasegawa** (*delenatii* X *emersonii*): (1991) A beautiful hybrid but it carries the growing challenges of *emersonii* and the shy-breeder syndrome from *delenatii*.

**Paph. Mem. Larry Heuer** (*emersonii* X *malipoense*): (1991) One of the biggest primary hybrids in this group. Many clones are six inches across and impart this size to their progeny. It's not as shy a breeder as the previous Parvi X Parvi hybrids, so I have great hopes for this cross as a parent.

**Paph. Norito Hasegawa** (*malipoense* X *armeniicum*): (1992) This cross seems to breed readily, but I haven't seen enough progeny to decide on my long-term expectations.

**Paph. Fumi's Delight** (*armeniicum* X *micranthum*): (1994) A beautiful flower, but it is way too early to tell what its hereditary traits are going to be. Notice how great the flower shape and balance is in just the first generation of breeding with *micranthum*!

**Paph. Fanaticum**

(*malipoense* X *micranthum*): (1999) My favorite Parvi X Parvi to breed with. It breeds quite readily and since both parents make such beautiful hybrids, I don't think you can go wrong using it as a parent anywhere in this group.



**Brachy X Parvi Hybrids:****Paph. Kevin Porter**

(*bellatulum* X *micranthum*): (1990)

This cross has produced some gorgeous flowers. They can be few and far between, but the good ones are great. The drawbacks are the low percentage of quality flowers, short stems and its reluctance to breed.



All of that makes sense after looking at the parentage, but the color is beyond great.

**Paph. Wossner Perle** (*niveum* X *micranthum*): (1991) Beautiful flower! We don't know yet how it will act as a parent, but we see the power of *niveum* and how *micranthum* can throw good shape in the first generation. I have seen many *niveum* by Parvi hybrids and I think *niveum* will end up being the best Brachy to mix with the Parvis. We should probably use it via Greyi, Psyche or Virgo.

**Paph. Ma Belle** (*malipoense* x *bellatulum*): (1992). A beautiful combination of two "tried and true" parents. I hope it turns out to be a good parent, but the jury is still out.

**Paph. Kabuki Moon** (*Virgo* x *emersonii*): (1992) We still don't know its value as a parent, but again we have *niveum* via Psyche via Virgo, a proven combination. I think this will be a long line of breeding.

**Paph. Wossner**

**Bellarmi** (*bellatulum* x *armeniicum*): (1992)

This has to be the finest pure color hybrid that I have seen. This is amazing for a primary hybrid and if it ends up being a good breeder, look out!



**Paph. Sugar Suite** (*emersonii* x *niveum*): (1993) Here we see what a great Brachy parent *niveum* is when mixed with the Parvis.

**Paph. Wintermoon**

(*Greyi* x *emersonii*):

(1995) What a beautiful hybrid! *Paph. niveum* via Greyi onto a Parvi. Gorgeous!

**Paph. Green Smoke**

(*malipoense* x *Greyi*): (1996) Similar to the previous cross and BEAUTIFUL!

**Paph. Raspberry**

**Rhapsody** (*Bella Lucia* X *micranthum*):

Although good pictures of this flower are hard to find, they are worth looking for just so you can see the red color that is attainable with this kind of breeding.

**Paph. Mem. Mark Johnson** (*Armeni White* x *Virgo*): (1998) One of the few *Armeni White* hybrids around. I think the power comes from *niveum* via Psyche via Virgo.

**Paph. Muy Mal**

(*malipoense* X Double

*Trix*): (2004) Stand Back! This hybrid blooms in a two-inch pot with six-inch flowers.

Good stem, color, and fertility as well. The real beauty is we can cross this back to either Brachys or Parvis and expect great flowers either way.

**Brachy and Parvi Culture:**

Both of these groups need less of everything than we thought in the past. I just have two big overall tips. For one, the plants don't read the books! Since they don't read the books, we have to read the plants. After you water or fertilize, go back and check on them in an hour or so and just look at the "perkiness" of the whole group. You will see if you did it right or not. If they ain't broke, don't fix 'em. The second tip is to stay consistent in your culture. These plants are very adaptive, so if you do everything in a consistent manner on a regular basis, the plants will adapt. If you're overwatering, they will send their roots to the perimeter of the pot to get more air. If you're consistent with your mix, they will adjust to it.

**Light** – 900-1200 footcandles at the brightest time of the day.

**Temperature** – Air temperature doesn't seem to matter, but root temperatures need to be 65 to 68 degrees. This is easily accomplished with hot water heat under the bench.

**Humidity** – Minimum 65%

**Watering** – This group does better when the roots are allowed to dry out periodically.

**Fertilizer** – Half-strength every third watering. The important points are to water before fertilizing and to not let the roots

dry out before the next watering. So make sure you're watering right after a fertilizing is done before the roots dry out. Then you can let the roots go dry before the next two waterings.

**Pesticides** – I don't use ANY bactericides or fungicides on this group. Brachys are notorious for developing rots, and to build disease-resistance into this breeding line we need to refrain from the constant use of these pesticides. Also, these orchids are in the most primitive group. They are not that high above a fungus or bacteria on the evolutionary ladder, so those chemicals can be deleterious to their health, especially the systemic types which are absorbed by the plants.

**Mix** – 7 parts fine fir bark, 1 part horticultural sand, 1 part perlite or lava rock, 1 part fine horticultural charcoal.

I mix the fir bark with hot water first to get it wet. Then I add the sand and mix it with the bark so that each piece of bark gets coated with the sand. This keeps the bark from clumping together and decomposing prematurely. The perlite or lava rock absorb water quite readily even if they are dry. So they grab the water quickly and give it back to the bark slowly. Dry fir bark is very hard to get wet quickly. I can't tell you scientifically what purpose the charcoal serves except it makes me feel better and seems to help.

*Nick Tannaci*  
*Nick Tannaci Orchids*  
*Watsonville, CA 95076*  
*www.tannaci.com*

*Nick Tannaci was the SOA sponsored speaker at the recent AOS Members Meeting in Sonoma, CA. This article is from his presentation at the meeting.*

## Growing Paph. Gloria Naugle 'Great Bowden' HCC/AOS

My thanks to the SOA for sponsoring the trophy for the best grown slipper orchid at the recent "Orchids In The Wine Country" Show & Fall AOS Members Meeting. It was a fantastic event in the beautiful surroundings of Sonoma wine country, and I hope that many SOA members were able to come and enjoy it.

Since acquiring my first orchid 25 years ago at the age of thirteen, my collection has grown to a bit over 300 plants, about two thirds of which are slipper orchids. Though I focus on the species, I do make room for many hybrids, especially



**Paph. Gloria Naugle 'Great Bowden' HCC**  
Photography by Kathy Barrett

primary hybrids. To me, Paph. Gloria Naugle (*micranthum* x *rothschildianum*) is an essential addition to any slipper collection. Good clones exhibit the best qualities of each parent: rich, harmonious colors and patterning; flowers which are esthetically well-balanced with good size and symmetry; flower stems that are sturdy, long and upright. The *micranthum* parent brings the plant size down considerably. The downside is that, like *micranthum*, the flowers are not very long-lasting – expect to enjoy them for three to four weeks.

I do not find that this hybrid has any special cultural requirements. My temperatures are on the cool side of intermediate, dropping to around 50 degrees in the winter. I find it a bit slow-growing; I think that it would probably do better somewhat warmer, at least in the summer. I fertilize with Jerry's Grow, with a small amount of Dyna-Gro Pro-TeKt to bring the pH to the 6.5-7.0 range.

My potting mix is primarily a 50/50 split between bark and coconut husk chips. For the size of pot this plant is in (3.5 inch), I use a 50/50 mix of small and medium components of the bark and coconut. This makes up about 85% of the mix. The remainder is medium perlite and medium diatomite.

Note that new coconut husk chips typically contain a high (sometimes *very* high) level of salts, and must be thoroughly leached. I soak it for between three and seven days (depending on the salt content) with daily water changes before using it.

Since its registration in 1993, Paph. Gloria Naugle has earned many awards and has been remade numerous times with parents of excellent quality. Today, it is not difficult to find, and I hope that every slipper orchid grower will find room for it in his or her collection.

*Jonathan Riley*  
*Sebastopol, California*



**Paph. Maudiae 'Magnificum' CCM 84**  
Photography by Les Werner

## SOA Trophy Winner at National Capitol Show

Russ Bolt returned to the National Capitol Show on October 8, 2005, to sell plants for Owens Orchids. As he was getting ready to leave he decided to take his Paph. Maudiae 'Magnificum' which he had brought to his home earlier when he and his wife were having dinner guests. Little did he realize that the last minute addition would receive the SOA trophy for best slipper orchid in the show and a CCM of 84 points! However Russ was a little disappointed. Just the year before he had divided Paph. Maudiae and the plant which he brought to the show was one-fourth of the original plant. Guess that he will just have to grow this one for a few more years and get a CCE!

## The species status of *Paphiopedilum platyphyllum*

### Introduction

I wrote an article in the Orchid Digest (vol 67 no, 3) in 2003 and want to revisit the status of *Paph. platyphyllum*. For those of you who have not read the article I will give the following synopsis:

There has been a lot of confusion regarding the name of a multifloral paphiopedilum in the section Coryopedilum that is closely related to *Paphiopedilum stonei* (Hook.) Stein and *Paphiopedilum kolopakingii* (Fowlie). This plant was originally known as *Paphiopedilum stonei* var. *latifolium*, but according to Phillip Cribb (1998), curator of the Orchid Herbarium at the Kew Royal Botanic Gardens and writer of the Genus *Paphiopedilum*, Second Edition, it was best treated as a cultivar of *Paph. stonei* as it had occurred from a single plant in introduction into cultivation. According to Fumimasa Sugiyama (2000) this is not the case as when this plant was discovered it was found in a population of about 30 plants. From this population 20 plants were brought back into cultivation. Later this plant has been known in the nursery



**Paph. platyphyllum 'Long Petals'**



**Paph. platyphyllum 'Tonka'**



**Paph. Platy Swith 'Maxima'**



**Paph. Fumimasa Sugiyama 'Golden Fleece'**



**Paph. Taiwan (rothschildianum x platyphyllum)**

business under a variety of names, like *Paph. stonei* var. *latifolium*, *Paph. kolopakingii*. (compact form), *Paph. fumii*, and *Paph. sugiyamii*. Some people considered this plant to be either a man made hybrid with *Paph. stonei* and some other Paph, or a natural hybrid between *Paph. stonei* and *Paph. kolopakingii*. Even though it looks very similar to the man-made hybrid *Paph. Memoria Albert Eickhoff* (*Paph. kolopakingii* x *Paph. stonei*), I think it is different enough to

warrant a species rank. T. Yukawa believed this to be true as well and that this plant was distinct enough from *Paph. stonei* that it could be described as a separate species: *Paphiopedilum platyphyllum* T. Yukawa in: Die Orchidee 52 (1): 84-86 (2001).

### History

According to Yukawa's article (Yukawa, 2001), *Paph. platyphyllum* was discovered by Mr. Toyoshima in Sarawak on the island of Borneo in April 1964. According to Fumimasa Sugiyama the original plants of *Paph. platyphyllum* were discovered and collected by Dr. Yoshishige Tachibana on April 25, 1964. A population of about 30 *Paphiopedilum* plants on a limestone rock in front of a huge cave on the mountain of Bukit Kana on the island of Borneo at an elevation of 800 m. Dr. Tachibana collected about 20 plants, of which 15 plants were given to Fumimasa Sugiyama of Yamato-Noen Orchids. (personal communication of Fumimasa Sugiyama, 2000).

A few years after Fumimasa Sugiyama received his plants, he sent a division to Norwood Schafer in Baltimore, Maryland as an unknown species. It was then sent to George Kennedy, California. George Kennedy named this plant *Paph. stonei* var. *latifolium* 'Ruth Kennedy'. It received an Honorable Class Certificate (HCC) on March 12, 1979 from the American Orchid Society (AOS) and an Award of Merit (AM) from the AOS in 1981 (personal communication of Fumimasa Sugiyama, 2000).

After *Paph. kolopakingii* was discovered and described in 1987 it was noted that the plant George Kennedy named *Paph. stonei* var. *latifolium* 'Ruth Kennedy' showed a very close affinity to *Paph. kolopakingii*. It was even suggested that 'Ruth Kennedy' was possibly a hybrid between *Paph. kolopakingii* and *Paph. stonei*, but according to Braem (1998), after an examination of the flowers this could not be confirmed.

According to Koopowitz (2000), the clone 'Ruth Kennedy' is more closely related to *Paph. kolopakingii*, but has a dorsal sepal with obvious *Paph. stonei* affinities. This clone has been selfed and used for hybridization. Its progeny are widely cultivated under the name of *Paph. stonei* var. *latifolium*, and its hybrids are registered under the name *Paph. stonei*, creating a certain amount of confusion. Koopowitz suggests that as these plants are different enough from *Paph. stonei* or *Paph. kolopakingii* and breed true they should be described as a separate species.

From the original 15 plants that Fumimasa Sugiyama received, both selfings and sibling crosses were made. All offspring from these crosses tended to look almost identical to the parents, and not much variation was present within the offspring. This gives more evidence that we are dealing with a true species and not with a hybrid between *Paph. kolopakingii* and *Paph. stonei* (personal communication of

Jerry Fischer, 2002).

### Overall Description of *Paph. platyphyllum*

Plants grow as epiphytes in leaf mold in rock cracks and crevices on limestone rocks. Rhizomes are short, and growth habit is tufted. Roots are fleshy, generally up to 40 cm long by about 1 cm in diameter. Each growth bears up to seven leaves. The leaves are 40 – 60 cm long and up to 9 cm wide, most often deep green, with lighter green bands running through the leaves. The inflorescence is erect to suberect, 30 to 50 cm long by about 0.8 cm in diameter. Each inflorescence has up to six to eight flowers, which usually are all open at the same time. Each flower is up to 10 to 14 cm across. The front of the floral bract has a white to light tan background with two to three prominent veins that are distinct, as they have dark brown to black markings. The backside of the dorsal sepal is tan to light brown in the center and has a 0.5 cm lighter colored to almost white edge. In the edge there are one to two darker colored veins. The petals are ribbon like and twisted, 14 to 18 cm long, 0.6 cm at the widest, divaricate at the base at about 45°, and then become pendulous. The petals are covered with warts that are more prominent at the base. Towards the tip the petals have linear brown to purple spots. The lip is light yellow to tan in color, distally with brownish venation. A chromosome count of the root tips indicated that *Paph. platyphyllum* has 26 chromosomes.

### Differentiation

Although the plant habit of *Paph. platyphyllum* resembles more closely to *Paph. kolopakingii*, I do believe *Paph. platyphyllum* is more closely related to *Paph. stonei*. In general the plants of *Paph. platyphyllum* are more compact, with shorter inflorescences, with less flowers (up to 5 to 7 flowers) compared to *Paph. kolopakingii* (up to 15 flowers). When the flowers of *P. platyphyllum* are compared to *Paph. kolopakingii* the first difference one notices are the longer pendulous twisted petals that have large warts on the upper part of the petals. The petals of *Paph. kolopakingii* lack any warts on the petals and are much shorter (up to 10.8 cm long). The flowers of *Paph. platyphyllum* are tan to light brown in color, as the flowers of *Paph. kolopakingii* are greener in color.

*Paph. platyphyllum* differs from *Paph. stonei* both in its plant habit and in the appearance of the flowers. *Paph. platyphyllum* is a more compact plant with wider leaves (up to 60 cm long and 9 cm wide), as *Paph. stonei* is less compact and has longer and narrower leaves (up to 70 cm long and 4.5 cm wide). The inflorescence of *Paph. platyphyllum* is shorter and more compact compared to *Paph. stonei*. The main difference in the flowers of the two species is the color and size. The flowers of *Paph. stonei* are more brightly colored, with a higher contrast between the floral parts; the dorsal petal has a almost pure white background, and it is accented

with dark, almost black stripes. The labellum (pouch) is almost a dark pink. The flowers of *Paph. platyphyllum* are less contrasting in color and have a tan to light brown background. There is also a difference between the form and shape of the flowers, between the two species: The flowers of *Paph. stonei* are larger, with a larger dorsal sepal and larger pouch. The dorsal sepal of *Paph. stonei* is flat, while the dorsal sepal of *Paph. platyphyllum* is recurved along the edges. The petals of *Paph. platyphyllum* are longer and narrower (14 to 18 cm long, and 0.4 to 0.6 wide) compared to *Paph. stonei* (10 to 15 cm long and 0.4 to 0.7 cm wide). Also the petals of *Paph. stonei* seem to curl and twist more compared to *Paph. platyphyllum*. I have also noticed that the pouch of *Paph. platyphyllum* is often at an angle compared to the rest of the flower, but I don't know if that is a general characteristic or not. The tip of the staminodal shield differs between the two species. The staminodal shield of *Paph. stonei* is rounded at the tip, and in some instances has a tooth at the tip, while the staminodal shield of *Paph. platyphyllum* is indented at the tip, with two teeth, one on either side of the indentation.

### Distribution

Until now *Paphiopedilum platyphyllum* has been found only near the summit of Bukit Kana in Sawawak, Borneo. Sarawak is relatively flat, with a few isolated outcrops of highly eroded limestone mountains. The distance to the nearest mountain from Bukit Kana is over 60 Kilometers. The land between the mountains is flat and the vegetation on the mountains is fairly isolated. The vegetation on the lowlands is very similar everywhere and uninteresting. However on Bukit Kana above 500 meters elevation, the vegetation becomes more interesting, with different plants compared to the lowlands. At this location it rains twice everyday all year round and the humidity is very high (Sugiyama, 2000).

The distribution of *Paph. kolopakingii* is in central Kalimantan at 600 to 1100 meters altitude on the island of Borneo. This area lies further to the south compared to where *Paph. platyphyllum* was found. Also the fact that until now *Paph. platyphyllum* has only been found on one mountain, which was isolated from any other mountains might mean that *Paph. platyphyllum* at one time was closely related to *Paph. stonei* and *Paph. kolopakingii*, but has been separated from both species for long enough so it became a separate species.

### Conclusions and Final Remarks

*Paph. platyphyllum* has been collected in a different location on the island of Borneo from where *Paph. stonei* grows, and based on morphological differences in plant habit and flower shape and color, and differences in breeding behavior we conclude that *Paph. platyphyllum* is different enough from

*Paph. stonei* to consider it to be a separate species.

Guido Braem (2003) still does not believe there is enough evidence to warrant a species level to *Paph. platyphyllum*, and believes that it is either a man made hybrid or a natural hybrid. My opinion is that it is a true species, but that it is very closely related to *Paph. stonei* and *Paph. kolopakingii*, but as it became an isolated population thousands of years ago, it became its own species. To find out the true nature of this species the only thing we can do is to go back to the same location and find out if there are still plants of *Paph. platyphyllum* growing in the wild, and also if there are any other plants of this species growing in other locations.

Based on the information I wrote in the Orchid Digest, Phillip Cribb had agreed to recognize *Paph. platyphyllum* for registration (Cribb, 2002). This means that all grexes made with *Paph. platyphyllum* as a parent, that have been registered in the past under *Paph. stonei* have been amended, and in future grexes made with *Paph. platyphyllum* will be accepted by the registrar (Shaw, 2002b). Since I originally wrote this article for the Orchid Digest, 11 hybrids have been registered using *Paph. platyphyllum* as a parent.

### Literature

- Braem, G. J., Baker, C. O., Baker, M. L. (1998). The genus *Paphiopedilum*, natural history and cultivation. Volume 1. Botanical Publishers Inc.
- Braem, G.J., and G.R. Chiron. *Paphiopedilum*. Tropicalia. 440 pp.
- Cribb, P. (2002). Personal Communication.
- Fischer, J. L. (2002) Personal communication.
- Koopowitz, H. (2000). A revised checklist of the genus *Paphiopedilum*. Orchid Digest (64) p. 155 – 179.
- Quene, R. W. (2003) *Paphiopedilum platyphyllum* is a separate species. Orchid Digest (67, No. 3) p. 152 - 156
- Shaw, J. M. H. (2002a). Royal Horticultural Society. Registrar's Notes. Orch. Rev. Suppl. (July 2002).
- Shaw, J. M. H. (2002b). Personal communication.
- Sugiyama, F. (2000). Personal communication
- Yukawa, T. Die Orchidee 52, 1 :84 (2001)

Dr. Robert-Jan W. Quene  
Orchids Limited

## Supporting Members

In each issue of our newsletter we like to recognize and thank our supporting members. Each one of these businesses continues to support our efforts to have an outreach program for all slipper growers. If you are interested in becoming a supporting member, please contact Jean Metcalf at orchidiva@yahoo.com. We also hope that each of our members will support these businesses.

Antec Labs, Bob and Lynn Wellenstein  
 B & B Orchids, Bob Ellis  
 Barron's Greenhouse, Jack Barron  
 Berkshire Orchids, Ann Levine  
 Celebrate Orchids!, Barbara Noe  
 Fishing Creek Orchids, Stephen Male  
 Flasks by Chuck Acker, Chuck Acker  
 Fox Valley Orchids, Ltd., Tom Kalina  
 Glendale Botanicals, Robert Gennari  
 Gypsy Glen Orchids, Dennis D'Alessandro  
 Herb Windom  
 Hilo Orchid Farm, James Fang  
 James L. Newsome, MD  
 Ken's Orchid Studio, Ken Smiegowski  
 Marlow's Orchids, Jim Marlow  
 Marriott Orchids, Hadley Cash  
 McLellan Botanicals/Taisuco America  
 Michael L. Ault, MD  
 Nicky Zurcher  
 Orchid Inn, Ltd., Sam Tsui  
 Orchidaceae, Mark Snull and Joan Bateman  
 Orchidbabies, LLC, Earl and Phyllis Bailey  
 Orchids Limited, Jerry and Yoko Fischer  
 Orchidview Orchids, HP Norton  
 Paphanatics, unLimited, Norito Hasegawa  
 Pinecrest Orchids, Leon Blumreich  
 Piping Rock Orchids, Glen F. Decker  
 R. K. Gems, Rod Knowles  
 Ratcliffe Orchids, LLC, Paul and Mary Phillips  
 Seagrove Orchids, LLC, Linda Thorne  
 Slipper Orchid Study Group of Florida  
 Steve Heibling  
 The Slipper Orchid Forum

Tindara Orchids, Frank Coppolino  
 Tonkin Orchids, Inc., Valerie Tonkin  
 Tyler Orchids and Tropicals, Russell M. Tyler, Ph. D.  
 Whippoorwill Orchids, Tom and Barbara Larkin  
 Windy Hill Gardens, Marilyn and Brian LeDoux  
 Woodstream Orchids, Bill and Lynn Evans-Goldner  
 Zephyrus Orchids, John and Nicole Doherty

## SOA DIRECTORY

President: Barbara Tisherman, Pittsburgh, PA; (412) 683-0207; btisherman@aol.com

Vice President: Thomas Larkin, Rogers, AR; (501) 925-2228; wiprLark@cs.com

Secretary: Dr. Albert Svoboda, Santa Barbara, CA; (805) 969-4536; Asvoboda@earthlink.net

Treasurer: Linda Thorne, Seagrove, NC; (336) 879-6677, orchidlinda@rtmc.net.

Director: Jerry Fischer, Plymouth, MN; (763) 559-6425; orchids@orchidweb.com

Director: Richard Grundy, Santa Rosa, CA; (707) 570-2828; richardgrundy@att.net

Director: Alice Barrios, Gretna, LA; (504) 227-1127; orchidgal@cox.net

Webmaster: Rod Knowles, Brainerd, MN; (218) 829-4840; rkgems@brainerd.net

Newsletter Editor: Janette Harris, Westfield, NC; (336) 351-3945; jaharris@surry.net

Membership Secretary: Jean Metcalf, Erie, PA; (814) 366-3437; orchidiva@yahoo.com

## Do you love Cymbidiums and Paphiopedilums?

### The Cymbidium Society of America invites you to join

Membership includes six issues of the colorful CSA Journal magazine

**Current annual dues: US\$30.00 (includes overseas surface postage) - add \$20.00 for overseas airmail**

**[VISA, MASTERCARD, JCB or checks in US funds only]**

**c/o Kenneth Jacobsen, Membership Secretary, 195 Exter Ave., San Carlos, CA 94070**

**E-mail: ackpj@yahoo.com**