



The Slipper Orchid Alliance Newsletter

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The Moon Slipper – *Paphiopedilum hangianum*

In spring of 1999, Olaf Gruss, in Bavaria, Germany, received a surprise parcel that included 35 mm slides, a cut flower of huge proportions, and a cut leaf of an unknown paphiopedilum. The sender had asked him to determine whether it might be a hybrid. It had some resemblance to *Paphiopedilum* Larry Heuer, the horticultural hybrid of *Paph. malipoense* x *Paph. emersonii*, but was clearly different, and most likely a new species. Olaf asked me to join him in publishing the description of this magnificent new slipper orchid. In case it would be identified as a new species, the grower of the plant had asked to name it after a Vietnamese lady named Tong-Ngoc Hang. In late April, 2000, it was published as *Paphiopedilum hangianum* in Supplement No. 6 of *Die Orchidee*, the magazine of the German Orchid Society. The dried type material from the parcel was deposited in the Herbarium of the Botanical Garden, Halle.

Unlike the case with the published description of *Phragmipedium kovachii* in the U.S., no living material was used for the description and formal publication in Germany, nor was it owned, handled, imported or accepted by the

authors. Despite this, the publication caused a long legal struggle, including police investigations and court hearings. The court issued a fine for CITES (Convention on International Trade in Endangered Species) violation; although the parcel had not been requested by Gruss, it contained illegal material and was accepted by the addressee, with the dried flower and leaf subsequently deposited in the herbarium. An amusing side note: a few years later, German television, inspired from the trouble stirred up by the publication of the new slipper orchid, created a fancy story—murder included, of course—for an episode of a long-running TV-crime series.

I first encountered a living *Paphiopedilum hangianum* after I moved to China in 2001. Specimens were offered at an orchid show in my new home town, Chengdu, and I have cultivated this species ever since. A new paphiopedilum of supposedly southern Yunnan, China, origin was described in 2000 as *Paphiopedilum singchii* (Liu and Zhang, 2000). *Paphiopedilum singchii* turned out to be the same species as *Paph. hangianum*, and its name therefore is considered a synonym. Some time later I visited Wenshan, in southeast Yunnan, and talked to botanists of the local college about habitats of paphiopedilums in the region. They confirmed that despite the heavy clearing of natural vegetation such areas are still around, some quite close to the Vietnamese border, where several *Paphiopedilum* species grow in undisturbed primary vegetation. The botanists introduced me to a local orchid grower who had mainly cymbidiums in his backyard, but also a few paphiopedilums, including *Paph. hangianum*. I suggested that these plants most likely would have their origin in nearby Vietnam, but the orchid grower emphatically confirmed that a friend from Malipo had collected these plants near Malipo in Yunnan. Though doubts remain, I am inclined to believe that statement. Regular *Paph. hangianum* can be found in flower markets in several cities of Southwestern China, and dealers usually tell you without hesitation that their plants are from Vietnam. Imported plants sell better than local 'weeds'. Furthermore, the mentioned locality near Malipo is just about 60 km northeast of the

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confirmed Vietnamese populations of *Paph. hangianum*. This is likely the source for the plant described as *Paphiopedilum singchii*.



Habitat of *Paph. hangianum*

Wild orchids are not currently protected by law in China, as long as they grow outside of nature conservation areas. Thus the plants in that private collection are legal to keep in China. Of course, their export from China would be illegal, because China has long been a signatory of CITES. Due to activities of conservation-minded people, such as my friend Prof. Dr. Yibo Luo, from the Institute of Botany, in Beijing, the Chinese government has prepared a bill that will secure the full legal protection of wild growing orchids, no matter where they grow in China. This will protect the genera *Paphiopedilum*, *Cypripedium*, *Dendrobium* and *Pleione* in due course.

My first trip to Vietnam brought me to Hanoi in early spring of 2003. I was there to attend an IUCN (World Conservation Union) workshop on behalf of my employer, the Huanglong Nature Reserve, Sichuan. On this occasion I met Prof. Dr. Xuen-Nhu Dang, Director of the Center of Experimental Biology, National Center for Technological Progress. Prof. Dang is a plant physiologist and runs a project for ex-situ conservation of native Vietnamese *Paphiopedilum* species. I learned several new details from her about *Paphiopedilum hangianum*. Most amazing was that the Vietnamese family name Hang is based on Hang Nga, the mystic moon fairy, who is said to reside in a palace on the moon. This means that *Paphiopedilum hangianum* can be dedicated to the moon, a fitting analogy in shape and color!

In the March, 2005, issue of *Orchids*, the magazine of the American Orchid Society, Leonid Averyanov and his Vietnamese colleagues Nguyen T. Hiep and Phan Ke Loc (Averyanov et al. 2005) introduced details of the ecology of *Paphiopedilum emersonii* and *Paphiopedilum hangianum*,

which confirmed what I learned in Vietnam. The known distribution of *Paph. hangianum* extends from about 75 km southeast of Malipo and approximately 45 km southeast of the Chinese border in northeast Tuyen Quang and northwest Bac Kan. I was told that *Paph. hangianum* is very abundant in this area of about 90 by 60 km, but is not known from anywhere else. However, recent reports from Vietnam indicate that new populations were found northwest of this area, somewhere towards or in the province of Ha Giang. The mass commercial exploitation of this slipper orchid in Vietnam undoubtedly has already destroyed most populations. I saw thousands of freshly collected *Paph. hangianum* during my visit in Hanoi. Depletion of the declining *Paph. hangianum* populations continues today, even though collecting wild orchids has been illegal in Vietnam for years! When I met Leonid Averyanov at the 8th Pacific Orchid Conference, in Tainan, Taiwan, in spring, 2004, he told me that wild-collected *Paph. hangianum* in flower are even offered as ornamentals, bought on the streets by gentlemen as a present for their ladies. In his charming style, Leonid stated that he is in full accordance with the habit of buying beautiful flowers for beautiful women. But he pleaded: these guys should please buy roses or lilies for



Plants of *Paph. hangianum* growing in the wild

their beloved, not wild collected *Paph. hangianum* plants that are prone to death in a vase!

What strikes you at first glance when you see wild-collected *Paph. hangianum* is the pendulous habit of the long leaves, as well as the coating of algae and small lichens on the leaves' surface. Not surprisingly, reports from the habitats, as well as *in situ* photos, reveal that *Paph. hangianum* grows on vertical limestone cliffs, usually in rather shady and humid conditions. Here the leaves can reach more than 11.8 inches (30 cm) in length and 1.6 to 2.8 inches

Upcoming Events

Paph Forum
February 16, 2008
National Arboretum
Washington DC

A day to celebrate all things having to do with slippers....speakers, show table, AOS judging, vendors. More info in next newsletter.



Comparison of Paph. emersonii and Paph. hangianum flowers

(4 to 7 cm) in width. They are slightly glossy, uniformly green with a faint underlying and finely textured dark green tessellation. The underside is uniformly whitish-green and lacks any reddish pigmentation at the leaf base.

The flowers open ivory to greenish-yellow and often darken to a deeper yellow within a few days. They are usually between 3.9 to 5.5 inches (10 to 14 cm) wide. The biggest flower known so far had a spread of 7.5 inches (19 cm), but the shape was less full, that is, it was much wider than high. In good forms, with fully spreading sepals and petals, the flower is only slightly wider than high and thus has a rather round shape. Inferior forms have segments that do not spread fully, they are subcampanulate, which means slightly bell-shaped, or they have short upper sepals and/or slightly twisted petals. The greenish-yellow to yellow coloration is rather uniform but usually overlaid with deep red at the base of the petals. This coloration can, in some specimens, reach out towards the middle of the petals, forming a red tessellation, and can spread to the base of the upper sepal. A rather



This specimen of Paph. hangianum grew 4 years in pure perlite and flowered for the first time November 13, 2006, an unusual flowering time for the species.

prominent feature of each flower is the broad staminode the size of a man's thumbnail. Its' base color is ivory white with a greenish-yellow tip, and it is heavily patterned with a dark red tessellation. The pouch is always unicolored outside but has bold deep magenta spotting inside. The entire flower surface, except for the staminode, is covered by very short hairs, which results in a velvet-like appearance of the flower.



A spread of 6.3 inches (16 cm) was measured with this flower at Hengduan Mts. Biotechnology in Chengdu, Sichuan, when it flowered in May 2007.

As if that were not enough, this striking flower is also fragrant and emits a sweetish perfume with a spicy note.

From the leaves and the flower it becomes evident that *Paph. hangianum* is a close relative of *Paph. emersonii*. Leonid Averyanov and Phillip Cribb (Averyanov et al. 2003) have subsequently created a new section, *Emersonianum* Aver. et P. J. Cribb, as part of the subgenus *Parvisepalum*, with *Paph. emersonii* and *Paph. hangianum* being the two



Within the EU, cultivated specimens of *Paph. hangianum* appear in Orchid Shows, like here at the Spring 2005 German Orchid Society Show in Stuttgart, Germany.

members. Like *Paph. emersonii*, *Paph. hangianum* has a short flower stem that often needs some support to keep the flower upright. Growing on vertical cliffs in nature lets the flower easily face forward, despite the weak stem. Leonid Averyanov et al. (2005) have reported that *Paphiopedilum hangianum* and *Paph. emersonii* do not grow in the same locations in the wild. But *Paph. malipoense* var. *jackii*, and sometimes *Paph. tranlienianum*, can be found growing along with *Paph. hangianum* in the same locations and at the same altitude, around 600 m, while higher up on the same mountains *Paph. malipoense* var. *malipoense* and *Paph. micranthum* might occasionally occur.

In cultivation, *Paph. hangianum* responds well to the same treatment as the other species of the subgenus *Parvisepalum*. It might accept much more shade than the others, but I have never tried this and haven't heard of other growers doing so. Cultivated plants usually have leaves only half the size of wild specimens. Furthermore, the leaf surface is much more shiny and the faint tessellation nearly absent. Here in Chengdu we have a temperature pattern not unlike that of the habitat of *Paph. hangianum*, with summer highs slightly above 86°F (30°C) and winter lows around 39°F (4°C). I have cultivated that species all year round on my balcony

for several years without problems and only recently have begun to grow them in a greenhouse. Meanwhile, we have included *Paph. hangianum* in our project of mass propagating native orchids from seed and the first seedlings are developing from the Wenshan specimens.

I grow *Paph. hangianum* like all my paphiopedilums: in a mix of tree fern and high-quality sphagnum (i.e. sphagnum with a coarse structure) in plastic pots. I call this mix 'sphagnum with a skeleton' because the strong fern fibers give the sphagnum structure and keep it open. The plants receive slight shading and frequent watering in summer, with reduction of moisture in winter, when the plants are kept at temperatures between 50-59°F (10-15°C) during the day and 41-50°F (5-10°C) at night. They are watered less in winter but never allowed to dry out. Main flowering is in April and May, but sometimes a few plants produce their flowers as early as autumn, especially after a cooler and moister summer than usual.

The first hybrids with *Paph. hangianum* have flowered in Taiwan, and document the high potential of this species as a parent. Legal plants from artificial production have yet to enter the international trade for widespread use in breeding. Regardless of its value for hybridization, *Paph. hangianum* has an unmatched beauty of its own that was fittingly described recently by the experienced German paphiopedilum grower Guenther Dankmeyer (2005): "Nature has outrun the horticulturist!"

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About the Author

Holger Perner, born in 1960, in Hamburg, Germany, earned a Ph.D. in Ecology at the University of Hamburg. He tries as much as possible to combine his interest in orchids with his professional work in plant ecology. In 2001, after a decade working at a national research center in Germany, he began

work for the Huanglong Nature Reserve in Sichuan, China. He recently launched a project on mass-propagation of native Chinese orchids, particularly the genera *Cypripedium* and *Paphiopedilum*, in order to provide legal, laboratory-raised orchids for the international market.

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19th World Orchid Congress

January 22 – 27, 2008, Miami, FL

Wow, I can't wait! A World Orchid Conference has not been held in the United States since 1984, and that was in Miami also. I hope many of our members will take advantage of this opportunity to attend the 19th WOC, hosted by the South Florida and Fort Lauderdale Orchid Societies, because it will be a long time before it returns to the United States. (In 2011 it will be in Singapore. Although that lovely and exotic location is very appealing, Miami is a lot closer.) I urge everyone who can to attend. It is an incomparable experience - days of total immersion in gorgeous flowers, orchid education and social contacts within the world-wide orchid community. For more details and registration, go to their website – www.19WOC.com. Daily registration is also available.

There is so much that goes on at one of these meetings, I hardly know where to begin. Of greatest interest to SOA members will be our own meeting and the speakers in our field of interest, and a stellar group it is.

The SOA will have a meeting at the Sheraton Miami Mart Hotel and Convention Center on Thursday, January 24 at 4:30 p.m. in the Banyon Room. However, I urge you to check the official printed program and even the posting of daily events in the hotel to be sure of the place, as in a convention of this magnitude details can change. This meeting will be open to anyone interested in the lady-slipper orchids, and it should be great fun to meet with other slipper lovers from around the world.

The SOA has donated \$1000 to the 19th World Orchid Conference and will be acknowledged as a Society Sponsor, although our real expense is only \$500. One of the benefits of sponsorship is two free registrations, so Linda Thorne and I paid the SOA rather than the WOC for our registration. The SOA will be recognized by a special trophy in our name and by listing in the show program and the 19th WOC website.

WOC judging will start at 8:00 a.m. on Tuesday, January 22, and that evening the official opening ceremony will be followed by a cocktail party for registrants. The show, sales and lectures continue Wednesday through Saturday. I expect the show to be awesome, and the sales area will be brimming with temptations from around the world. A gala banquet will be held Saturday night at the new Parrot Jungle Island. The closing ceremony will be Sunday, January 27, at 4:00 p.m.

There are four different bus excursions being offered to various nurseries January 23-26, and day trips are planned to the American Orchid Society Visitors Center and Botanical Garden and Morikami Japanese Gardens in Delray Beach and to Fairchild Gardens in Miami. There are also trips planned before and after the Conference. Information about these tours is on their website.

The selection of lectures is overwhelming, and they are offered daily in three concurrent panels – scientific, horticultural and conservation. The following speakers are of particular interest to SOA members.

Scientific Panel:

Leonid Averyanov (Russia) – Vietnam Orchids and Their Habitats
Stig Dalstrom (United States) – *Phragmipedium besseae* – *kovachii* Connection
Holger Perner (Germany) – *Paphiopedilums* Native to China

Horticultural Panel:

Hadley Cash (United States) – Complex *Paphiopedilums*
Norito Hasegawa (United States) – Multiflora *Paphiopedilums*
Harold Koopowitz (United States) – New Miniature *Paphiopedilum* Hybrids
Paul Phillips (England) – *Paphiopedilum* and *Phragmipedium* Culture

Conservation Panel:

Alfred Manrique (Peru) – *Phragmipedium kovachii*
Beyond the Discovery
Michael Ooi (Malaysia) – *Paphiopedilum niveum*

These are just the slipper orchid speakers! Many others cover almost any orchid subject you can think of (and many you would not think of). You will find a current list on the website.

Did I whet your appetite? I hope to see you in Miami!

Barbara Tisherman

Please note: Barbara's email address was left out of the SOA directory. Please add her email address (btisherman@aol.com) to your directory.

Phragmipediums

Part five of a series by Helmut Rohl

PHRAGMIPAPHIUM (*Paphiopedilum* x *Phragmipedium*)

Only seven such intergeneric grexes have been registered, and for some of them the registered parentage is doubtful. I list them according to their year of registration. The first two seem to have disappeared, and it would be interesting to have them remade.

Phrphm. Malhouitri (*Paph. Harrisianum* x *Phrag. schlimii*), registered in 1912 by Boulet. The cross is reported to be quite similar to *P. Harrisianum*. No awards, no offspring.

Phrphm. Confusion (*Phrag. Grande* x *Paph. Mem. J. H. Walker*), registered in 1960 by Dr. & Mrs. W. W. Wilson (Mansell & Hatcher). The stated parentage of this cross is quite questionable. No awards, no offspring.

The only awarded grex is ***Phrphm. Hanes' Magic*** (*Paph. stonei* x *Phrag. Albopurpureum*), registered in 1983 by J. Hanes. The up to 3-flowered inflorescences bear medium size flowers with dorsal sepal and synsepal pale pink, finely striated green. The petals are yellow-green spotted burgundy. The pouch is cream, heavily veined ochre. 1 AD/AOS, 1 AM/AOS. No offspring.

Phrphm. Charming Daughter (*Phrag. longifolium* x *Paph. henryanum*), registered in 1995 by N. Toyoshima. *Phrphm. Charming Daughter* could easily be the result of a selfing of *Phrag. longifolium*. The few-flowered inflorescences bear medium size flowers. The dorsal sepal is tan with darker venation; the synsepal is cream with darker venation. The petals are tan proximally, maroon distally. The pouch is tan striped and suffused brown with infolded side lobes white. The staminode is greenish. No awards, no offspring.

Phrphm. Fourman's Twilight (*Phrag. schlimii* x *Paph. micranthum*), registered in 2002 by T. Fourman (O/U). The up to 3-flowered inflorescences have small to medium size flowers. Dorsal sepal and synsepal are light green, linearly marked and spotted red-purple. The petals are white, linearly spotted dark red. The pouch is cream suffused pink, dotted darker pink. The staminode is reddish brown fading to light yellow toward the top. No awards, no offspring.

Phrphm. Fourman's Freckles (*Paph. bellatulum* x *Phrag. schlimii*), registered in 2003 by T. Fourman (O/U). The up to 3-flowered inflorescences bear small to medium size flowers. Dorsal sepal and synsepal are greenish, linearly spotted brown. The petals are cream, linearly spotted light brown. The pouch is light pink, spotted darker pink. The staminode is brown fading to greenish yellow toward the top. No awards, no offspring.

Phrphm. Elisabeth Schrull (*Paph. dayanum* x *Phrag. Sedenii*), registered in 2004 by J. Werner. No details concerning this cross are currently known to me. No awards, no offspring.

In addition to these registered phragmipaphiums there are two as yet unregistered ones that were bred in Japan by Hideo Kiryu [for images see Tanaka (2005)]. They are:

Phrag. besseae* x *Paph. malipoense which produces up to 3-flowered inflorescences with small to medium size white flowers faintly dotted pink. The staminode is white on top changing gradually to purple on the lower part.

Phrag. besseae* x *Paph. micranthum has up to 3-flowered inflorescences with small to medium size flowers. Dorsal sepal and synsepal are creamy green, and the dorsal sepal is striated dark maroon. The wide petals are white, suffused and linearly spotted dark purple. The pouch is white, blotched and suffused pink. The staminode is cream, suffused light pink.

It is interesting to note that, with one exception, these phragmipaphium crosses are either simple primary crosses or complex primary crosses whose other partner is itself a

simple primary cross. I, for one, believe that mating complex phragmipediums with complex paphiopedilums (or making the reverse cross) would lead to more gratifying results.

A number of additional hybrid phragmipediums have been registered, before as well as after the arrival of *P. besseae*, and many more are to come. At this point in time the number of hybrid phragmipediums can still be envisaged by an individual, and hence an assessment can be established quite firmly. For this section I did select those hybrids that I consider the best and the most desirable ones, based on their performance as award recipients and as breeding partners. Others may come up with different selections, but I am confident that these will not be too strongly dissimilar from mine. Hence I will take one more step forward and reflect on what the future might bring. Obviously this is a challenging and frequently unrewarding enterprise, and so I shall stride onward gingerly.

CONCLUDING REMARKS

Even at the dawn of orchid hybridization the interest in phragmipediums hybrids without *P. besseae* and *P. schlimii* in their ancestry was quite moderate. After the revival of this line of breeding about 30 years ago the public's infatuation with this type of hybrids remains muted. The main reason seems to be that the somewhat bizarre and strangely appealing shape of the flowers could not overcome the often subdued and somewhat bleak colors. I expect to see occasionally new crosses of this type to hit the market, to be cherished by a small group of true aficionados.

Crosses involving *P. schlimii* should fare quite a bit better, as this species brings in a higher flower count and a more traditional, that is better or rounder, flower shape. In addition, *P. schlimii*'s cream to pink color of sepals and petals and the dark rose color of the pouch appear in its progeny. By pursuing this line of breeding and using judicious selection of cultivars based on these traits, new and more floriferous crosses could be obtained with larger flower size, better flower shape and more attractive colors.

The addition of *P. besseae*, both the normal form and its yellow variant, to the recent swarm of hybrids has been a huge success. As a result, more and more generations of *P. besseae* have been added to various hybrids creating larger, better and more deeply red "*besseae*." Although these hybrids are commercially highly rewarding, they fail to inspire me as interesting advances in hybridizing. A different line of breeding is to combine *P. besseae* with the group of grexes in the first category mentioned in the preceding section. Several of these crosses have been made, and discussed above. The resulting flowers are strongly influenced by these

cultivars and receive from the *P. besseae* parent only a more or less "reddening" or "yellowing" and a minimal improvement in the shape of the flowers. Continuing to put *P. besseae* into this mixture could give us better flower color and shape, and in select cultivars very dark margins and veins. Could this be a way to create tessellations and more complex flower patterns? Perhaps it is worth a try.

The last category in the preceding sections deals with hybrids that have both *P. besseae* and *P. schlimii* in the mix. This combines the two phragmipedium species with the best color and shape (not counting the yet untested *P. kovachii*) and holds great promise in my opinion. The general comments to be made here are the same that were stated in the preceding paragraph.

Next I come to the very recent and exciting newcomer to the genus *Phragmipedium*, *P. kovachii*. It is yet untested, but the first hybrid seedlings have appeared on the market. What can we expect? Certainly the very large size and the deep purple color will make a dramatic contribution to new, truly outstanding color schemes in massive hybrids, with the additional bonus of possibly obtaining four and more flowers per stem. A feature to be counteracted is the rolling back of the *P. kovachii* petals by the use of flat flowers of the other parent. The best mates to be bred repeatedly onto *P. kovachii* could be *P. besseae*, *P. schlimii*, *P. Hanne Popow* and similar grexes, hoping to maintain color and size, spike habit and flower count of *P. kovachii*.

Another direction of breeding involves tetraploid cultivars. Through colchicine treatment a number of tetraploid *P. besseae* have been made and were used by the Orchid Zone and the Eric Young O. F. for hybridizing. The resulting triploids and tetraploids are exciting additions to the palette of hybrid phragmipediums, and more such polyploids will appear in the future. It seems to be a sensible idea to convert other species into tetraploids, remake some of the most appealing registered hybrids in their tetraploid form, and to create new hybrids at various ploidy levels. As in dendrobium breeding, amphidiploids should be used systematically [see Kamemoto et al. (1999)].

Finally, a few remarks concerning intergeneric phragmipedium crosses. As stated above there have been 7 registered phragmipediums. It would be adventurous and most likely enticing to create more of these intergenerics by using more complex hybrids on either side of the nothogenus. I can imagine that crosses between phragmipediums based on *P. besseae* and paphiopedilums involving sect. *Coryopetalum* or other multifloral species could lead to highly successful lines of breeding. To stretch this idea a bit further, don't combinations of hybrid phragmipediums and hybrid (or species) cyripediums and selenipediums sound

great? Some of the more colorful cyprapediums mated with hybrid phragmipediums could bring about new and wonderful color schemes. Due to genetic incompatibilities such attempts may require a good deal of time and much tenacity to achieve the goal. But in my opinion they are worth the effort.

The toothpicks are awaiting.

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Growing Slipper Orchids in Louisiana

My wife and I have been growing orchids for 15 years and have tried many varieties. The Cattleyas are doing the best in our climate, if we keep them out of the rain to prevent black rot.

We have a large collection of Phalaenopsis and a slightly smaller collection of Paphiopedilums. When we first started growing orchids our new friends insisted we grow Paphs with our Phals because the culture was similar. So we got hooked on Paphs, since there were so many varieties. We now grow several species and many hybrids of multifloral, mottled leaf types and parvisepalums. We also grow some Phragmipediums.

We cannot grow the bulldog type. We have tried many times and wind up giving them to someone who is growing indoors, and I do not grow my Paphs with the Phals any longer. For a long time I did not realize the amount of water Paphs need. I kept thinking the roots were rotting, but all the time they were dying because of the drying, then rotting after they were dead. So now everything else in my greenhouse gets watered once a week, and the Paphs and Phags get watered two to three times a week.

We reside approximately 65 miles southwest of New Orleans in a small community called Bourg. We are 30 miles from the Gulf. The humidity runs high all the time, so that helps out with the 95 plus degrees we get in the months of July, August, and September.

My greenhouse roof and gables are constructed with polycarbonate. The roof has 65 percent shade cloth, the ends have glass sliding doors and windows, and there are windows across the roof ridge to expel hot air. The sides are wrapped with 50 percent shade cloth and have poly curtains that are rolled under the eaves for the summer. We have ceiling fans every 6 feet alternating one moving air up, the next moving air down and two floor fans running at all times. Air enters the green house from every direction.

I have my Paphs on a bench facing the East, and Cattleyas are hanging above them to block the sun as it moves to the West. All the Paphs have the same culture; the potting medium is a mixture of small and medium coconut husk chips, coconut coir, vermiculite, aliflor and charcoal. I fertilize every other week with ¼ strength of Peters 20-10-20 peat light special. I never water lightly; I leach every time I water and fertilize the day after a watering. They are doing fine; this is where we live, so we try to make them as comfortable as possible.

Ashley Matherne is from Houma, Louisiana. At the Louisiana Orchid Show on June 2, 2007, his Paph. Macabre won the Slipper Orchid Alliance trophy. At this same show he put up the exhibit for the Terrebonne Orchid Society and won the AOS and ODC trophies. Recently one of his plants (not a slipper orchid) was awarded an FCC and a CCE.

Phragmipedium kovachii News

The key to growing this plant properly is not to let it get above 85 degrees Fahrenheit for too long and to be sure the plant gets plenty of water. This plant can stop growing when it is too warm but grows the fastest in the fall and spring months. It will actually do well with some mineral content in the water, such as calcium and magnesium. A Ph of 7.5 is acceptable. They do seem to like a fast draining mix with plenty of air around the roots. I use a small bark mix. The largest kovachii plants we have now are about 12 inches across. They are a bit slow for the first year but then grow quickly once they reach the 3-4 inch leaf span size.

The plants we imported from Peru, including the hybrids, are growing very well. The largest wallisii x kovachii at this writing is now 24 inches across with a new growth coming on strong. There was only one cross that turned out to be a mix-up. To be sure we had the plants DNA sequenced. They all proved correct except one cross that was labeled kovachii 'Jewel' x 'Roseline.' This cross turned out to be wallisii x

kovachii. Other crosses with schlimii, longifolium, dalessandroi, Living Fire, and St.Ouen are now available from a couple of nurseries. More crosses are in the works.

It will be exciting to see the wallisii x kovachii hybrid, as kovachii x besseae, St.Ouen and Living Fire have already been flowered by Piping Rock Orchids. I think the long-petaled Phrags crossed with kovachii could yield some very interesting flowers indeed. Imagine the wallisii x kovachii cross like a Schroderae but on steroids. I expect 10 to 12 inch long petals that will be 3-6 centimeters wide. The colors should be an icy pink with darker lavender edges. The pouch should be fantastic, with an inner rim colored in white with a combination of green and ruby-magenta spotting inside. Of course this is in my imagination, but it will be interesting to see how close this cross really ends up being to the picture I have in my mind. There are always surprises.

I believe kovachii will be most valuable in second generation breeding with Phrag. besseae or besseae hybrids, just as it was with besseae. I can't wait to see what these new crosses look like a few years from now.

*Jerry Fischer
Orchids Limited*

Phrag. kovachii Hybrids

All photos courtesy of Glen Decker, Piping Rock Orchids



**Phrag. Alfredo Manrique
(kovachii x Walter Schomburg)**



Phrag. Suzanne Decker
(kovachii x Cape Sunset)



Phrag. Haley Decker
(kovachii x Saint Ouen)

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Proposal for CITES Nursery Registration

To all interested in the subject of orchid species and hybrids as imports or exports, I propose a plan to deregulate all artificially propagated orchids, whether species or hybrids, as CITES's role should be to regulate trade in only wild specimens.

Recent changes in CITES requirements have made it difficult for nurseries and hobbyists alike to import orchid plants from foreign countries. Many artificially propagated species and even hybrids are now becoming more difficult to find or are simply unavailable as nurseries that once were able to export have found the process too overwhelming.

In the U.S., for example, the requirement is that a nursery must now have a master permit. Every plant to be exported must be approved by the U.S. Fish and Wildlife Service by information on the propagation method (seed, cuttings or cloning). They also require information as to from whom the plants were purchased with details, pot sizes, annual production, number of plants to be exported each year, how many parental stock are maintained, from seed or cuttings etc., and number of years in production.

Imagine filling out such an application (in my case it took 250 hours) and then waiting nine months to a year to receive the permit; during this period orders cannot be processed. Once you get this permit, single issue copies are purchased in advance. Adding any new plants to your permit requires all the same detailed information. Hybrids are another problem, as specific hybrids or species that make up the hybrid have to be approved on the master permit.

The various countries' management authorities and CITES officials are, I believe, unaware of the great advances in the laboratory production of orchids that have taken place within the past few years. Nurseries are now able to reproduce in reasonable numbers those plants that were once considered difficult or even impossible to produce. The continued over-regulation of artificially propagated plants and the nurseries that produce them is in my opinion a complete waste of CITES resources. The reason CITES was created in the first place was to protect *wild* populations of living organisms that were threatened by trade. This is what it says in the first paragraph on www.cites.org home page: "**CITES (the Convention on International Trade in Endangered**

Species of Wild Fauna and Flora) is an international agreement between governments. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival.” In reality, the rapid artificial propagation of orchid plants helps to ensure that wild stock will remain where it is.

A recent example of how things have changed can be found in Peru, where no wild collecting for export is allowed. The government allowed a few plants of *Phrag. kovachii* to be collected and used for seed propagation; now that they are available legally the demand for wild plants no longer exists. All plants must now be produced at the approved nurseries from seed or division of established stock. Nursery owners and local employees benefit through production, and the government benefits through plant populations being protected and the economic benefits of sales.

There is an important synergy between orchid societies, hobbyists and commercial growers. Without commercial growers who are willing to propagate species and new hybrids there would be few hobbyists. Without hobbyists there would be no orchid societies. The articles written about new orchid species or hybrids would fall on deaf ears if the plants being written about would not be available legally to hobbyists. We are all interdependent, and it would be helpful if we all spoke with one harmonized voice.

No one can argue with the good intentions of CITES, namely the protection of species in the wild. No one can argue that each country's department of agriculture has the important job of controlling the introduction of new pests and diseases through the importation of plants. However, it is time for change regarding trade of orchids and other plants that are artificially propagated.

My proposal is simple in concept:

1. Protect all **wild** orchids by elevating that group to Appendix I status. Why have 2 categories? This change would eliminate the need for export permits for artificially propagated plants. Due to growing human populations and decreasing tropical rainforests, protecting all orchids at the highest level will be required sooner or later. Why not make the change now?
2. Certify nurseries that are growing or buying for resale orchids that are artificially propagated. Let those certified nurseries trade freely with a certification number or stamp which would be recognized and accepted by all signatory members of the CITES treaty.

These changes would include not allowing any wild collection for export of any orchid plants except for exceptional reasons, such as the following, under appropriate

regulation and supervision:

1. A nursery in the country of origin would want to add a small number of wild plants to their breeding stock or collect a limited amount of seed.
2. In the case of a rescue operation where orchid plants are going to be destroyed due to development, the plants could be collected with government permission and given to certified nurseries in the country of origin, with restrictions on their later distribution.

Flasked seedlings:

There is a lot of confusion about flasked orchid seedlings, what is legal and what is not. The CITES treaty clearly states that all orchid seedlings traded in vitro are exempt from CITES regulations as long as a phyto accompanies them, except in the case of flasked Appendix I seedlings. They are considered as art prop material, yet one may have to prove that the parents were legal. Different countries have different interpretations as to what this means. Thousands of Vietnamese *Paphiopedilum* species (and hybrids) are now in worldwide trade, because border authorities have no way to understand or control incoming flasks.

This proposal needs your help. The biggest change I would like to propose is that nurseries be certified for export of artificially propagated plants and that this certification would allow orchid plants so produced to be traded without a highly detailed permit. The program would still be under CITES control, but the need for lengthy accounting should be greatly reduced or better yet eliminated.

My goal is for all interested orchid growers to consider these proposed changes, make adjustments if necessary, gain a consensus, sign documents of support for the changes and petition the CITES management authorities within each regulated country as well as the responsible CITES officials in Switzerland. If we can do this in significant numbers then the CITES officials should respond and help create positive change.

I would appreciate it very much if interested parties would comment on my ideas so that I might improve this proposal. I also am in need of letters of support by e-mail or post as I would like to present this proposal with the letters of support to the proper officials here in the U.S. and Switzerland.

If you would like to debate these ideas it is best done on the forums where I have posted this proposal. My full proposal is posted on my web-site – www.orchidweb.com.

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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.

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