

PHRAGMIPEDIUM KOVACHII HYBRIDS

GLEN DECKER

HERE WE ARE IN THE 21ST CENTURY, with technology developing faster than we can keep up with, yet one of the most exciting orchids to be discovered was a mere eight years ago. During my years of growing *phragmipediums*, I would have never dreamed of such a thing, nor did I ever expect to be involved with the propagation of this species and producing some of the first hybrids available.

Fortunately, the hybrids were definitely easier to grow than the species itself. Even though the species has a bad reputation for being difficult to grow this does not seem to be an issue with the hybrids. The first of the hybrids bloomed only 13 to 14 months from flask, not that uncommon, since hybrids like *Phragmipedium* Don Wimber were being flowered as quickly as 12 months. The hardest, most exciting part of breeding with a newly discovered species is that no one knows what it will do. Will it impart only bad traits or only good ones or a little of both; one could only speculate what you might achieve. Usually we expect to see a little of both, but how much bad or good will have a lot to do with what you have bred it with.

Since this was a plant strictly under the control and supervision of the Peruvian government, the first round of hybrids were done in Peru. At the time, two Peruvian orchid nurseries were given the permits to collect, grow, hybridize and distribute *kovachii* and its hybrids. The first was Alfredo Manrique of Centro de Jardineria Manrique and the other Manolo Arias of Peruflorea. I had the distinct pleasure of being able to work with Manrique on many of these first hybrids. The biggest problem we faced was simply that we were limited to what was available in Peru to breed with, which was a handful of species and a few *besseae* hybrids.

Looking at *kovachii*, the most important trait we wanted to see in our hybrids was size, although we were also interested in seeing some of the color come through as well. I was concerned that the color could dominate. Some of the other traits to consider were plant and spike habit, flower shape, and longevity. The majority of the traits are positive ones with the exception of the shape. Unfortunately, *kovachii* has a very large flower which, as it matures, has a tendency to reflex. After considering all of this, it was my belief that the only way to help flatten out the petals of its hybrids was the use of *Phragmipedium besseae* or many of the *besseae* hybrids, and from what I have seen so far, that still stands true.

Size and Shape

Flowers can range in size from 4" (10.2 cm) to 7-7/8" (20 cm) natural spread. However, this is based on plants that are still relatively immature and one could expect to see even larger flowers on more mature and stronger plants. If you use *Phragmipedium besseae* or a *besseae* hybrid as the other parent, it can definitely help flatten out those petals. Otherwise, in most hybrids without the influence of *besseae*, you would expect less shapely flowers, but that does not mean that they will be any less beautiful – just not as flat. However, even with the *besseae* influence, it does not guarantee that they will be flat. Although *kovachii* only produces one or two flowers, with an occasional three, some of the hybrids, on their first blooming, have produced up to five flowers and I would expect the number to increase as plants become more mature. Finally, *kovachii* seems to add longevity to its blooms, lasting upwards of three to four weeks per flowering on stronger first blooming plants.

Color

Even though *kovachii* exhibits very strong color, *Phragmipedium besseae* and *schlimii* as well as their hybrids will still dominate with their own color. I consider this, for the most part, a good trait since I was worried about the color of *kovachii* might dominate its hybrids. Unfortunately, the downside is that I have yet to see any of the hybrids come through with that intense coloration of the pouch that makes *kovachii* so beautiful. In many cases, I look at the hybrids and if I didn't know any better, I would have assumed that they were *besseae* hybrids. However, the difference (this is something you can't tell by looking at a photo) is the larger size, giving you what looks like a *besseae* hybrid on steroids.

Plant and Inflorescence

My initial impression of *kovachii* in its habitat was that this is going to be a large plant. I think our excitement was like talking about the fish that got away. In retrospect, the plant is really no larger than some of the other species we grow and, in some cases, even smaller growing than many plants of *Phragmipedium longifolium* or *P. sargentianum*. The best trait of all is that unlike *besseae*, *kovachii* has a clumping habit with a shorter, more rigid inflorescence, which for the most part is passed on to its hybrids from what we have seen

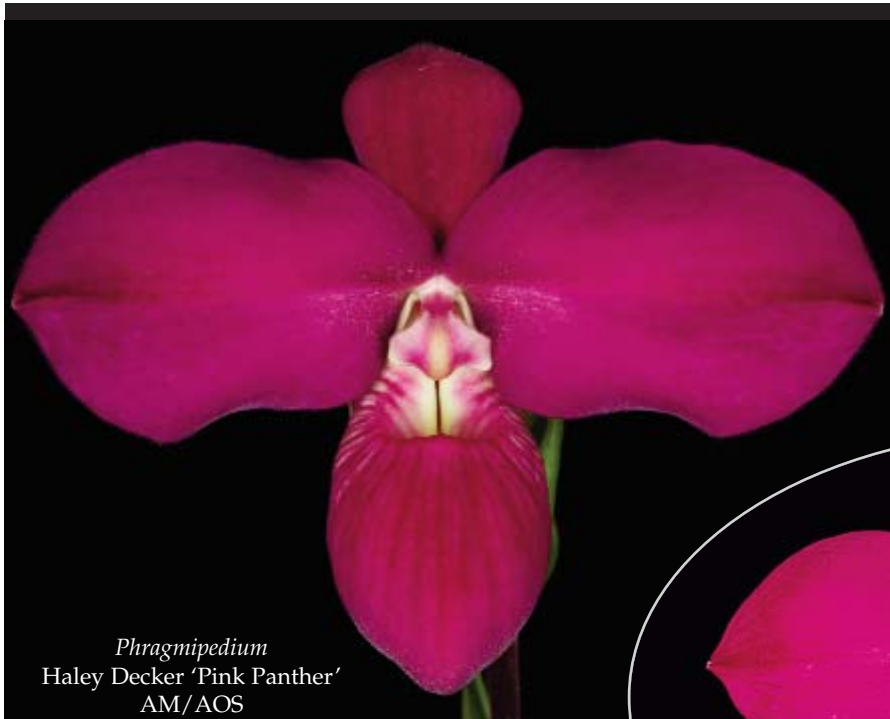
so far. This is really important since this gives us the opportunity to create hybrids that produce larger flowers on shorter stems that are more proportional to the plant.

Presently, we are looking at 16 registered hybrids from 3/7/2007 through 2/27/2009, with plenty more hybrids waiting to bloom and to be registered. I have

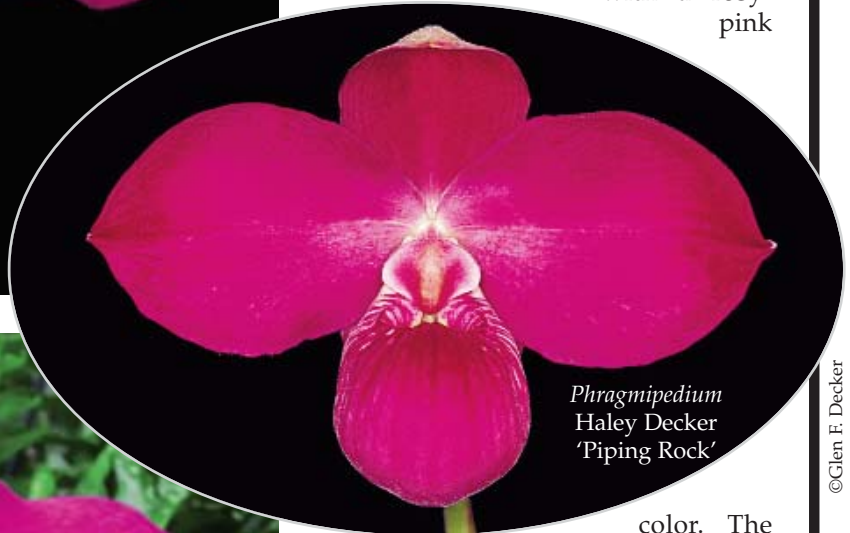
seen many examples of at least five of the following hybrids, and will be able to offer you a good idea of what to expect from those. The balance of the hybrids, I can only offer an opinion on what I have either seen in person, in a photograph or have been given information about.

***Phragmipedium* Haley Decker** (*kovachii* x Saint Ouen)
3/7/2007 - Piping Rock Orchids/Alfredo Manrique

Phragmipedium Haley Decker is the first of what I'm sure will be a long list of *kovachii* hybrids. Excited as I was to see the first of our efforts, I think I was even more excited to be able to register it after my daughter. *Phragmipedium* Saint Ouen is a second generation *besseae* hybrid (Hanne Popow x *besseae*), giving us *besseae* influence on both sides. I don't think I could have asked for much more. This is a relatively small, compact grower with flowers ranging in size from 4" (10.2 cm) to 5-1/4" (13.3 cm) in natural spread with a rosy-pink



Phragmipedium
Haley Decker 'Pink Panther'
AM/AOS



Phragmipedium
Haley Decker
'Piping Rock'



Phragmipedium
Haley Decker

color. The color is relatively consistent for the hybrid although some exhibit richer tones. What does vary quite a bit is the shape and form. The shape of the smaller sized flowers is reminiscent in shape to what you would expect from *P. Hanne Popow* or *P. Saint Ouen*, but when we see larger flowers they seem to almost look like a smaller version of *kovachii*. Variation is good; it makes every plant exciting to watch bloom. Unfortunately, even though we have seen some really nice blooms, some can have extremely reflexing, rolled or ruffled petals, even with the influence of *besseae* in its background.

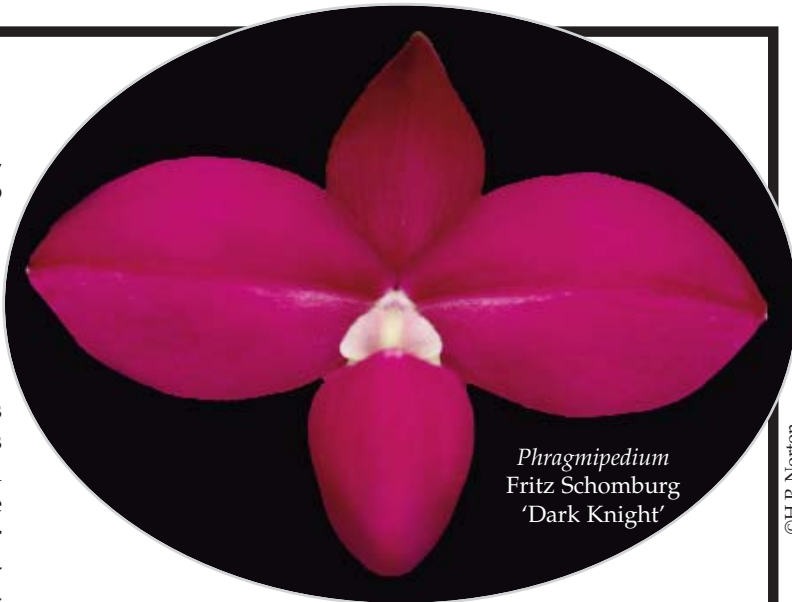
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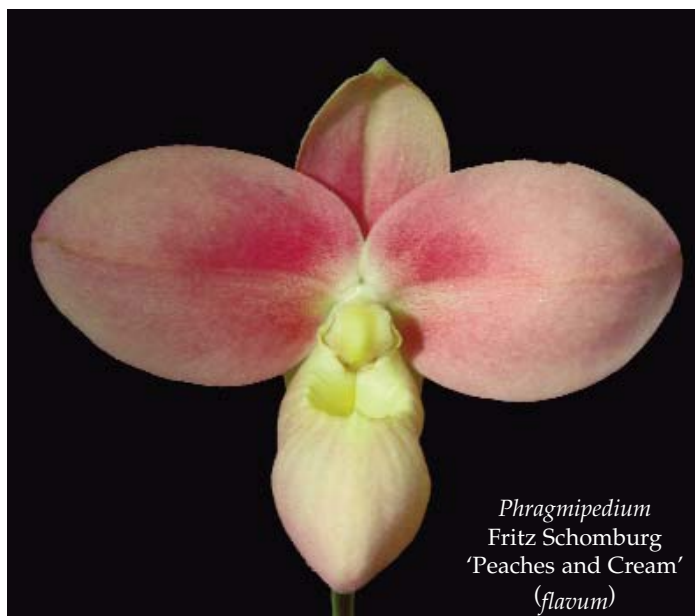
Phragmipedium Fritz Schomburg (*kovachii* x *besseae*)
 3/7/2007 - Piping Rock Orchids / Alfredo Manrique

Almost to the day that Haley flowered, *Phragmipedium* Fritz Schomburg was the next hybrid to bloom. Unfortunately, we only had one plant that flowered and was not a very good example. However, H.P. Norton of South Carolina, with his exceptional skills in growing *phragmipediums*, was very fortunate to have flowered several very good examples from flasks he obtained from Peruflorea and has been kind enough to share with us. Here we see several examples of this hybrid made with the type form of *besseae* as well as the *flavum* form. At first glance, you would almost think you were looking at photos of *P. Hanne Popow*, however, when you see it in person, it's far from it. The size of the flowers for the type form breeding ranges from 3-1/2" (8.9 cm) to 4-3/4" (12.1 cm) natural spread. The color can be very variable, ranging from orange to red for the type, and pastel colors for the *flavum*. H.P. tells me that the darker the flower, the smaller the size. He also says that with the *flavum* type breeding, the size is about the same, but not as full shaped. The best qualities of the flower are the substance and velvet-like texture.



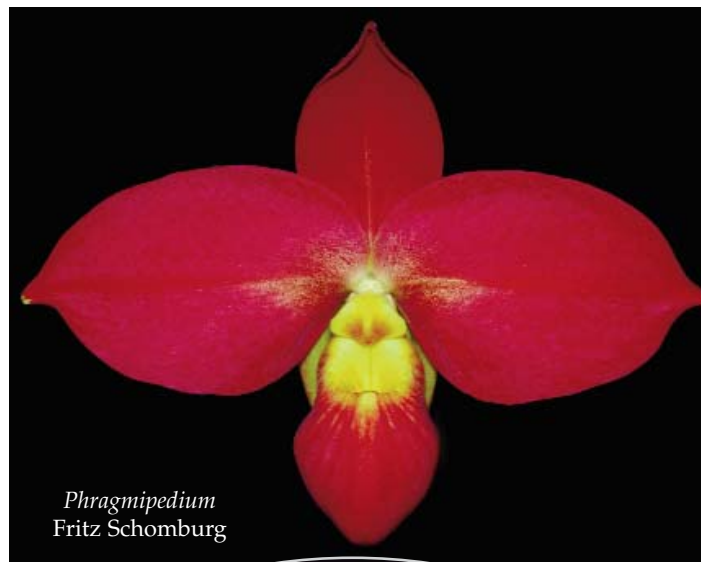
Phragmipedium
 Fritz Schomburg
 'Dark Knight'

©H.P. Norton



Phragmipedium
 Fritz Schomburg
 'Peaches and Cream'
 (*flavum*)

©H.P. Norton



Phragmipedium
 Fritz Schomburg

©Peruflorea



Phragmipedium
 Fritz Schomburg
 'Flamingo'
 (*flavum*)

©H.P. Norton



Phragmipedium
 Fritz Schomburg
 'New Year'

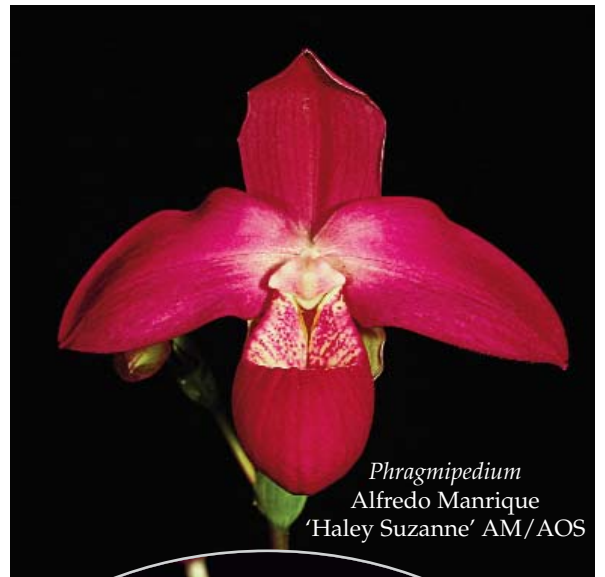
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Phragmipedium Alfredo Manrique

(*kovachii* x Walter Schomburg)

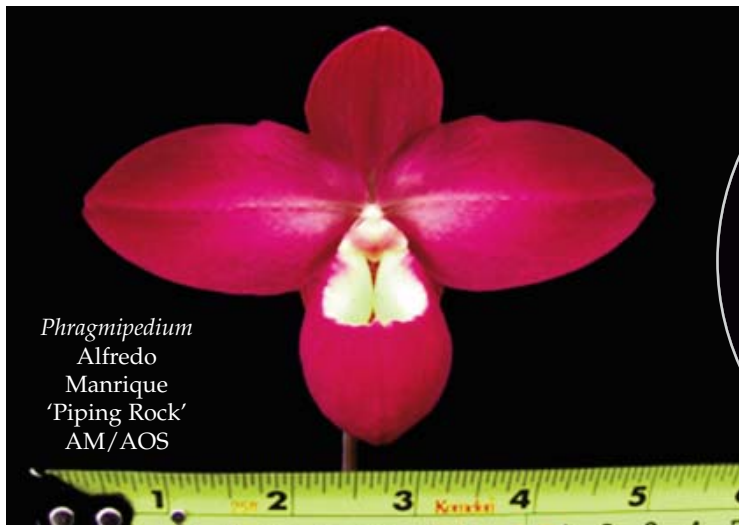
6/7/2007 - Piping Rock Orchids / Alfredo Manrique

Primary hybrids aside, to me *Phragmipedium* Alfredo Manrique is the most successful of the *kovachii* hybrids to date and I decided that this should be named after my partner. The flowers have a natural spread of 4-1/2" (11.4 cm) to 5-1/2" (14 cm), with a deep, crimson-red color. *P. Walter Schomburg* is a second generation *besseae* hybrid (Eric Young x Andean Fire). I think the combination of *kovachii* for size, *besseae* to flatten and broaden the petals and *lindleyanum* for deepening the color is a perfect combination for success giving us flowers that exhibit good color, shape, form and substance. We also have the influence of *P. longifolium* in the background of this hybrid which usually adds easy and vigorous growth to the plants. Unfortunately, not many of those traits have come through, and of all the hybrids I have grown, this one seems to be a bit slower grower similar to *P. Jason Fischer*.



Phragmipedium
Alfredo Manrique
'Haley Suzanne' AM/AOS

©John Porteous



Phragmipedium
Alfredo
Manrique
'Piping Rock'
AM/AOS

©Glen F. Decker



Phragmipedium
Alfredo Manrique
'Suzanne'

©Glen F. Decker



Phragmipedium
Memoria Mariza Rolando

©Alfredo Manrique

Phragmipedium Memoria Mariza Rolando

(*kovachii* x Hanne Popow)

6/7/2007 - Piping Rock Orchids / Alfredo Manrique

Phragmipedium Memoria Mariza Rolando was named after the late wife of Dr. Isaias Rolando of Peru, who was responsible for giving me, Harold Koopowitz and the rest of our group the opportunity to visit the *kovachii*'s habitat. On a personal note, unfortunately Isaias is also no longer with us and will be missed by all in the orchid community. There is not much I can tell you about this hybrid. I have only seen two plants flower to date and both were very similar to that of *P. Haley Decker*. *Phragmipedium* Hanne Popow is a first generation *besseae* hybrid (*schlimii* x *besseae*). Expect to see pink flowers ranging in size from 3-1/2" (8.9 cm) to 4-3/4" (12.1 cm) in natural spread on relatively compact growing plants.

***Phragmipedium* Suzanne Decker**

(*kovachii* x Cape Sunset)

6/7/2007 – Piping Rock Orchids / Alfredo Manrique

Phragmipedium Suzanne Decker is an absolute favorite of mine, but not everyone likes pink flowers. I do and this one is extraordinary. Considering that I had already named the first hybrid after my daughter, it was only fair to name this one for my wife. Using a second generation bessee hybrid *P. Cape Sunset* (Eric Young x *schlimii*) shows you just how dominant *P. schlimii* color is in its hybrids. When looking at this flower, I definitely see it as *P. Cape Sunset* on steroids. This hybrid has been the strongest grower of them all, with rich pink flowers, blushed white in the center of the petals, and a natural spread of 6" (15.2 cm) to 7" (17.8 cm). Of all the hybrids to bloom so far, this one is the most consistent when it comes to shape, size and color of the flowers. A few of the plants have been so robust that they already have eight growths in a pot.



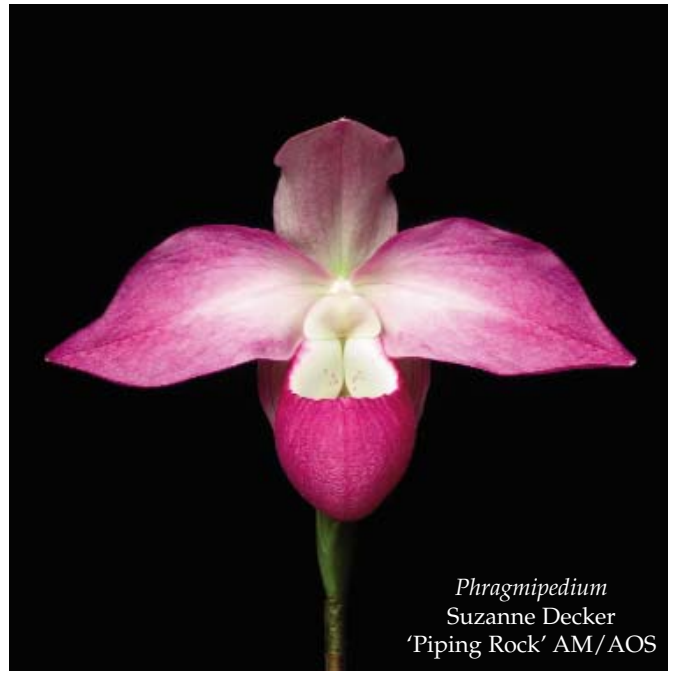
Phragmipedium
Suzanne Decker

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Phragmipedium
Suzanne Decker

©Kathleen Harvey



Phragmipedium
Suzanne Decker
'Piping Rock' AM/AOS

©Greg Allikas

***Phragmipedium* Peruflores Cirila Alca**

(*kovachii* x *dalessandroi*)

6/11/2007 – Peruflores

It's not uncommon to see a plant of *P. dalessandroi* holding eight to ten flowers on a single, branching inflorescence, which I would expect to see come through in this hybrid once larger, more mature plants begin to flower. The downside to *P. dalessandroi* is that it gives you less shapely flowers with narrower petals, so it's a trade off of shape versus flower count. Manolo tells me that the average natural spread of this hybrid is around 4-3/4" (12.1 cm), with colors ranging from light pink to deep purples. Like many *phragmipediums* blooming for the first time, they can flower on relatively small plants. Manolo named the plant in honor of Cirila Alca who helped raise and educate him helped his parents raise and educate him and his brother and sister while their parents were working. Unfortunately, lost her battle to cancer in 1994.



Phragmipedium
Peruflores Cirila Alca

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***Phragmipedium* Peruflores Spirit**

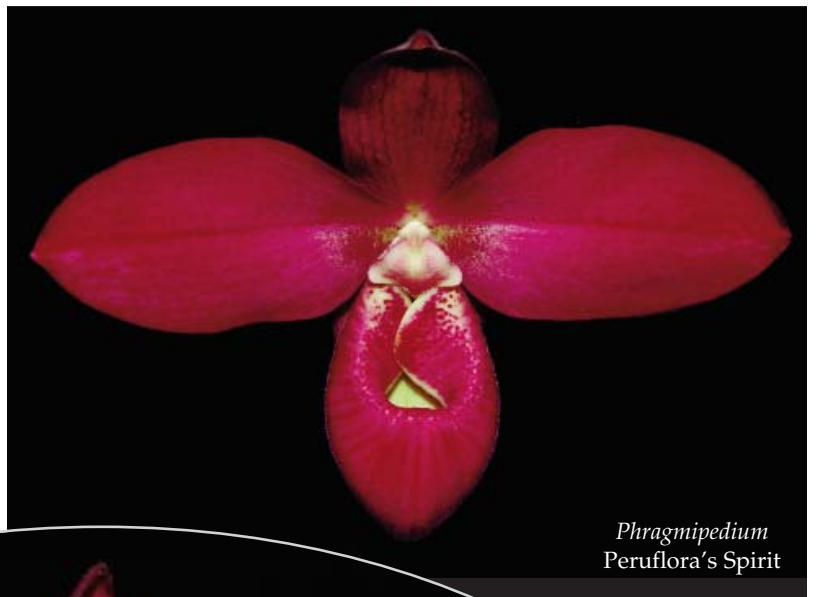
(*kovachii* x Eric Young)

6/7/2007 – Peruflores

Phragmipedium Peruflores Spirit is the first of many *kovachii* hybrids that Peruflores has produced and registered. I have not seen this hybrid in person, but looking at the photos it appears to be a very large *P. Eric Young* (*longifolium* x *besseae*). Again, H.P. was fortunate enough to bloom a few of these and he tells me that the flowers can be 6-1/4" (15.9 cm) to 7" (17.8 cm) in natural spread. However, Manolo from Peruflores tells me that the ones flowering in Peru have been a bit smaller, averaging around 5-1/8" (13 cm). The difference in size could strictly be cultural, not saying that one grower is better than the other, but referring to geographical differences in temperature, light and water qualities. I would have to assume that these must be very vigorous growers due to the influence of *P. Eric Young*.



Phragmipedium
Peruflores Spirit



Phragmipedium
Peruflores Spirit



Phragmipedium
Peruflores Spirit

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Phragmipedium
Peruflores Cirila Alca

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Phragmipedium Peruflora's Saltimbanco

(*kovachii* x *czerwiakowianum*)

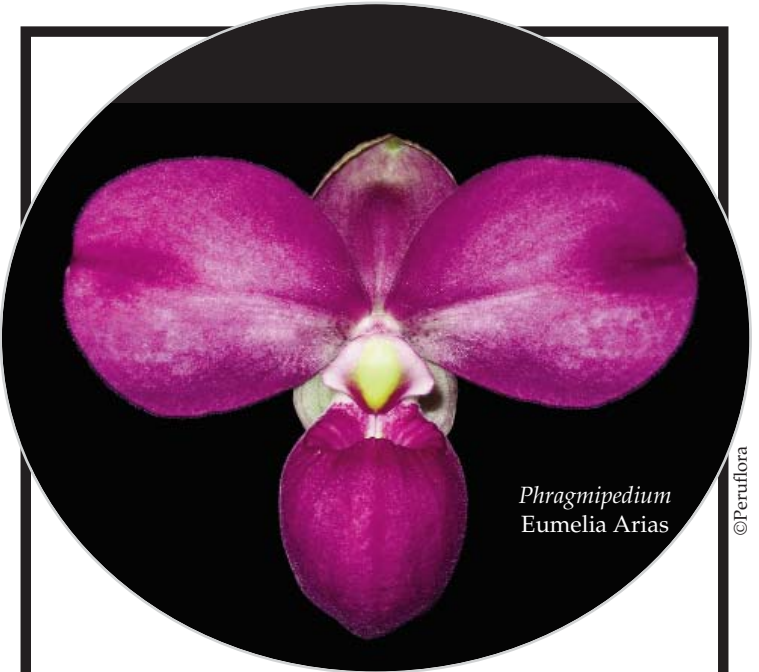
6/11/2007 – Peruflora

Phragmipedium Peruflora's Saltimbanco is a hybrid that just had to be made, not because it would be beautiful but just because. Even though we know that some hybrids are not going to be great hybrids, they are still important to make as stepping stones for future second generation hybrids, and, in my opinion, this is exactly what we have here. Of course I have only seen a couple, but I don't think if I saw a hundred that any of them would be fantastic. However, I do like the color very much and still would not mind having one in my collection. The color is not pink, but dark lavender even approaching purple in color and may prove important in future breeding. Manolo tells me that the flowers can have a natural spread of 7" (17.8 cm) to 7-7/8" (20 cm), which is sizable. The biggest problem I see with this hybrid will be its shape, particularly the twisting petals.



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Phragmipedium Eumelia Arias (*kovachii* x *schlimii*)

7/19/2007 – Peruflora

From the minute I saw these photos, I fell in love with *Phragmipedium Eumelia Arias* as I'm sure did Manolo since he named it after his mother. You can definitely see the influence of the *P. schlimii*, creating a larger version of it with flowers ranging in color from light pink to deep purple with a natural spread of 4-3/4" (12.1 cm). I am already sitting here thinking of the possibilities of recreating all the older *P. schlimii* hybrids, but replacing it with *P. Eumelia Arias*, never knowing what you might get. However, isn't that what breeding is all about—dreaming of the possibilities!



©Peruflora

Phragmipedium **Peruflora's Angel** (*richteri* x *kovachii*)
7/19/2007 – Peruflora

This cross was a pleasant surprise. Flowers exhibiting a culmination of colors from orange-red to lavender-purple with some green-yellow tones exhibited in the petals have been seen in the handful of plants to date. They have good size flowers, averaging 4-3/8" (11.1 cm) in natural spread on a tall inflorescence. I would expect that hybrids such as *P. kovachii* x *P. pearcei* or *P. kovachii* x *P. hirtzii* to be very similar to this one. Even though this group of hybrids lack form, they make up for it in charm. We should see compact growing plants with good sized flowers.



Phragmipedium La Vingtaine

(Memoria Dick Clements x *kovachii*)

9/27/2007 – Eric Young Orchid Foundation

I have absolutely no information on this hybrid although I have tried to get information directly from the Eric Young Orchid Foundation. I'm sure information will be available on this and other hybrids in the near future. I can tell, from looking at this photo, that there are problems with this particular bloom, including major deformities and color breaks. Of course, different parents will give you different results. I would definitely expect this to be a great hybrid, just not this particular plant. If I had to guess, the *P. Mem. Dick Clements* (*sargentianum* x *besseae*) used here was probably a tetraploid.



Phragmipedium La Vingtaine

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Phragmipedium Allison Strohm

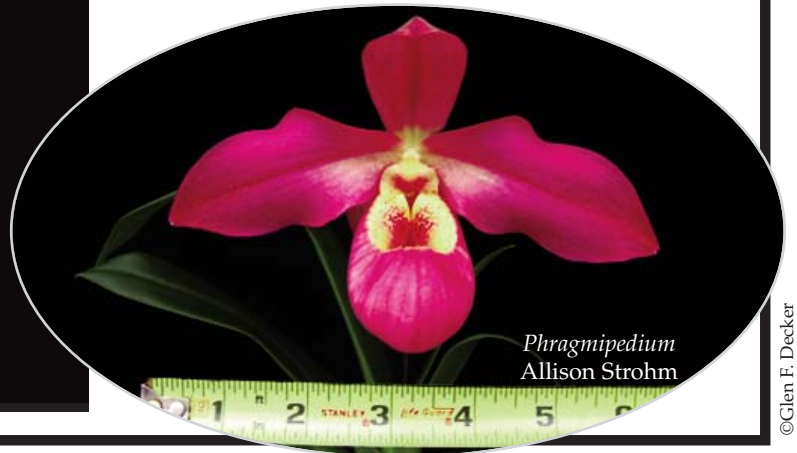
(*kovachii* x Living Fire)

11/16/2007 – Schomburg / Alfredo Manrique

We knew this cross would be a triploid since the *P. Living Fire* (*Sorcerer's Apprentice* x *besseae*) used was a tetraploid. Even though I did not register this hybrid, it's still one that I was involved in making. I personally had higher expectations for this hybrid, hoping for extremely large, red flowers of exceptional shape. We did get very large flowers ranging in natural spread from 6" (15.2 cm) to 7" (17.8 cm), in tones of red, from pale to vibrant. I was disappointed because I expected to have flatter, broader segments and that just didn't happen. There are still nice flowers from this hybrid, just don't expect them to be flat. That doesn't make them 'bad'. Expect lots of variation in the shape and form of the flowers. A remake of this hybrid with the diploid form of *P. Living Fire* will definitely give us different results, which I look forward to seeing in the future.



Phragmipedium Allison Strohm



Phragmipedium Allison Strohm

©Glen F. Decker

©unknown

***Phragmipedium Andean Tears* (*wallisii* x *kovachii*)**
7/28/2008 – Peruflora

Looking at the photo of the first bloom of this hybrid, *Phragmipedium Andean Tears*, it is definitely better than I expected. I thought it would have bigger, flopper petals, although we may see some of that in the future. Remember that this is a photo of the first to bloom to date and it is very similar to what you might expect from a *P. besseae* hybrid—large plants with flowers averaging a vertical natural spread of 6-1/4" (15.9 cm). We might see larger flowers as more mature plants begin to bloom. The only problem with this type of breeding is waiting for them to bloom. Unlike most *phragmipedium* breeding where we can see plants bloom as early as 12 to 15 months, using a species like *P. wallisii* can result in a waiting time that can be longer.



Phragmipedium
Andean Tears

©Peruflora



Phragmipedium
Incan Treasure

©Allen Black

***Phragmipedium Incan Treasure* (*kovachii* x *longifolium*)**
7/28/2008 – Peruflora

I am not impressed with this hybrid, but I really like the lavender-purple coloration of the flower. This hybrid could prove to be extremely important in second generation breeding, as *P. Eric Young* (*besseae* x *longifolium*) was for second generation *besseae* breeding. Allen Black flowered this hybrid, telling me that the flowers on the first blooming had a natural spread of 5" (12.7 cm) and on the second blooming were even bigger with an improvement in the shape.

***Phragmipedium Les Varines* (*sargentianum* x *kovachii*)**
8/5/2008 – Eric Young Orchid Foundation

Another Eric Young Orchid Foundation hybrid, so I have no information to share with you. If I were given the opportunity to make this hybrid, I would be looking for the influence that *P. sargentianum* has in strengthening the color of its progeny. A good example of this would be the *P. besseae* hybrid of *P. Mem. Dick Clements* (*sargentianum* x *besseae*).

***Phragmipedium Frank Smith* (*kovachii* x Grande)**
2/27/2009 – Krull-Smith

This is the latest of the registered hybrids, and unfortunately, I do not have too much information to offer you at this time. However, I am going to assume that it should look very similar to an oversized *P. China Dragon* (*besseae* x Grande). I briefly spoke to Frank Smith, and the only thing he could tell me was that this flowering was very small, but had tremendous potential I trust Frank's judgment and I think he wouldn't have something named after him unless it was good although he has had something ugly named after him before. Unfortunately, no photo was taken.

This is just the tip of the iceberg. There is the yet to be registered hybrid of *P. Bel Royal* x *kovachii*, giving us an almost florescent pink color. There are many other new hybrids with mature plants waiting to bloom that you can look forward to seeing in the near future. *P. Sunset Glow* x *kovachii* should be similar to *P. Alfredo Manrique*. Other hybrids are *P. pearcei* x *kovachii*, *P. Don Wimber* x *kovachii* and *P. Jason Fischer* x *kovachii*, which is one I can't wait to see. I am not sure where the Eric Young Orchid Foundation is with their *phragmipedium* breeding program when it comes to *kovachii*. However, the EYOF has always been one of the leaders in this field and they have already registered two hybrids. We will just have to wait and see what they have in store for us. As for Alfredo, he tells me that he has remade *P. Alfredo Manrique* using different parents and it is presently growing in the lab. He also has made a handful of newer hybrids, crossing *kovachii* back onto *P. Haley Decker*, *P. Suzanne Decker* and *P. Memoria Mariza Rolando* with the first having active growth in the lab. H.P. Norton has also been busy working on a host of new things. He has remade many of the *kovachii* hybrids presently available using different parents, as well as many newer hybrids such as *P. Tara* x *kovachii*, *P. Bouley Bay* x *kovachii*, *P. Fritz Schomburg* x *Prissy* and *P. Perufiora's Spirit* x *besseae* to name a few. Outside of the EYOF and a few breeders in Germany as well as Manrique and Arias of Peru, I would expect to see new *kovachii* hybrids coming from right here in our own backyard, from a few of our own *phragmipedium* breeders such as H.P. Norton, Jerry Fischer, Bill Goldner and Chuck Ackers. I will also be interested to see if Terry Root might have something in the works for us. What does the future have in store for *kovachii*? Who knows, but it is sure to be exciting!

The cultural requirement for growing these new hybrids seems to be controversial, making hobbyists feel as if they are too difficult to grow. In reality, they are no different from growing any other *phragmipedium* hybrid presently in your collection. I think that all the information out there on growing the species has unnecessarily scared off many hobbyists from trying

these new and wonderful hybrids. Below is some general cultural information on how I grow my *phragmipediums* as well as my *kovachii* hybrids. I'll start with my potting mix which is really only a basic bark mix. Keep in mind that, at least for me, my mix usually changes slightly every year depending on the quality of the bark, and what I find after inspecting the roots from the previous repotting. If I find that there are too many dead roots in the pot, I have to ask myself why. Was it because the plant was overdue to be repotted compromising the air circulation within the pot, or was due to not getting enough water? Since I do not sit my plants in water, they sometimes have a tendency to dry out a little more than I would like, so I add more fine bark to my mix to retain more moisture for a longer period of time.

- 7 parts medium grade fir bark
- 11 parts seedling or fine grade fir bark
- 3 parts horticultural charcoal
- 4 parts sponge rock or large perlite
- 1 part calcium chips or cracked oyster shells (optional)
- 1/8 part pelletized limestone (optional)
- 1/8 part bone meal (optional)

For seedlings, I would swap out the medium grade fir bark and replace it with fine grade fir bark. Of course, this is a potting mix that works well for me, but may need to be tweaked for your growing environment. Now, don't get all crazy about finding calcium chips or cracked oyster shell. If you are fortunate enough to live in a farming community, then it's real easy. Any store that sells animal feed will carry one or both of these products. It's inexpensive, I think it costs around \$9.00 for a 50 pound bag ... yes, 50 pound bag ... share it with your friends. However, I use it for all my *paphiopedilums* and *phragmipediums*. Both of these products are used as poultry feed supplement for egg producing chickens to help strengthen their shells. I would also have to assume that any large specialty bird store or pet store would carry it as well to feed to nesting birds of all types. As for pelletized limestone and bone meal, both can be found in your local hardware store or garden center, but none of these products are necessary to successfully grow your *phragmipediums*.

Using higher quality waters, such as RO or rain water will be an advantage when growing the species, however are not as important when we are talking about the hybrids. You should be able to get away with using all types of water, just watching your salt levels. Water softeners are a no-no, since they use salts to accomplish their function. As with all *phragmipediums*, we want to keep them moist to almost wet at all times.

Fertilizing, again as with all *phragmipediums*, they tend to be heavier feeders, however young plants should be grown with lighter dosages. I won't recommend a percentage or at what rate, since this is something that is clearly defined on how you grow and your

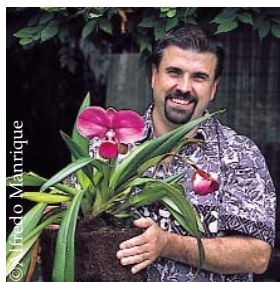
own growing conditions. Along with regular feeding, I will occasionally supplement with calcium nitrate as well as magnesium sulfate, which is actually Epsom salts... yes, I know I said to watch your salts, but all fertilizers contain salts. During the summer months, I may also supplement with fish emulsion and/or kelp extract as well. Both are nitrogen based foliar feeds which I feel benefit the plants during the growing months. As with all fertilizers, following the manufactures recommending dosages is a good start, however if they give you a once a month rate, break it down and

Acknowledgements

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About the Author

Glen Decker began growing orchids at the age of 15 and holds the degree of Associate in Applied Science in Ornamental Horticulture. Glen is presently the owner of Piping Rock Orchids in Galway, New York. He presently serves as a director of the Orchid Digest Corporation and was the previous chair of the American Orchid Society's Publications Committee and is still a member of the committee today. Glen has won numerous AOS awards, including the Butterworth Prize, Nax Trophy, WW Wilson Award and the Carlyle A. Luer Award. He has appeared in Martha Stewart's Better Living Magazine and in the PBS TV special "Orchid Delirium". He rewrote the Slipper section of the Brooklyn Botanic Garden's "The Best Orchids for Indoors" and was the technical editor for the book, "Orchids for Dummies".



Glen F. Decker
Piping Rock Orchids
2270 Cook Road
Galway, NY 12074
E-mail: pipingrock@aol.com
www.pipingrockorchids.com



do it weekly. Windowsill and under light growers, I would recommend cutting the rate in half for starters, since your conditions can sometimes be less than optimum.

Of course, the full potential of *kovachii* hybrids is yet to be seen and the best, I'm sure, is to come. So far most of my expectations have been met with average size plants, a more compact inflorescence with larger flowers and good color. I feel the second generation hybrids will truly be the test of its potential. For now, it's still a waiting game, waiting for the next wave of hybrids to bloom and shine. *Phragmipedium kovachii* has probably been the most important and exciting find in orchids in the past 100 years, and it could very well be that for the next 100 years to come.✿