



The Slipper Orchid Alliance Newsletter

Volume 2, Number 2

Spring 2001

SOA Restructures in 2001

Over the last year and one-half, the Alliance has evolved from a concept into a vital education and outreach activity. Our principal goal of fostering understanding of all genera of lady slipper orchids including *Cypripedium*, *Paphiopedilum*, *Phragmipedium*, and *Selenipedium* orchids, as well as their conservation in natural habitats and under cultivation, is now a reality.

To more effectively satisfy this goal we are taking two initial steps to restructure the Slipper Orchid Alliance. First, we have established an SOA Executive Committee to guide the transition of the Alliance from its present structure that relies on acting officers to a structure that is more permanent in nature. Second, we have established an SOA Resource Committee to support the SOA's educational activities in particular, the SOA Newsletter.

SOA Executive Committee

The SOA Executive Committee will guide the transition of the Slipper Orchid Alliance from its present structure that relies on acting officers and a steering committee to a structure that is more permanent in nature. Its function will be to advise the Executive Director who is responsible for overall operation of the Slipper Orchid Alliance.

Among the immediate priorities to be addressed by the

SOA Executive Committee are membership outreach and development of guidelines governing the SOA's participation in speakers forums and seminars. Longer term priorities will focus on formulation of our business strategy and plan, drafting of SOA By laws, and the appointment and/or election of officers.

The new SOA Executive Committee will consist of Richard Grundy of Santa Rosa, California; Barbara Tisherman of Pittsburgh, Pennsylvania; Janette Harris of Westfield, North Carolina; Lois Dauelsberg of Los Alamos, New Mexico, Jerry Fischer, of Plymouth Minnesota; and Tom Kalina of Naperville, Illinois. The SOA Executive Director is Richard Grundy.

SOA Resource Committee

Currently, the SOA conducts three informational activities: the SOA Newsletter, participation in national and regional forums and seminars, and the SOA Web-site at "www.slipperorchid.org."

The SOA Resource Committee will identify potential authors and subjects for inclusion in the SOA Newsletter and on the SOA's Web-site, as well as ongoing activities and speakers of interest to the SOA's readership. It is anticipated that members of this committee will be appointed so as to establish a network capable of monitoring and reporting on slipper orchid activities both nationally and internationally. From time to time, members of the committee may also be asked to peer review articles before their inclusion in the SOA Newsletter.

The new SOA Resource Committee will be structured to reflect various segments of the slipper orchid community (such as conservation, cypripediums, paphiopedilums, phragmipediums, etc.) as well as geographic areas such as Asia, the Pacific coast, the Midwest, Central, Northeast, mid-Atlantic, Southeast, England, Europe, and South Africa.

Among the initial members of the SOA Resource Committee are Jerry Fischer of Plymouth, Minnesota; Bill Goldner of Huntingtown, Maryland; Tom Kalina of Naperville, Illinois; Harold Koopowitz of Santa Ana, California; Kevin Porter of Santa Maria, California; Norito Hasegawa of Anaheim, California; Paul Phillips of

SOA Mission Statement

To foster understanding of all genera of lady slipper orchids including *Cypripedium*, *Paphiopedilum*, *Phragmipedium*, and *Selenipedium* orchids, as well as their conservation in natural habitats and under cultivation. To promote scientific and horticultural studies of slipper orchids and the exchange of information at regional, national and international forums and seminars.

Kissimmee, Florida; Steve Drozda of Pittsburgh, PA; Olaf Gruss of Germany; and Bob Wellenstein of Candor, New York. Other committee members are being sought to represent specific areas of slipper orchid expertise or geographic areas.

Summary 2001 SOA Speaker Forum

Reported by Richard Grundy

The Slipper Orchid Alliance's Annual Speakers Forum was held on May 19, 2001, at the Radisson Hotel and Conference Center Minneapolis. Everyone present enjoyed a full day's program including presentations from such notables as Louis Hegedus from Fort Collins, Colorado; Kevin Porter of Curved Air Orchids, Santa Maria, California; and Karen Muir of Laguna Niguel, California. In addition, there were a panel discussion on lady slipper orchid culture including Sam Tsui, Lou Hegedus and Karen Muir; a notable exhibition table, and an auction for the benefit of the Slipper Orchid Alliance.

As discussed elsewhere in this issue of the SOA Newsletter, Dr. Louis Hegedus provided a stimulating overview of the discovery of Phragmipedium species beginning with Phrag. *caudatum* in 1841 and Phrag. hybridizing since Phrag. *Dominianum* in 1870. For 30 years as a hobbyist, Dr. Hegedus has grown and bred Phrag. species and their hybrids (including Phrag. *besseae*, Phrag. *Mary Bess*, Phrag. *Rosalie Dixler*, and others). Currently he has some 400 plants in his basement under lights and flasks on the dining room table.

Kevin Porter presented a provocative view of the "Evolution of Designed Paphiopedilums," that is reviewed elsewhere in this issue of the SOA Newsletter. He is the owner of Curved Air Orchids, and has been growing orchids and hybridizing Paphiopedilum orchids for more than 20 years. His sought after hybrids are actively pursued by collectors on the West coast and throughout the Pacific Rim.

Karen Muir provided an in depth discussion of "Parvisepalums – Then and Now." Karen is chair of the AOS Pacific South Judging Region. She has raised orchids for 26 years and is a past president of the Michigan Orchid Society.

As the banquet speaker, Dennis D'Allesandro discussed "New Slipper Orchids from Southeast Asia (Vietnam and Indonesia)." He presented a travelogue of recently discovered slipper orchids and their habitats. In 1977 he moved to southern Ecuador, where he was curator of the orchid collection at Orquideario Predesur, a botanical garden dedicated to the cultivation and propagation of the native orchid species of Ecuador. He also is the owner of Gypsy Glen Orchids in Beaver, Pennsylvania.

The highlight of the exhibition table was a Phrag. Paul

Fischer 'Untima' exhibited by Jerry Fischer of Orchids Limited. The plant received rosettes for First Place, Culture and Best Besseae Phrag. Hybrid. The plant also received the People's Choice award, a hand-blown glass *Cypripedium*. First place rosettes also were given for the Best Species to Paph. *braemii* 'Fox Valley,' AM/AOS, exhibited by Tom Kalina of Fox Valley Orchids; for Best Paph. Hybrid to Paph. Al Hill 'Fox Valley,' exhibited by Tom Kalina; for Best Paph. Hybrid to Paph. Wossner *Uberrauschung* 'Gold Finger,' exhibited by Jerry Fischer; for Best Phrag. Species to Paph. *wallisii* exhibited by Jerry Fischer; and to Best Other Phrag. Hybrid to Phrag. *Grande*, exhibited by Jerry Fischer. The awards committee consisted of Lois Dauelsberg of Los Alamos, New Mexico; Leroy Peterson of Wauwatosa, Wisconsin; and Karen Muir of Laguna Niguel, California.

Among the commercial vendors present were Slipper Orchid Alliance supporting members: Castle Rock Orchids of Maple Plain, Minnesota; Fox Valley Orchids of Villa Park, Illinois; Gypsy Glen Orchids of Beaver, Pennsylvania; the Orchid Inn of Downs, Illinois; and Orchids Limited of Plymouth, Minnesota. In addition, an open house was held for attendees on Sunday morning at Orchids Limited, hosted by Jerry and Yoko Fischer.

Special thanks are extended to Barbara Tisherman, who handled all of the arrangements; Ed Bayer of Gibsonia, Pennsylvania, who served as registrar for the forum; and Jerry Fischer, who assisted with the hotel arrangements.

Summary report of presentation on Evolution of Designed Paphiopedilums

By Kevin Porter, Curved Air Orchids, Santa Maria, California

Introduction

For the first 60 years interest in the genus Paphiopedilums was limited to those species that it was feasible to grow and hybridize, such as Paph. *insigne* and Paph. *spicerianum* and their hybrids. Because such species were vigorous growers they essentially dominated the marketplace. The range of choices was very narrow. The lone product was the so-called "standard" hybrid, being a single large and rounded bloom on a firm stem. What you got was what the hybridizer could successfully grow.

By comparison, today the consumer's choices are much broader, loaded with an array of species-based breeding, many only recent introductions. However, for many breeders, today's market for Paphiopedilums is once again

Upcoming Events

August 11, 2001

SOOS Orchidfest

Mark your calendars for the Southern Ontario Orchid Society Orchidfest, Saturday, August 11, 2001, at the Civic Garden Center, Toronto. Among the speakers will be Norito Hasegawa of Paphanatics unLimited on "The Newly Discovered Paphiopedilum Species."

September 23, 2001

9th Paphiopedilum Salon

Romantic Village, Tochigi, Japan. The presentations will emphasize Paphiopedilums *stonei* and *philippinense*.

November 10, 2001

4th Slipper Orchid Symposium

Kissimmee, FL

November 11, 2001

Virginia Paphiopedilum Society

Bob Walker will speak on Slipper Orchid propagation. 2:00 PM, Sandy Bottom Nature Center, Hampton, VA, (757) 825-4657

April 10 - 14, 2002

AOS Trustees Meeting

Chicago, IL. SOA meeting and sponsorship of speakers.

driven by the so-called "standard" hybrids. That is because they are both popular with the dominant Asian hobbyist, and in demand as a flowering plant for the floral market.

Fortunately, as a consequence of 30 to 40 generations of genetic experience, the better contemporary hybridizers of Paphiopedilums can establish or target specific desired characteristics and formulate ways to shoot at them. This is accomplished by understanding what genetic combinations are necessary to achieve their selected targets based on this genetic experience.

Such complex, designed hybridization is in contrast to the uncharted exploration of breeding with, for example, the recently discovered Parvisepalum species from Vietnam and China, where the hybridization is just beginning to evolve.

Application of early experience

Since the early 1950's, the more visionary hybridizers have built on the experience of their predecessors such as Robert Jones, John Hanes and the Ratcliffe Nursery to maintain the advancement necessary to satisfy the buying power of the Asian market. Besides demanding standard Paph. hybrids, this market is trending toward hybrids from Paph. *sanderianum*, and the Brachypetalum and Parvisepalum groups, which are still in their (primary x species) and (primary x primary) levels of complexity. Thus, there is more rapid evolution and more unpredictability in the quality of the product.

In trying to satisfy this market, the designer hybridizers tend to focus on small characteristics and seek to lock them in, and then intensify them.. For example, one target has been to produce a solid red bellatulum. By selecting and line breeding suffused parents, progression toward the target is made.

Many of the exciting fruits of these designed efforts have gone to the Asian market because of its buying power. Thus, many such hybrids generally are not known in the United States. Among these are "standard" reds mated with vini-color hybrids derived from Paph. *callosum* 'Sparkling Burgundy,' Also involved are the largest of the standard whites, and hybrids from novelty parents such as Paph. Friendship. The more complex Brachypetalums with the most intense color and markings are also highly sought after.

With the down turn in the Asian economy, many hybridizers on the West coast are paying more attention to the creation of Paph. hybrids for the domestic market. Flowers which meet both the bigger, fuller, rounder criteria of the hobbyists and the strong substance, bright color, and strong stem of the pot plant market have become a particularly important direction.

An area of renewed interest is the remake of primary Paph. crosses using improved Paph. species. For example, Paph. Rolfei (*bellatulum x rothschildianum*) or Paph. S. Gratrix (*godefroyae x bellatulum*) have been remade with vastly superior parents derived from hybridized species clones. Just within the Brachypetalums themselves there has been significant improvement over the last five years through selective species breeding. A strain in Japan of Paph. *godefroyae v. leucochilum* produced significantly amplified characteristics of size, form and color. A cross of Paph. S. Gratrix made by Nick Tannaci has spurred renewed interest in complex Brachypetalum evolution. Even the availability of album forms of Paph. *bellatulum*, Paph. *leucochilum*, and Paph. Greyi has introduced vigor of growth, and in some cases, improvement in stem length.

On the edge of introduction are Brachypetalum blooms with "candy stripes", mists of spots all over, and deep overall colors of umber or gold. There are also on the way second and third generation (multifloral x Brachypetalum) crosses

which are strongly rounded versions of Paph. Frank Hughes or Paph. Rolfei.

Parvisepalums/Brachypetalum hybrids.

Experience so far from crossing Parvisepalums with standard Paph. hybrids suggests some interesting possibilities. Paphiopedilum *emersonii* has made nice things, such as Paph. Sugar Suite (*emersonii* x *niveum*), which produces almost circular flowers. Some new possibilities are suggested, therefore, with the combination of standard greens with Paph. *emersonii* and its hybrids for creamy whites with yellow pouches, for example. One may also see speckled or veined pinks. Now, there is also the introduction of Paph. *emersonii* var. *album*, which is missing the red dots on the inside of the pouch and the red hairs in the center of the petals, and may breed in its own way.

Paphiopedilum *malipoense* has been an especially fine parent when mated with standard greens. Surprisingly, while most Paph. *malipoense* have heavy veining and stippling on their petals and pouches, the progeny have generally been smoothly colored greens and yellows or near-standard shape on really tall stems, and vigorously growing plants.

Also, now that Paph. *delenatii* var. *album* is available we can expect that it will be crossed with standard green Paph. *insigne* hybrids to produce designer whites. Similar potential exists for the full flowered Paph. *vietnamense*, which is bigger than Paph. *emersonii* and possesses a wide color spectrum from apple blossom pink to almost solid rose. When finally approved by CITES for documented distribution, its progeny will be especially sought after.

Paphiopedilum Skip Bartlett (*godefroyae* x F.C. Puddle) breeds essentially like a Brachypetalum and produces a lot of seed. Initially used to breed clear whites, Paph. Skip Bartlett is now a significant novelty parent, producing new directions such as Paph. Snow Eagle (Skip Bartlett x Eagle Lake), a spotted standard pink/white. It is also being bred back to some of the contemporary Brachypetalums for novel directions in markings and form.

It should be observed, however, that when you cross a relatively complex “standard” paph with the brachy/parvi group, one has to monitor the maintenance of the novelty. Otherwise the species influence is lost.

Poly-floral Paphiopedilums.

Bigger is not necessarily better. Another area to look at for new developments is the so-called “poly-floral” Paphiopedilum, characterized by numerous small flowers blooming simultaneously in a small pot, using species such as Paph. *henryanum*, Paph. *charlesworthii*, Paph. *barbigerum*, and, when ultimately documented, Paph. *helenae*, for example. The target will be miniaturized flowers of new color and markings with traditional “standard” shape.

Already being developed in this are crosses using Paph. Chilled Bubbles (*henryanum* x Winston Churchill) and Paph.

Hot Spots (*henryanum* x Red Glory) in combination with the large standard spotted flowers such as Paph. Johnbourn or Paph. Personality.

Current state of the art

Contemporary designers of Paph. hybrids now have a rapidly expanding spectrum of choices to draw from which permit a much faster realization of their goals.

As an example, one area being developed is vini-color standard Paphs. One of the first steps in this effort was Paph. Flasher (*charlesworthii* x Goultenianum). From this came Paph. Flashdance (Orchilla ‘Chilton’ and Flasher). This evolved into a pairing of Paph. Flashdance with the premier standard red breeder, Paph. Amanda ‘Joyance’ AM/RHS. The result was perhaps the roundest, fullest standard vini-color available today. In turn, it has been mated with the gigantic Paph. Alakazam (Algonquin x Amanda). When these bloom out they will essentially be a line-bred, vinicolor version of Paph. Amanda ‘Joyance.’ Such reds will create a whole new spectrum of vivid, glowing standards which will be economically available to the paphiopedilum hobbyist.

Another benchmark direction has been the progeny from Paph. Skip Bartlett, which developed the Paph. White Knights. These are making even larger whites such as the current state-of-the-art, Paph. Mystic Knight (White Knight x Elfstone). In turn, they will evolve further using some of the huge standard greens coming from the new Paph. Elfstone.

Still another new line of breeding relies on Paph. Friendship (Windbell x *niveum*) which took over 15 years to develop, and is now producing the next generation of versatile breeders such as Paph. Stargate (Friendship x Skip Bartlett) and Paph. Snow Tiger (Friendship x Mem. Toshio Miyata), each in the pink/white line.

And so it goes, each line evolving and influencing the next. Thus, in a fifteen year period, designer hybridizers have produced totally new styles of flowers and are building groundwork for the widening spectrum of flowers yet to come.

Reported by Richard Grundy

Virginia Paphiopedilum Society

Founded in January 1998 by Jerry Lawless, the Virginia Paphiopedilum Society is a non-profit educational organization that provides members with continual, in-depth information on all aspects of Slipper Orchid appreciation, culture, and quality. We have local, out of state, and international members, and are an affiliated society of the **Orchid Digest**.

Our meetings are the second Sunday of each month, September through December, and the fourth Sunday of the

month, January through May, at 2 pm in the Nature Center classroom at the Sandy Bottom Nature Park, 1255 Big Bethel Road, Hampton, Virginia.

Each meeting features:

- Seminars, lectures, or panel discussions from both professional and amateur growers.
- A display table of members' blooming Slipper Orchids, with a "show n tell" of how they grew them.
- Orchids for sale by both speakers and members.

We also offer:

- A yearly auction in March featuring quality Paphiopedilums, Phragmipediums, and Cypripediums for sale at reasonable prices.
- The **Paphiopedilum Monthly**, an informative bulletin featuring reprints of classic Slipper growing information, as well as new articles and art work created especially for the society.
- A colorful website at: <http://www.geocities.com/RainForest/Wetlands/3437/index.html> featuring a list of current programs and upcoming non-Society Orchid events, a Slipper Orchid Photo Gallery, and a list of many useful Slipper Orchid related links.

We have enjoyed programs by:

- Professor Martha Case of The College Of William & Mary; AOS Judges Nancy Meares, Paul Sheetz, Steve Shifflett, and Bill Werntz; commercial growers Leon Blumreich, Hadley Cash, Art Chadwick, Yassir Islam, Michael Kovacs, Tom Nasser, Mark Rose, Sam Tsui, Tony Whitaker, and others.

Some of our commercial members include:

- Antec Labs, Bridges Orchids, Castle Rock Orchids, Chadwick & Son Orchids, Flasks By Chuck Acker, Kingswood Orchids, Marriott Orchids, Orchid Inn, Pinecrest Orchids, Piping Rock Orchids, Ratcliffe Orchids, and Woodstream Orchids.

Membership in the Society requires the approval of the VPS Executive Board. Persons of both sexes, all races, religious beliefs, and ethnic groups are invited to apply for membership.

For more information, please contact:

Jim Bridges, President

1504 Ashley Drive

Virginia Beach, VA 23454

Phone: (757) 481-5352

Email: jbridges@worldnet.att.net

Dave Alford, Vice President

112 Kohler Crescent

Newport News, VA 23606-2625

Phone: (757) 595-4385

Email: dalford@infi.net

Urgent Final Notice OVERDUE 2001 DUES

If you are one of our members who have not paid their 2001 annual dues, this is the last copy of the SOA Newsletter that you will receive. Therefore, I encourage you to renew your SOA membership by forwarding your 2001 SOA dues to the Slipper Orchid Alliance, 950 Wikiup Drive, Santa Rosa, California 95403-1305.

Report of presentation on Phragmipedium Hybridizing: Past, Present and Future

By Dr. Louis Hegedus, Fort Collins, Colorado

The evolution of Phragmipedium discoveries

Interest in the genus Phragmipedium began with the discovery of caudatum in about 1841. These long-petaled, large showy plants occur in many color forms from white to pink to brown and reddish brown. (When Phrag. *caudatum* is used as a pod parents it takes about nine months for the pod to mature in contrast to a couple of months for other Phrags.)

Further interest followed the description of Phrag. *lindenii* around 1846, which is a slipper orchid without a pouch, and Phrag. *lindleyanum* in 1848, with its branching spikes, round flowers and lots of color variation. In addition, Phrag. *klotzschianum* was described in 1850; however, it was not available in the trade for many years. It is a robust grower when raised from seed but jungle-collected plants may be difficult. It may be related to Phrag. *caudatum* and it breeds a nice red color into the petals and red striping on the dorsal.

Along came Phrag. *caricinum* in 1852 which has a very nice flower. When used in breeding it can impart a nice red color into the petals and produce branching spikes which carry multiple flowers. Also described in 1852 was Phrag. *longifolium*, which exhibits huge variation, such as that represented by Phrag. *longifolium* var. *gracile*, that may in fact be a different species.

Interest was spurred by the discovery of the pretty pink Phrag. *schlimii* in 1854, because it was capable of imparting pink to its progeny. Phrag. *schlimii* thus became the lynchpin for a spate of hybridizing that extended through the 1890's into the early 1900's. Also described in 1854 was Phrag. *boissierianum* with its large green flowers. Although it is used infrequently in hybridizing, care must be exercised when using it as a pod parent because of its tendency to self-

pollinate.

Phrag. *pearcei* was described in 1865. When it is used in breeding its pale green or white color tends to wash out color in its progeny. Another small plant described in 1873 was the Phrag. *caudatum*-like plant, Phrag. *wallisii*. In 1874 Phrag. *reticulatum* also was described, although similar to Phrag. *boissierianum*. Eleven years later, Phrag. *kaieteurum* was described in 1884 and compared to Phrag. *lindleyanum*. While Phrag. *kaieteurum* breeds red it does so to a lesser extent than Phrag. *sargentianum* described in 1892 for which the operative word is “red.”

Significantly, for the eighty-six year period from 1892 until 1978 there were no reported discoveries of new Phragmipedium species until the discovery of Phrag. *ecuadorensis* in 1978. This was immediately followed by the accidental discovery of Phrag. *besseae* in 1981. Like Phrag. *schlimii* a hundred and thirty years earlier, Phrag. *besseae* is today’s lynch-pin for the incredible amount of Phrag. hybridization that is currently taking place. Of special interest is Phrag. *besseae* var. *flava* with beautiful flowers, but from the standpoint of hybridization the jury is still out.

More recently, Phrag. *exstaminodium* was described in 1984, which like the name implies lacks a staminode but in other respects is similar to Phrag. *caudatum*. It grows well until it spikes and then it tends to die, as if it has a death wish. This was followed by the description of Phrag. *hirtzii* in 1984, which may be a natural hybrid of Phrag. *longifolium*. Even more recently, Phrag. *richteri* was described in 1994, although initially called Phrag. *amazonica* and a possible natural hybrid, and Phrag. *fischeri* was described in 1996.

Reportedly, there are several more recent discoveries for which pictures are not yet available.

Historical perspective of hybridization

The first known Phrag. hybrid was reported around 1831, although it was grown before that time. In the subsequent 50 years until 1880 only four hybrids are known. The fact that any were made at all is significant, however. The first recorded hybrid was Phrag. *Dominianum* (*caricinum* x *caudatum*) in 1870. Notably, the early Phrag. *Dominianum*’s awarded by the AOS exhibit characteristics that suggest Phrag. *longifolium* rather than Phrag. *caricinum* is in their heredity; for example, they are much larger than more recent remakes with the correct parents. It is reasonable to suspect that some of these early awarded Phrag. *Dominianum*s may actually be Phrag. *Grande*. Therefore, if you hybridize with these early Phrag. *Dominianum*s you may not be able to determine what you will end up with.

Three other hybrids registered in the 1870’s were with Phrag. *schlimii*: Phrag. *Sedenii* (x *longifolium*) in 1873, which is a delightful pink; Phrag. *Stenophyllum* (x *caricinum*) in 1876, which are small plants with great color; and Phrag. *Albopurpureum* (x *Dominianum*) in 1877. However, the early awarded Phrag. *Albopurpureum*s are not as claimed.

The flowers are too large and exhibit red in the petals that suggests the presence of Phrag. *longifolium* in their heredity.

Between 1881 and 1890 there were nine recorded hybrids, five of them with Phrag. *schlimii*. The first was Phrag. *Grande* (*caudatum* x *longifolium*) in 1881. This hybrid can be huge and very nice; however, there is huge color variation depending upon the color of Phrag. *caudatum* used. Also recorded in 1881 was Phrag. *Conchiferum* (*caricinum* x *longifolium*), which is not very exciting. Phrag. *Schroderae* (*caudatum* x *Sedenii*) was recorded in 1882. This is a lovely plant to grow. You can see flanges along the lip line from the Phrag. *longifolium* in Phrag. *Sedenii*. Some of them have been incorrectly awarded as Phrag. *schlimii*, however. Also in 1882, Phrag. *Cardinale* (*schlimii* x *Sedenii*) was recorded. Phrag. *Sedenii* was put back on Phrag. *schlimii* to round it out. Similarly, although lovely, many of the Phrag. *schlimii* awarded until recently were in fact Phrag. *Cardinale*; for example, Phrag. *schlimii* ‘Wilcox.’ You get another delight with less round petals when you put Phrag. *Sedenii* back onto Phrag. *longifolium* to get Phrag. *Calurum* which was recorded in 1883.

The last hybrid of note in this decade was the very nice Phrag. *Nitidissimum* (*caudatum* x *Conchiferum*) recorded in 1888. Some of the early awarded clones are in fact Phrag. *Grande*, however. Also recorded in the 1880’s were Phrag. *Umbriel* (*Grande* x *sargentianum*) in 1881 and Phrag. *Leomoinierianum* (*Calurum* x *Sedenii*) in 1888.

This brings us to the decade of the 1890’s when twenty hybrids were registered – four with Phrag. *schlimii* and some with Phrag. *boissierianum*. Most of these hybrids were primary crosses or primaries crossed back on species. Virtually none of these hybrids are around today. The principal exception is Phrag. *Giganteum* (*caudatum* x *Grande*) which was registered in 1894. As interest in Phrag. hybrids waned, from 1900 and 1910 there were three hybrids registered, all made with Phrag. *schlimii*.

What happened was that once all primaries had been crossed back onto species the hybridizers eventually run out of steam. When you breed with the pinks you eventually hit a wall. Further progress can only be made by repeating the earlier hybrids with bigger and better clones.. Between 1911 to 1920, one hybrid was registered and it also was made with Phrag. *schlimii*.

More importantly, over the intervening fifty years from 1921 to 1970 no Phrag. hybrid was registered.

Resumption of hybridization in the 1970’s

During the decade of the 1970’s there was a re-emergence of interest in Phrag. and four hybrids were registered. One was with Phrag. *schlimii*: Phrag. *Carol Kanzer* (*pearcei* x *schlimii*) in 1980. The other three were Phrag. *Praying Mantis* (*longifolium* x *boissierianum*), registered in 1975, which grows like a weed; Phrag. *Court Jester* (*caudatum* x *boissierianum*), registered in 1977; and Phrag. *Clover Field*

(*Sedenii* x Praying Mantis) registered in 1979.

In the decade of the 1980's four hybrids were registered – none with Phrag. *schlimii*. These were Phrag. *Betheva* (*caudatum* x *pearcei*) in 1985, Phrag. *Fireworks* (*pearcei* x *Grande*), in 1987; Phrag. *Fire Star* (*Nitidissimum* x *pearcei*) in 1988; and Phrag. *Sorcerer's Apprentice* (*sargentianum* x *longifolium*), in 1986, which is a big plant that grows like a weed. In 1990, two additional hybrids were registered: Phrag. *Demetria* (*caudatum* x *sargentianum*) registered by Bud Mellott in the name of his wife, which has a very good flower, from Phrag. *caudatum*, and Phrag. *Dana Hutchinson* (*lindleyanum* x *czerwiakowianum*).

Every thing broke loose at the end of 1990 following the discovery of Phrag. *besseae* in 1981. Like Phrag. *schlimii* a hundred and thirty years earlier, Phrag. *besseae* is today's lynch-pin for the incredible amount of Phrag. hybridization that is currently taking place. Of special interest is Phrag. *besseae* var. *flava* with beautiful flowers but from the standpoint of hybridization, the jury is still out.

Between 1991 and the year 2000 there are 141 known Phrag. hybrids of which 121 are registered. Of these 79 are with Phrag. *besseae*. The first four registered in 1991 were: Phrag. *Eric Young* (*besseae* x *longifolium*) which is very nice, followed by Phrag. *Mary Bess* (*besseae* x *caricinum*), which is named after Lou Hegedus' wife and has lots of flowers on a single spike. Closely related are Phrag. *Ecua-Bess* (*ecuadorensis* x *besseae*), which tends to be less intense in color; and Phrag. *Hanne Popow* (*besseae* x *schlimii*), which is pink from Phrag. *schlimii*. It also exhibits the color break that is common to many Phrag. *besseae* hybrids, as well as Phrag. *besseae* itself.

These were followed in 1992 by Phrag. *Mem. Dick Clements* (*sargentianum* x *besseae*); Phrag. *Andean Fire* (*besseae* x *lindleyanum*); and Phrag. *Ruby Slippers* (*caudatum* x *besseae*) which can be outstanding when you get a good one. These were followed in 1993 by Phrag. *Rosalie Dixler* (*besseae* x *kaieteurum*), with fine flowers. However, some of them are just plain dogs. Sometimes you need to be careful with Phrag. *besseae*, because of its lip shape you can get a lot of distortion.

Among the very good primary crosses of the 1990's are: Phrag. *Patti MacHale* (*pearcei* x *sargentianum*) in 1995; Phrag. *Barbara LeAnn* (*besseae* x *fischeri*) in 1998; and Phrag. *Coral Jewel* (*schlimii* x *sargentianum*). However there is Phrag. *Rumwell* (*kaieteurum* x *wallisii*) in 1998, which is a bland Phrag. *Demetria*.

Among the very nice primaries crossed back onto species are Phrag. *Don Wimble* (*Eric Young* x *besseae*) in 1995; Phrag. *Jason Fischer* (*Mem. Dick Clements* x *besseae*) 1996, which is red-red and about as good as it gets; and Phrag. *Rosy Charm* (*Mem. Dick Clements* x *schlimii*) in 1997, and Phrag. *Purple Wave* (*Mem. Dick Clements* x *fischeri*) in 2000. A winner among them is Phrag. *Noirmont* (*Mem. Dick Clements* x *longifolium*) in 1997. When you put Phrag.

longifolium onto something else you get flowers that are bigger than either parent.

Other notable crosses of primaries onto species are Phrag. *April Fool* (*Cardinale* x *besseae*) in 1994; which is pink from Phrag. *schlimii*; Phrag. *St. Ouen* (*besseae* x *Hanne Popow*) in 1997, which is still pink and not necessarily an improvement; Phrag. *Elizabeth March* (*Sedenii* x *besseae*) in 1995, again pink; and Phrag. *Beauport* (*Hanne Popow* x *sargentianum*) in 1997. In addition, Phrag. *Flying Fortress* (*Calurum* x *besseae*) in 1993, gave you lots of flowers. Experience with crossing primary hybrids back onto species is that you get a lot of variation.

In conclusion

Not to be deterred, in the year 2001 the hybridizers seem to still be going strong. Of recent interest is the use of the "yellow" Phrag. *besseae* var. *flava*. This is a gorgeous little species that appears to have little color. But when it is bred with a green Phrag. *czerwiakowianum* you get the pink Phrag. *Robert Palm* from somewhere within the Phrag. *besseae* var. *flava*.

Reported by Richard Grundy

SOA's Web-site Species Structure

By Richard Grundy

The SOA's Web-site at <http://www.slipperorchid.org> provides a portal to separate sections of the web-site for each of the genera *Cypripedium*, *Paphiopedilum*, and *Phragmipedium*. Currently, the section for each genus incorporates an alphabetic list of orchid species within such genus.

The genus *Cypripedium*

The section for the genus *Cypripedium* sets forth an alphabetic list of species. Color photographs of each *cypripedium* species are currently being researched and will be added to the SOA Web-site as they become available. The current priority is North American species.

In addition, the section sets forth an alphabetic list of registered *Cypripedium* hybrids, as well as a companion list of *Cypripedium* hybrids by pod and pollen parent. Photographs for these *Cypripedium* hybrids also are being researched and will be added to the SOA Web-site as they become available.

The genus *Paphiopedilum*

The section for the genus *Paphiopedilum* also sets forth an alphabetic list of species, as well as similar lists for each subgenus, such as *Brachypetalum*, *Parvisepalum* and

Paphiopedilum. Photographs of each Paphiopedilum species are currently being researched and will be added to the SOA Web-site as they become available. The current priority is recently discovered Asian species.

An alphabetic list of primary Paphiopedilum hybrids, that is species crossed with species, also is being researched for inclusion on the SOA Web-site, along with color photographs.

Contributions to such information and pictures would be appreciated.

The genus Phragmipedium

The section for the genus Phragmipedium sets forth an alphabetic list of species. Color photographs of each phragmipedium species are currently being researched and will be added to the SOA Web-site as they become available.

An alphabetic list of Phragmipedium hybrids also is provided, as well as a list of by pod and pollen parents. Color photographs of such Phragmipedium hybrids also are being sought and will be added to the SOA Website as they become available.

As the SOA Web-site matures the priority is being given to the addition of bibliographies and cultural information, as well. Contributions to the SOA's Web-site would be appreciated.

S L I P P E R S A L E S M A R T

FOR SALE: Book: "*The Genus Paphiopedilum*" (2nd Ed.), P. Cribb, \$90. (Mint cond.) Richard Grundy, 950 Wikiup Drive, Santa Rosa, CA 95403. Email: richardgrundy@att.net

FOR SALE: Limited edition (50) signed print by Carol Woodin. for 44th Eastern Orchid Congress \$150. One inflorescence each of Phrag. caudatum, Cyp. kentuckiense, and Paph. stonei. Image 15 1/2 x 21 inches with three inch border. Contact Carol Woodin by phone at 716-373-1219 or Email: mcwoodin@eznet.net

The Slipper Sales Mart is a small classified section. Ads should be twenty-five words or less (excluding address and phone number). Make checks payable in the amount of \$10 to the Slipper Orchid Alliance and mail check and text of ad to Janette Harris, 1947 Jackson Road, Westfield, NC 27053. The SOA assumes no responsibility for any item offered for sale, and the tariffs or governmental requirements are the responsibility of the purchaser/seller.

SOA Membership Status

Support for the Slipper Orchid Alliance continues to grow. When the Alliance completed its 2000 inaugural year, founding member support exceeded 170 members from seven countries: Australia, Canada, Dominican Republic, England, Japan, Jersey of the Channel Islands, and the United States. At the Alliance's May 19th Speakers Forum, membership exceeded 200.

Supporting membership also grew in 2001 to include seventeen commercial members: Antec Laboratory, Candor, New York; Bloomfield Orchids, Pittsford, New York; Castle Rock Orchids, Ltd., Maple Plain, Minnesota; Curved Air Orchids, Santa Maria, California; Ellenberger's Orchid Eden, Victor, New York; Fox Valley Orchids, Villa Park, Illinois; Gypsy Glen Orchids, Beaver, Pennsylvania; Orchidaceae, Seattle, Washington; Orchid Inn, Downs, Illinois; Orchids Limited, Plymouth, Minnesota; Paphanatics, Ltd., Anaheim, California; Ratcliffe Orchids, LLC, Kissimmee, Florida; The Orchid House, Los Osos, California; The Paph House "Orchids", San Leandro, California; Whippoorwill Orchids, Rogers, Arkansas; Windy Hill Gardens, Labadie, Missouri; and Woodstream Orchids, Huntingtown, Maryland.

On behalf of the Alliance, I wish to thank you for your continuing support and urge that you renew your membership.
Richard Grundy, Executive Director.