

The Houston Orchid Society, Inc.



A non profit organization established in 1945, HOS is a recipient of the American Orchid Society's Distinguished Affiliated Societies Service award



Please Welcome New Members:

Melissa and Fa Dwan

Liza and Chang Lee

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The Houston Happenings



Volume 45, Issue 8

August 2015

August Program: How To Manage Your Orchid Collection

By Derek Lowenstein, VP Speakers & Programs

Alan Koch will be our speaker at the August meeting. Alan owns and operates Gold Country Orchids where he specializes in miniature and compact Cattleya's. Alan started growing orchids in 1969 with 3 Cymbidiums given to him by an aunt. While in college he became interested in other orchids and discovered many would grow outdoors in Southern California. He has moved five times as his orchid obsession has led to the need for more growing space. With the last move, he purchased 10 acres of land in Lincoln, California for his 250,000 orchids. He is recognized as an

expert in the Brazilian Cattleya alliance and a trend setter in miniature Cattleya breeding. Alan has been published in the *Orchid Digest*, the American Orchid Society magazine, as well as many International Publications. He has also been published in several proceedings of the World Orchid Conference. He is an internationally known speaker. He is a past member of the AOS Judging Committee, and the Research Committee, as well as an Accredited Judge and is Training Coordinator for the California Sierra Nevada Judging Center. Alan also served two terms on the Or-



Alan Koch

chid Digest Executive Committee and 3 terms on the Board of Directors, as well as two terms as a Trustee for the AOS.

Alan Will Be Selling Plants at the August Meeting.

Presidents Post

By Mary Gunn, President

I hope to see most of you at the Summer Workshop on August 7th and 8th. If you haven't ever attended, I encourage you to join us this year. We will be back at St. Thomas University in Jerabek Center. John Stubbings and Father Ted have arranged another outstanding line-up of speakers: Alan Koch, Glen Decker, and Richard Jamison. These are nationally and internationally known orchid experts that write articles for *Orchids* magazine or other well know publications in the orchid world. Here's your chance to meet them and hear them speak

on their area of orchid expertise. Friday night includes a Reception with hors d'oeuvres, the Houston Judging Center judging event, first chance to purchase orchids from our speakers, a silent auction that benefits HJC, and a relaxed evening to visit with our Speakers and other HOS members. Saturday includes speaker keynote talks, breakout sessions with additional topics and Q&A, another silent auction offered by HOS, more visiting, lots of orchids to admire and buy, and more food - continental breakfast plus an 'eat in' lunch from the St. Thom-

as cafeteria. Lots of fun and a great value. See the complete schedule on our website. <http://www.houstonorchidsociety.org/workshop.html> You can still register at the HOS meeting, by sending in the registration form with payment by mail (form on website), or even at the door on Friday or Saturday. We'll have our annual picnic in October. We need two volunteers to plan and handle arrangements. Please contact me if you'd like to help. See you at the next HOS meeting on August 6th.

July Plant Table

By Loren Neufeld, Photos by Loren Neufeld



Hybrid Winner:
Stanhopia Assidensis
Presented by Judith Neufeld

Species Winner:
Den. griffithianum
Presented by Stephen Moffitt

There were 9 hybrids and 3 species entered



SHOW TROPHIES

If you have Heisey orchid trophies that you don't want anymore, I can buy them back or you can donate instead of sponsoring a trophy by giving money. I am collecting trophies now. Contact Holly Miller for more details. hollymil@earthlink.net

Volunteer Of The Month

By Mary Gunn, President

Jerry Stephens was our volunteer of the month for July 2015. Jerry is an HOS life member, an AOS Emeritus Judge, and served as President of Houston Orchid Society in 1982-83. During his term as President, Jerry was responsible for taking the idea of an 'occasional workshop' and turning it into the HOS Annual Summer Workshop, which has been held every year since then. He served as the chairperson for the event for about 25 years. The workshop is attended by Society members from

across Texas and Louisiana. It's an important part of HOS's mission to "discuss and study orchids, present lectures, lessons, exhibits, organize and participate in workshops and similar study groups, symposiums and conferences concerning the subject of Orchids". We are very appreciative of Jerry's many years of participation and volunteering in HOS, and especially his contributions to creating and managing the Annual Workshop. Thank you, Jerry.



August 2015 Workshop

By Holly Miller

We are pleased to bring to Houston three well known orchid people. You can meet them Friday evening at our reception from 5:00 till 8:00 and enjoy some light refreshments and liquid refreshments. We will have AOS judging during this time. We also will have a silent auction in support of the Houston Judging Center and the vendors will be selling orchids. All activity will end by 8:00 PM. This will be followed by a Dutch treat dinner with the speakers. All members are invited. Saturday starts at 8:00 AM for registration and runs till 4:00 PM. Lectures and breakout sessions alternate all day with a break for a lunch included in your registration fee.

The speakers:

Alan Koch will join us from California. Alan owns and runs Gold Country Orchids. He will speak on smaller growing (easier to grow) Cattleyas. Alan will bring plants for sale. He has given lectures at previous workshops.

Dick Jamison will make the shortest trip. He comes from Shreveport, LA. Dick will pre-

sent 'Tolumnia Culture'. He has been growing Tolumnias (Equitant Oncidiums) for years. Dick is an AOS judge of long standing and is really into this group of orchids.

Dick frequently attends our shows and workshops.

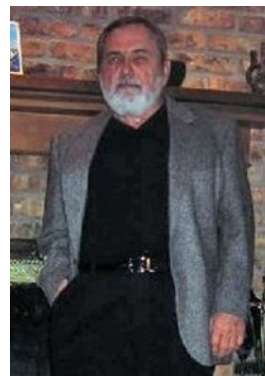
Glen Decker, our third speaker, hails from Galway, NY. Glen owns and runs Piping Rock Orchids, famous for slipper orchids. Glen will talk on 'How to Grow Great Slipper Orchids'. The slippers he concentrates on are Phragmipedium kovachii, kovachii hybrids and Paphiopedilums. Glen will be bringing plants for sale.

In addition to the lectures there will be three breakout sessions in the morning and three more after lunch. There will be luncheon, a silent auction supporting the Houston Orchid Society Saturday as well as a brief live auction.

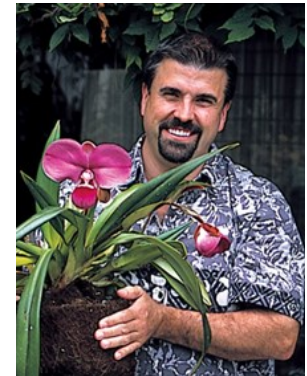
So there you have it a weekend of orchids, auctions, parties. What more could you want.



Alan Koch



Dick Jamison



Glen Decker

**Summer Workshop
Registration Information and
Schedule:**

[http://houstonorchidsociety.org/
workshop.html](http://houstonorchidsociety.org/workshop.html)

A Brief Look at Polyploidy

By Paul Gripp

One of the main features of orchids as a hobby is the wide range of interest that makes it a challenging, intriguing, and ever-searching endeavor. The study of plant genetics in reference to orchids is one of these fascinating sidelines.

Now, orchid genetics can be a very involved, technical subject, but for those of us interested in merely a working knowledge to help us in our estimate of expectations, there are a few basic facts which we should understand in order to be intelligent cultivators of this particular plant family. Perhaps the most basic-study that we, as orchid growers, should understand is that area dealing with chromosome numbers (or, levels of ploidy). Plants carry, in their anatomical make-up, a certain number of genetic carriers (chromosomes) which determine the characteristics of the plants and their future progeny. An interesting fact about chromosomes is that, besides carrying the individual genes that determine specific characteristics, the degree of influence of an individual set of chromosomes is greatly modified by the number of sets (or level of

ploidy) of the particular individual. Hence, the terms diploid (2n), triploid (3n), tetraploid (4n), pentaploid (5n), etc., refer to the number of sets or level of ploidy. Those in which the multiple is greater than the normal or diploid level are referred to collectively as polyploids. In trying to understand this, we should keep in mind that although plants of these various genetic groups do have certain specific characteristics, their main significance in breeding and heredity is their degree of influence in determining the characteristics of progeny. It is also true that the nature and significance of ploidy varies greatly among the various genera. In certain genera the rules of ploidy are fairly simple, with not too many exceptions. In other genera, however, the rules are very much complicated by uneven chromosome numbers and ability to breed among even very irregular chromosome patterns.

Generally speaking, the rules for the genus *Cymbidium* are fairly simple and well worked out, and they serve as a good example on which to learn. Breeding in *Cymbidium* turns out to be a

blending process influenced by the various traits of both parents and weighed in quantity by their particular level of ploidy.

Diploids (2n): — Most typical, normal, naturally occurring wild types are of a diploid level of ploidy. The diploid level is the standard in nature, even though mutations and resultant abnormal strains commonly occur. Diploids are characterized by typically good, natural vigor. Diploids have many good features that are important in the most modern hybrids, and often it is their agreeable complimentary compatibility that makes a good match when used with other levels of polyploids, particularly the tetraploids.

Good *Cymbidium* diploids are certainly of great importance. Because of the fact that many of the most famous polyploids in *Cymbidium* have been brought about by much inbreeding, there are some poor growth characteristics that have carried along, and it is often the free-growing habit of the diploid that influences the progeny into being good, free performers. *Cymbidium* diploids are also characterized by often having more flow-

(Continued on page 5)



**Cymbidium Fanfare 'Sierra Spring',
AM/AOS (1965)**
An example of a diploid (2n) flower



Cymbidium Fanfare 'St. Francis', AM/AOS
An example of a tetraploid (4n) flower

Polyploidy - Continued

ers per spike than many of the more popular tetraploids. Together with this, popularity in the tetraploid line has centered around the full-shaped white tetraploid. In order to get other colors, we must draw from the diploid color genes.

Tetraploids (4n) : — Tetraploids originally occurred by freak happenings, the plants' cellular structure changing in such a way as to possess twice the normal number of chromosomes in their make-up. Though tetraploids are often characterized by slower growth and heavier texture, the significance to the naked eye may or may not be apparent. It is also questionable to say that tetraploids are always necessarily associated with desirable features, such as good form and other characteristics we look for. Their main significance lies in their breeding influence. Because of their doubled chromosome number, they assert double the influence that a normal diploid would. Thus, the tetraploid has led to the finest advances in orchid breeding. This is because certain plants of good quality have been discovered to be tetraploids and they have been used in breeding to exert the advantage of their added breeding influence.

Triploids (3n): — Triploids normally are the resultant progeny from the mating of a tetraploid with a diploid. These comprise the great bulk of present-day cymbidiums. They are distinguished by uniform good growing characteristics and freeness of performance. Their visual traits, of course, vary from the extremes of one parent to the other and combinations of both, with their typical average lying about one-third from the tetraploid parent and two-thirds from the diploid. The ideal is to find those few plants from a particular cross which

exhibit the good features of both parents, and in these exceptional cases we find our improvements. We usually find that triploid cymbidiums are sterile and will not produce seed. There are, however, some exceptions which give rise to other categories of polyploidy.

Pentaploids (5n): — A still higher realm of polyploidy is sometimes found in orchid plants and this is the pentaploid. A type having five sets of chromosomes in the vegetative cell. Pentaploids have proven to be fairly useful breeders, although because of the mechanics of chromosomes, uniform growth and quality usually are not obtained and some of the resultant seedlings may be more difficult to grow and bloom. Many of our most famous plants, however, have pentaploid parents in their backgrounds.

Aneuploids: — Hybridizers are continually trying to do the unusual: therefore, there is an emphasis on abnormal types which has led to the development of a goodly number of orchid plants with uneven chromosome numbers. These are termed aneuploids. Aneuploids are usually derived from uneven and rather unstable crossings, when parents of semi-incompatible chromosome numbers are used. The seedlings of such aneuploid crosses are usually most irregular and will vary greatly as individuals from their brothers in almost every aspect — from exact chromosome number to flower and growth patterns. This irregularity is brought about because their individual chromosome numbers are not exact multiples of the typical base number of the parent plants. Because some of these may be close to that of tetraploids, sometimes these aneuploids will act as breeders, but their performance can only

be proven by giving them a try to see the results. There are many fine plants among the aneuploids, and although their implications in breeding are definitely hit and miss, it assuredly makes for interest and speculation.

With these various levels of ploidy available for hybridizing, there are a variety of possible combinations and it is possible to anticipate some generalities about the resulting progeny. It is with these thoughts in mind that hybridizers propose hopeful crossings.

Diploid X Diploid: — In the early days when all or most cultivated plants were diploids, a knowledge of other types was lacking. Flowers were mated with little regard to genotype, and most of these happened to be diploids. Even though more advanced types of combinations have come about, certain hybridizers have worked hard in the diploid line and fantastic progress has been obtained. The results, although different from those obtained with polyploids, have shown characteristics that, while not necessarily comparable, have been equally spectacular. The uses of diploid crosses in cymbidiums at present are (1) to gain more desirable forms of colored types, which are more intense in diploids than other classes; (2) to provide a new assortment of genes for use as potential breeding with tetraploids; (3) to create early bloomers and; (4) to make miniature cymbidiums.

Diploid X Tetraploid: — The breeding method which has proven most satisfactory, with the largest and most prominent mass producers of seedlings for uniform high-quality progeny, has been the mating of the tetraploid of good form with the free and prolific diploid. The result is the triploid strain.

(Continued on page 6)

Polyploidy - Continued

There seems to be no doubt that for uniform high quality of shape, habit, and pleasing color, this seems to be one of the most satisfactory of genetic combinations. Because of the fact that the tetraploid parent influences twice as much as the diploid parent, its characteristics of form and color are more nearly approached. As new tetraploids of different types are brought into use, we will be able to greatly broaden our spectrum of hopefulness.

Tetraploid X Tetraploid: — An even more recent trend in breeding is the tetraploid-with-tetraploid mating. These have produced outstanding blooms. In addition, the resulting progeny are tetraploids, so this type of breeding has given rise to entire strains of tetraploid plants. Because there were only a few tetraploids in the beginning, there was much tetraploid inbreeding, with consequent undesirable characteristics perpetuated in the progeny. Some of the more inbred tetraploid types, even though characterized by excellent flower quality, have poor growing and blooming habits and are difficult plants to handle. Care must be used in selecting and mating tetraploids to guard against such bad features.

Triploid, Pentaploid and Aneuploid Matings: — When triploids, pentaploids and aneuploids are used in mating with their like or the more normal diploid or tetraploid, a wide number of combinations can occur. Because these "offbeat" types produce gametes (pollen and egg) that are often incomplete or uneven, crosses with them are characterized by irregularity and unevenness, if they take at all. Because they are lacking certain genes, many plants do not perform normally. Over the years, however, certain plants in the aneuploid or uneven polyploid levels (triploids, pentaploids, etc.) have become known as good parents as a result of the success of their progeny. Sometimes outstanding plants are obtained from these matings, but usually the resulting aneuploid plants are irregular growers and often the seeds are few. For commercial establishments who grow large blocks of seedlings, this type of breeding is not practical. "Off-beat" breeding offers tremendous interest for the hobbyist, however. The hobbyist can't use many plants, and if he drops all his pods for the year, he has lost nothing. This opens up an infinite vista for attempts where the high percentage of

failures will keep the hobby in line. The value to this type of breeding is that occasionally very fine varieties arise, and secondly, often the progeny that do arise are strange aneuploids themselves and sometimes breedable.

The subject of ploidy has many interesting facets, each of which can be magnified into a particular situation in a specific genus or group of plants. Cymbidiums have been used as a passing example because they are not only well worked out but simple in example. In some other genera things can be far more complicated. Although there are many variations and exceptions in the behavior of living things, most of these differences can be explained by subsequent modifications and rearrangements which do not change the underlying principles.

The ways of Mother Nature sometimes appear confused and complicated, but in reality they are orderly and pleasant, and these phenomena are brought forth most finely in our study of the orchids.

Paul Gripp - 1250 Orchid Drive, Santa Barbara, California.

Houston Judging Center

By Don Maples

**Location Change:
Judging on August 15th
will be in the Malloy
building, Room 210.
University of St. Thomas**

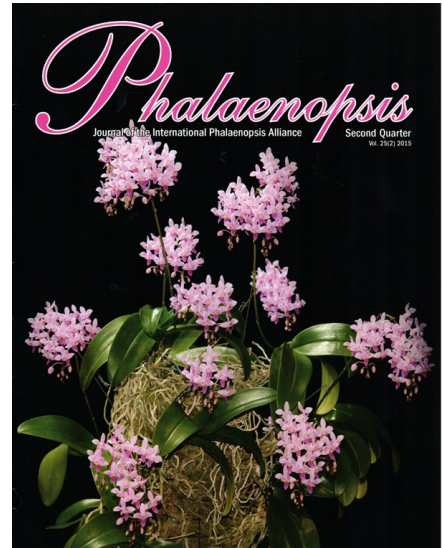
The Houston Judging Center met on July 15th at the Jereback Center. Five orchids were brought in and there were no awards.

Don't forget the HOS Workshop on 7 - 8 August. There will be judging Friday evening.

In the month of August, the judging center will meet in Malloy 210 NOT 202 Jerabeck. Since it is Orientation weekend at St. Thomas, we have had to move to a different room. We will return to Jerabeck September through December.

Congratulations to Bill Bartlett and Malcolm McCorquodale

The new (IPA) International Phalaenopsis Journal cover is a photo of Bill Bartlett's Phal equestris that was awarded at our last show. The photo was taken by Malcolm. Great plant and great photography!



Cultural "Quick Tips"

By Jay Balchan

I like to make things easy when growing my plants and I like to have a nice, neat growing area. One product that I have found that helps me accomplish both of those goals is this neat hose that collapses down to nothing at all when the water pressure is off.

I got this hose a couple of Christmases ago as a "stocking stuffer" gift. It was right about the time you saw these hoses advertised all over TV as the next best thing since the Internet! I really did not think about the gift much, because I already had a full sized hose in my greenhouse and that seemed good enough to me. It took me about a year to hook the new hose up because I had to install a short piece of regular hose with an easy to reach valve to make it able to be stored under a bench.

Well I've been using this new hose for about 6 months and it is fantastic! I used to trip all over my old regular hose and it was a pain in the you know what to haul around and put away. This new hose expands easily to the far end of my greenhouse and collapses down to nothing when the water

pressure is taken away allowing it to be easily put under a bench out of the way.

If you get one of these, be sure to get a 3/4" diameter hose and not the 1/2" diameter one as you will probably not get the amount of water pressure you want with the smaller hose. Even the larger hose seems to cut the water pressure down a bit. My siphonex does not work properly on it. I use my regular hose for fertilizer watering. I use this hose for mid week watering and quick "cool down" sprayings.

Convenient and neat.... This is a great gift for your next birthday or holiday!!

Happy growing!



August 2015

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6 <small>7:30 PM</small> <i>HOS Meeting</i>	7 <i>HOS</i> <i>Workshop</i>	8 <i>HOS</i> <i>Workshop</i>
9	10	11	12	13	14	15 <i>HJC</i> <i>Judging</i>
16 <small>2:00 pm</small> <i>Newcomers</i>	17	18	19	20 <i>Newsletter</i> <i>Content is Due</i>	21	22
23	24	25	26	27	28	29
30	31					

Newcomers Group

By Amy Colville

The Newcomers will be meeting at Fr. Ted's place at the University of St. Thomas on August 16th at 2:00. We will discuss his growing habits, care and watering for his plants.

July Raffle Table

By Elayne Duncan

This month we will have a beautiful selection of budding plants from Sunset Valley Orchids in California. Raffle tickets can be purchased using cash, check and credit cards. Be sure and pick up your bonus tickets for wearing your badge, bringing in your box tops for education and first time attendees. Stay Cool!

Intermediate Group Meeting

By Jay Balchan

Our next Intermediate Group meeting will be in September (4th Sunday) at Bill Bartlett's home. For this meeting we will be learning some intermediate level wire bending techniques from Bill and others. There are an amazing array of clips, fasteners, and other useful items for orchids that can be made from regular straight wire. The HOS will provide enough wire for the day of activities, but you must bring your own wire clippers. If you don't have a good pair of clippers, go get one.... And don't skimp! A good pair is only a few dollars more than a lousy pair and you need to be able to cut and bend your own wire!!

More details on this meeting to come in the September Happenings Newsletter.

REFRESHMENT CORNER

The Refreshment Committee had 5 people sign up to bring snacks for the August HOS meeting. If anyone else would like to bring snacks please do. Thanks to Bill Bartlett, Lily Chang, Melissa Dwan, Cherie Lee, Liza Lee, Denise Mitchell, Judith Neufeld, Sandy Stubbings, Winnie Yap and anyone else who brought snacks to the July meeting.

A sign up sheet will be circulated at each meeting to cover the next 2 months.

Thanks,

Margaret Mahoney & Sandra Higham

Upcoming Events

Aug 7 - 8
Houston Orchid Society's 36th Annual Summer Workshop
 Jerabeck Center, Univ. of St. Thomas
 Houston, TX

Aug 21—22
22nd IPA Symposium
 Sheraton Orlando North
 Maitland, FL
<http://www.phal.org/symposium.htm>

Sep 26-27
Greater North Texas Orchid Society Fall Show & Sale
 Southfork Hotel, 1600 N. Central Expwy.
 Plano, TX
<http://www.gntos.org/node/28>

Oct 2-3
Central Louisiana Orchid Society Show & Sale "Orchids on the Plantation"
 Kent Plantation House
 Alexandria, LA

Oct 24-25
Fort Worth Orchid Society Show "An Orchids Autumn"
 Ft. Worth Botanical Garden
 Ft. Worth, TX

Oct 31—Nov 1
Kansas Orchid Society Fall Show & Sale
 Botanica, The Wichita Gardens
 Wichita, KS
 Contact Sarah J. Pratt



HOS Officers and Committee Chairs

Officers

President	Mary Gunn
VP - Speakers	Derek Lowenstein
VP - Shows	Kar Chong & Winnie Yap
VP - Membership	Natalie Istin
Treasurer	Rick Hepler
Recording Secretary	Tom Durrett
Past President	Mary Gunn

Chairs

Conservation	Marianne Walker
Display Table	Loren & Judith Neufeld
Guest Hospitality	Lorraine Hughes
Happenings Editor	Susan Dally
Intermediate Group	Jay Balchan
Newcomers Group	Amy Colville & Calvin Starr
Parliamentarian	Marvin Gerber
Photography	Malcolm McCorquodale
Plant Raffle	Elayne Duncan & Sara Bentley
Refreshments	Margaret Mahoney
Silent Auction	Frank & Cherie Lee
Spring Show	Holly Miller & John Stubbings
Summer Workshop	John Stubbings & Fr. Ted Baenziger
Webmaster	Tom Durrett

Directors - Two Year Term

Fr. Ted Baenziger	Holly Miller
Amy Colville	Stephen Moffitt
Marvin Gerber	Calvin Starr

Directors - One Year Term

Jim Butler	Sandra Higham
Susan Dally	Lakshmi Narayana
Don Ghiz	Marianne Walker

Representatives

AOS Representative	Don Ghiz
IPA Representative	Fr. Ted Baenziger
ODC Representative	Michael Mondville
SWROGA Directors	Sandy Stubbings & Lauri Skov



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Chinese Paphs, 37 photos in this month's issue. Just GORGEOUS
Subscribe at orchiddigest.com



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Bromeliad Society Houston

We Meet on the
Third Tuesday
of each
month, 7:00 pm
Moody Community
Center

Visitors Welcome

www.
bromeliadsocietyhouston.org



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The International Phalaenopsis Alliance Presents

22nd IPA Symposium

August 21 & 22, 2015

at the Sheraton Orlando North, Maitland, Florida