The Arizona Orchidist

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NEXT OSA MEETING

The next regular society meeting will be **Monday, July 7, 2008** at **6:45 P.M.**
Meetings are held at the Encanto Park Clubhouse
2605 N. 15th Ave., Phoenix, Arizona
North of Encanto Blvd. on 15th Ave.
OSA meetings are open to all plant enthusiasts
Refreshments will be provided.
Snacks thoughtfully provided by Wilella Stimmell and Sally Griffith (donation)
Beverage by Bob MacLeod
Refreshment Coordinators:
Barbara Parnell (480) 948-0714
Mary Gannon (623) 878-4173
Carol Erwin (602) 996-1696

OSA BOARD MEETING

Board Meetings are open to all members
The next Board meeting will be Sunday July 27th 1 P.M.
at the home of Barbara and Harry Parnell

GROWER ON CALL

Wilella Stimmell

wilellas@worldnet.att.net

July Program

REMEMBER MEETINGS NOW BEGIN AT 6:45 PM

ORCHID ART WORK

Since members enjoyed our June impromptu program, and viewed and admired the botanical illustrations of Rocco Amico, your Board decided that the time was right for a program devoted to art owned by members. You are invited to bring in your orchid paintings and/or prints, framed or unframed, by famous or unknown artists. Tell us something about the history of the pieces you bring to the meeting. Some of our members own antique art, and others have had their art so long that they (the art) could now be considered antiques simply because they've been in their possession for a long time. Beautifully illustrated books also qualify as orchid art! This program promises to be aesthetically pleasing!

W. Stimmell

Editor's Note, during the July meeting, there will be a special silent auction of bare root Laelia anceps divisions donated to us by John Atwood.

See page 4 for a profile of this plant.

IN THIS ISSUE

From the President's Desk

Julie Rathbun

First, I need to inform our membership that on May 19th, Marleny Castillo resigned as Trustee. According to OSA's Bylaws, the President may appoint another member to complete a term of office. BOB MACLEOD graciously agreed to complete Marleny's term which ends on December 31, 2008. We thank Marleny for her service on our Board of Directors. Thanks, Bob, for your willingness to serve and for continuing to demonstrate that you are a team player!

For those of you who missed our June 2nd meeting, you should know that Aaron Hicks conducted the meeting. Because we were short on workers for the meeting (work and vacations sometimes leave us shorthanded), and since Aaron was present, I asked him to conduct the meeting so that I could help at the raffle ticket table. Thanks, Aaron! Also, we had a **surprise speaker** at the meeting. **Rocco Amico**, a British Airways crew member and botanical illustrator was in the valley for a short time. Rocco had contacted Aaron a few days before our meeting, so it wasn't possible for us to mention Rocco in our June newsletter. I was surprised that so many members were interested in Rocco's botanical illustrations. He was a gracious guest, and we thank him for taking time to talk to us about the steps involved in his botanical illustrations. (Rocco declined an honorarium and stated that we should save our money for our community service.) Thanks, Aaron, for bringing Rocco to our meeting. It was also a pleasant surprise to see Lisa Lauman at our meeting. We hadn't seen her in a long time.

After members discussed their display plants, Aaron introduced Rocco, our impromptu speaker.

After the two-part program, Aaron asked the members in attendance whether they had any suggestions for a July program. Since no member mentioned a topic when he asked the question, OSA's Board decided that July's program, following the June program on botanical illustration, was an excellent segue into one of the programs that we've had "on hold" - orchid art work owned by members – until we could determine whether our members would be interested in a program involving orchid art. Some of our members own special works of art that they would not display at our annual November orchid show, but they would bring their art work to a meeting. I can't wait to see the art that members bring to the July meeting!

See you on July 7th!

And don't forget our annual trip to the Northern Arizona VA greenhouse! Mark the date, Sunday, August 17th, on your calendars! And elsewhere in this issue, check the NAVAHCS Wish List. There might be one or more items listed that you could donate. If you can't join the caravan to Prescott, feel free to bring the items to our July or August meeting, and we will deliver your donation.

Julie

June Raffle Donors

Doug Baldwin, Bob MacLeod, OSA, Wilella Stimmell,

and the Family of Ken Gettys

THANKS TO YOU ALL FOR YOUR SUPPORT

ROLL OUT THE BARREL

I read of the experiments
Some growers made with beer,
And I was so intrigued with it.
I thought I'd try it here.
Now this decision that I made
Was bigger than you think,
I hate to see it used on plants,
When it's so good to drink.

But I went out and bought a case
And put it on the shelf.
I figured if it didn't work,
I'd drink the rest myself.
I then proportioned some the way
Most others seem to do,
With forty parts of water, to
Each part of 'sudsy brew'.

Although I haven't used it long.
I see a hopeful sign.
For all my seedlings have perked up;
They're really looking fine.
The moral is, that if you think
Your plants are feeling punk,
By all means get a case of beer,
And get them good and drunk.

From *Orchids in my Greenhouse, Crabgrass in my Lawn*. A Garden of Verse by Clarence S. Lindsten (Founding editor *The Arizona Orchidist*) Copyright 1973

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Direct Inquiries to our website at:

www.orchidsocietyaz.org

Or to any of the Board Officers or Trustees:

COMMUNITY SERVICE REPORT

Wilella Stimmell, CSP Coordinator

ARIZONA STATE VETERAN HOME FUND-RAISER:

The **first Saturday of each month from June through December**, **2008**, between 5 PM and 8 PM, you can benefit the Arizona Veteran's Donation Fund by purchasing a meal **and a beverage** at a popular, centrally located Phoenix restaurant, Sweet Tomatoes. (The meals are inexpensive, but there is a great variety of foods from which you can choose, and the food is very tasty.)

The restaurant will donate 15% of sales to the Veteran's Donation Fund. A pre-printed flyer must be presented at the time you pay for your meal. There is a flyer for each month, and the **flyers will be available at our July through December meetings**. You don't have to visit the restaurant in a group; even one person's meal will benefit the Veteran's Donation Fund. But if you do anticipate that you might need multiple flyers (one per person), they must be presented at the time of purchase.

Although this fund-raiser started in June, we didn't receive notice about it until it was too late to include mention of it in our June newsletter, and our July meeting happens AFTER the 1st Saturday in July. (Notice of the fund-raiser was sent to us in a pdf file by **Mindy Morales**, **Recreation Therapy Program Manager**.) Britany Shapiro, Marketing Coordinator for the restaurant, noted that three important rules must be followed:

1. Flyers should not be distributed in the restaurant, parking lot, or vicinity.

2. Other coupons or discounts will not be honored; however, 15% of your pre-tax food and beverage purchases will be donated to the Arizona Veteran's Donation Fund.

3. One flyer is required per transaction.

Orchid Profile - Laelia anceps

Laelia anceps is an undemanding and easy plant to grow for most people. This species is naturally occurring in Mexico and is extremely drought resistant as well as temperature tolerant. It will thrive in temperatures from 20 degrees Fahrenheit, or -5 degrees Celsius, to 100 degrees, or 38 degrees Celsius, as long as it is given enough moisture. It is known as a vigorous grower of medium size with long inflorescences from which it will have three to five lavender flowers. The flowers are a nice size 3 to 4 inches, or 10 centimeters, and are known for their Christmas blooming period although the blooming period is November through January. There are two distinct varieties now recognized by taxonomists – the eastern variety and a darker western variety.

This plant needs a lot of light and will grow well outdoors in full sun with some shade at midday. It needs well draining media and does best mounted where it can dry out completely between waterings. During hot summer months it will need to be watered 2-3 times a week while in winter weekly watering will be adequate. Fertilize during the growing season and then stop after flowering to allow the plant to rest. Then start again when growth is evident.

The Laelias are members of the Cattleya Alliance and have been used extensively in breeding to increase the number of flowers on a plant as well as pass on the easy growing habits. The "L" in Blc. Lc., and Slc. are all Laelia interbreeding. The smaller varieties have been used to impart the great color and smaller growth habit in much of the breeding for compact and miniature Cattleya Alliance orchids.

Recent work by scientists has broken the original Laelia genus into two different groups with the Mexican Laelias remaining in the original group and most of the Brazilian Laelias moved to Sophronitis. The genus is rather widespread with species found from Cuba to the southern part of Argentina. The southern varieties do not breed in the same manner as the more northern varieties, thus the reason for moving them into another genus.

Courtesy Susan Taylor www.Bellaonline.com

NAVAHCS WISH LIST FOR August 17th, 2008 FIELD TRIP:

For the nursing home -

*personal size toiletries (nothing containing alcohol)

*books (nothing war-related)

*puzzles

*sweat pants for men

*small decorative items that will move or make noise for stimulation

For gardening programs for the patients -

*metal markers that can be placed in the ground so that the patients know what has been planted

*ceramic, decorative pots - to accommodate large palms, etc. (Southwestern accent colors)

*macramé plant hangers - at least 3 feet long - to accommodate 12" pots (Southwestern colors)

*small decorative garden items to place in pots or in the ground

*wind chimes

*wind socks

*flags

*other decorative items that will brighten the garden area

*****To donate funds in lieu of items, a check should be made payable to NAVAHCS, and on the memo line, write: Acct. #GPF 9017. If you mail the check, send it to: Paula Moran, Northern AZ Health Care System, 500 N. Highway 89, Prescott, AZ 86313-5001**

For benefit of new members: Our annual field trip to Prescott is an all-day trip. (We depart Phoenix in the morning and return in late afternoon.) Bill Starkman, VA Greenhouse Supervisor, always has coffee waiting for us when we arrive. We can choose to tour the greenhouse, check the veggies in the garden adjacent to the greenhouse, and/or check the trees in the orchard for apples and peaches. After we help bring patients to the picnic area, all of us (staff, patients, and OSA members) enjoy lunch which is provided by OSA. (The picnic area is located near the greenhouse.) After lunch, before we hold an abbreviated board meeting, we help return the patients to the nursing home. And after the board meeting, we head back to Phoenix.

Patients, staff members, and OSA members always enjoy this annual event.

FROM THE ARCHIVES – 50 Years Ago

American Orchid Society Bulletin,
Volume 27, Number 8, August 1, 1958, pages 537-540.

"Use of Gibberellin for Growth Promotion of Orchid Seedlings and Breaking Dormancy of Mature Plants"

by Margaret W. O'Neill, Department of Biology, University of New Mexico, Albuquerque, New Mexico.

'Within the past year or two a great deal of experimental work has been done with gibberelic acid in stimulating growth, flower formation, and hastening seed germination. Many remarkable results have been reported.

Actually gibberellin is not new. Before World War II, the Japanese noticed a disease of rice, "the foolish seedling disease", in which the plant grew markedly taller than healthy ones, but the tall plants were weaker and soon died. The Japanese isolated a mold which they called *Gibberella fijikuroi*, but this was recognized later as being *Fusarium moniliforme.* Fusariums are parasitic molds that occur throughout the world and attack many varieties of plants. Gibberellin is a crystalline derivate of this mold, and to date there are three known, closely related gibberellins, differentiated by their chemical structure.

Some of the extensive work with gibberellin that has been done recently in this country on vegetable and horticultural crops has shown unexpected and remarkable results. Nearly one hundred different plant species have been treated and almost all have responded with accelerated growth. However, other additional effects have been noted. For instance, by treatment with gibberellin, dwarfism has been eliminated in some species and normal growth has followed. Primarily, gibberelic acid promotes top growth and lengthening of stems or internodes with an increase in height. However, root growth is reported to be less than normal. Gibberellic acid has proved capable of inducing flower formation in a number of plants under non-inducive conditions, although this result has not been general for all plants. A great number of plants will not flower unless subjected to certain highly specific environmental conditions such as low temperatures and certain day lengths. These conditions have been overcome in some plants by use of gibberellin. In addition, fruit set has been stimulated and seed germination has been promoted by use of gibberellic acid. However, care should be exercised in using gibberellic acid as plants react differently. Some respond to only one application, others need greater amounts and repeated applications. Young plants may react differently than older ones, so it is possible to get no response or to overdo the treatment and produce tall, weak, and spindly plants. Gibberellin is definitely not a cure-all for poor cultural conditions, poor soil, or lack of food.

In view of the above work with gibberellin, this study was undertaken on Cattleya hybrid seedlings and mature plants to determine 1) the effect of gibberellic acid on the growth period of seedlings, and 2) to determine its effect on dormant mature plants which had not flowered because of adverse climatic conditions.

For these experiments, a 10 ppm [parts per million] solution of gibberellin was used in a commercial form of "Mira-cell", and supplemental food materials, "Orthogro" and "Ra-Pid-Gro" were given alternately every two weeks throughout the tests.

In the first experiment, the growth-stimulating effect of gibberellin on hybrid Cattleya seedlings was studied. All plants were from the same seed lot and were at an age (2 ½ years old) where they consisted of one or two stems with leaves averaging 5 centimeters in length. Of twenty-six plants studied, 13 were used for control and the leaves of the other 13 were sprayed with gibberellin. Each plant in the treated group received a 10 ppm concentration of gibberellin spray once a week for the first three weeks and again once a week for the thirty-first through the thirty-third week. From the fourth week to the thirtieth week and from the thirty-fourth to the thirty-seventh week no gibberellin was given.

...(Table 1 is described in the text.)

Continued on page 7

Continued from page 6

The length of leaves of the treated plants was on an average almost double that of the control group, and the number of new stems on the treated plants was two to four times more than that of the untreated plants. This showed a decided growth stimulation of these two vegetative parts of the plants by the use of gibberellin. The roots of the treated plants, which were not expected to show increased growth, were double in number of those of the control plants. This could be due to the fact that orchid roots are adventitious and aerial, and therefore they are physiologically different from terrestrial roots of other plants previously tested with gibberellin in which slower growth was exhibited. The general appearance of both the treated and control groups was healthy and strong with growths of the leaves in proportion to the pseudobulbs both in length and fullness.

All of the treated group have [sic] been repotted into 4-inch pots, and they are expected to flower on the next or second lead. This expectation is based upon evidence of size and pseudobulb formation as compared with normally grown control Cattleya seedlings.

In the second experiment, flowering size plants of Vanda, Phalaenopsis, Cymbidium, and Zygopetalum were used. All of these genera were in flower or bud when they were purchased four to six years ago. They had not flowered in the four-to-six year period prior to this experiment, presumably due to lack of proper temperature conditions. However, all plants had undergone good vegetative growth. Weather conditions in the hot, arid Southwest appear definitely adverse for bud set for these particular genera. It is too dry for Vanda and Phalaenopsis, and it is very difficult to maintain a high enough humidity in the greenhouse. For Cymbidium and Zygopetalum it is too hot, particularly at night during the months in which these two genera form flower buds.

The purpose of this second experiment was to determine whether gibberellin could break the flowering dormancy produced by the adverse growing conditions discussed above. In this experiment the treated plants received a spray of 10 ppm concentration of gibberellin once a week for four months with a regular supplemental feeding of Orthogro and Ra-Pid-Gro alternated every two weeks.

…(Table 2 is described in the text.)

Eight large flowers were produced on each stalk of the Zygopetalums, and 16, 14, and 8 flowers were produced on the Cymbidiums. The Cymbidiums and Zygopetalums flower naturally in the winter months, and the treated plants also flowered during the winter months. This indicated that reaction to day-length (photoperiodism) was not affected by the gibberellin treatment.

The Phalaenopsis and Vanda hybrids flowered at approximately the same time of year as normally, and apparently here also day-length was not affected by gibberellin in these genera as has been reported for some other plant species.

SUMMARY AND CONCLUSIONS

Hybrid Cattleya seedlings were treated with 10 ppm concentration of gibberellin for a period of 37 weeks. Excessive growth of leaves, number of new stems, and number of roots were noted. There was also a definite shortening of the growth period of the plants from seed to flower production. Because the average length of time for a Cattleya to flower from seed is five to seven years, the use of gibberellin to promote rapid growth could shorten the growth period from one to three years. …

Four genera of mature orchid plants, Vanda, Phalaenopsis, Cymbidium, and Zygopetalum, were treated with gibberellin for a period of four months in an effort to break flower dormancy due to adverse climatic conditions in the arid Southwest. All treated plants produced flowers at their normal time whereas none of the untreated group flowered.

The fact that dormancy can be broken by gibberellin may be of decided economic importance for orchid growers, at least for the arid Southwest and possibly for other sections of the country in which there is difficulty in flowering certain genera of orchids due to adverse climatic conditions.

Although the sample size of the tests reported is not sufficient to yield adequate statistical data, results obtained thus far appear promising, and other tests are in progress on various effects of gibberellin on orchid growth and dormancy.’ [Editor’s Note: Six references cited following the article pre-date this article.]

OSA July 2008 Calendar

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	*2*	*3*	*4* *Independence Day*	*5*
6	***7*** ***OSA Meeting*** ***6:45 PM***	*8*	*9*	*10*	*11*	*12*
13	*14*	*15*	*16*	*17*	*18*	*19*  *Mary Alice Baumberger* *Kriss Beggs*
20	*21*	*22*	*23*	*24*	*25*	*26*
27 ***OSA Board meeting***	*28*	*29*	*30*	*31*		

Orchid Society of Arizona

c/o Keith Mead

5425 Thomas Drive NE

Albuquerque, NM 87111

July 2008 Newsletter