Next Meeting
Date: Sat., May 11, 2013  
Time: 1:30 Informal “talk story”  
2:00 Meeting starts  
Place: Kamana Senior Center,  
127 Kamana St., Hilo  
Speaker: Larry Kuekes  
Topic: Orchids Around the World

Orchids Around the World isn’t just our show theme. It’s a fact. Orchids grow everywhere except Antarctica. This month, Larry Kuekes will take us on a quick world tour to show us where in the world some of the orchids that we grow come from.

Why does that matter? Knowing where your orchids come from is a clue to how to grow them – hot or cold, wet or dry.

If you’re growing an orchid from the Himalayas, it wants to be kept cool! If it’s from the steamy jungles of New Guinea, it wants to be warm!

Larry has been a hobbyist orchid grower since 1984. He was President of the Connecticut Orchid Society, where he grew cool- and intermediate-growing orchids. In 2010 he retired and moved to Hilo. He has a small but diverse collection of mostly warm-growing orchids in a shade house near sea level. Although he grows some hybrids, he’s a self-described “species nut”. Larry is currently our President-Elect and newsletter editor.

Come to the meeting and see where the orchids that you grow come from. Maybe you’ll get some ideas for a few more to try!

Show News
The Show Committee held its kickoff meeting on April 23, and planning is well underway for August. Want to volunteer? There are lots of things that need to be done that don’t require a lot of time or skill, just a willingness to help. If you’d like to help out, talk to Show Chair Sheryl Rawson.

Rayna Armour is still looking for men to model in the fashion show event. Don’t be afraid, guys – you’ll be modeling aloha shirts, not Speedos. If you’d like to help, call Rayna Armour at 963-6233 or email her at rayna@theorchidworks.com

Rick Kelley has suggested the idea of producing a short video about the show to get our message out in future years. We’re looking for people with digital camcorders willing to record parts of the show. Any takers?

Rhyncholaelia digbyana, one of the orchids that Larry will talk about at the meeting. When you know where it comes from, you know how to grow it.
President’s Message

Dear Fellow Orchid Islanders!

Most of us know that for many years the Big Island has been nicknamed "The Orchid Isle". And what a lovely nickname it is! And who better to keep this legacy growing than the Hilo Orchid Society?

I like to think of our mission as not only keeping up the learning of our members on the subject of orchid culture, but also ever-enlarging the circle of orchid growers and hobbyists who live and work here. As many of you know, as your President I have tried to revitalize the presence of orchids on our street corners and in our yards. I am always hopeful that not only our members but others in our community will feel the urge to place orchids where they can be seen and enjoyed by residents and visitors alike. Wouldn't it be fantastic if visitors would want to come here just to look for orchids in bloom! The world would think of Hilo and East Hawaii as the orchid capitol of the Pacific!

In addition to individual efforts of our homeowners, we promote orchids in public places as well. For example, did you know that one of our former HOS Trustees, Eric Gutormsen, has for many months spent his Sunday afternoons in a labor of love at the Panaewa Rainforest Zoo planting and revitalizing orchids in trees. He climbs, trims, fertilizes, and answers questions of passers-by. Since Eric will be traveling for several weeks we will be left without an orchid spokesperson on Sundays. Why not stop by and visit with Eric on a Sunday soon and find out what he does and what you can do to help while he is gone?

In fact, we are planning to hold our Saturday, June 8th regular meeting at the zoo. We will start at 1:00 pm with a potluck and follow up with some additional orchid installations, with donated plants compliments of Gary Chen and Winning Orchids. We hope every member will come out and take part. We have many things you can do to help, from sitting jobs stapling handouts, to holding orchids while they are tied to trees, to talking to visitors about what it takes to grow orchids outdoors in their yards. It is guaranteed that each of us will learn a little something in the process. This will be a huge outreach to our beloved community ... and a huge one to advance our reputation as the Orchid Isle!

As my three-year tenure as your president winds down, I would like to think I have in some way encouraged and fostered a growing love for orchids in our community. Why not join me by placing a new orchid in your yard and coming out to the Zoo to help create an orchid showcase for all to enjoy?

And ... stay tuned for some additional public locations that may be getting an orchid boost!

Yours in the love of this most elegant of blossoms!

Julie Goettsch

CALANDER OF ORCHID EVENTS

All events are held at the Kamana Senior Center, Hilo, unless otherwise noted.

May 10 9:00 am - 6:00 pm and 8:00 am - 5:00 pm Kona Orchid Society Show and Sale, Old Airport Events Pavilion, Kailua-Kona

May 11 1:30 Hilo Orchid Society meeting 4:00 AOS Judging

June 8 1:00 Hilo Orchid Society Zoo Outreach Event, Panaewa Zoo 4:00 AOS Judging

July 13 1:30 Hilo Orchid Society meeting 4:00 AOS Judging

Aug. 1 HOS Show Judging and Preview Party, Edith Kanaka’ole Stadium, Hilo

Aug. 2-4 Hilo Orchid Society Orchid Show, Edith Kanaka’ole Stadium, Hilo
April AOS Judging Awards

Explanation of AOS Awards

AOS judging uses a 100-point scale with points assigned for desirable qualities such as flower size, shape, and color. AOS flower quality awards include:

**HCC/AOS** (Highly Commended Certificate) – given to orchids scoring 75 to 79 points.

**AM/AOS** (Award of Merit) – given to orchids scoring 80 to 89 points.

**FCC/AOS** (First Class Certificate) – given to orchids scoring 90 to 100 points.

Other awards recognize plants of special botanical or horticultural significance (CBM and CHM) and growers of exceptionally well-flowered plants (CCM and CCE).
Members’ Choice Winners for April  

Left: Hobbyist 1st place: *Cattleya skinneri alba*, grown by Momi Szirom 
Right: Hobbyist 2nd place: *Paraphalaenopsis labukensis*, grown by Jeff Fendentz 

We apologize that this month’s Members’ Choice is a bit abbreviated. We took the pictures for Members’ Choice late in the meeting, and the other hobbyist winner and all the commercial winners had been removed from the show table, so we don’t know who they were. We thank everyone who brought in orchids for the show table – the variety and beauty of the flowers was amazing.

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Did You Know?

It used to be thought that orchids had evolved very recently because no orchid fossils had been found. Then in 2007, a bee was found preserved in amber dated at 15 to 20 million years old. The bee had pollinia (clumps of pollen) stuck to its back, and only orchids produce pollinia. So there must have been orchids then!

More recent studies, based on the known rate of DNA mutation, have estimated that the orchid family originated about 70-80 million years ago, when dinosaurs walked the earth.

Bee preserved in amber, with orchid pollinia on its back.
Orchid Stories

Clones

To most people, the word “clone” has a sinister science-fiction ring to it. But in real life, clones are nothing new. A clone is simply an organism that is genetically identical to another. When you propagate a plant from a cutting or a division, you’ve just made a clone.

If you’re an orchid breeder, and one of your seedlings turns out to be exceptionally nice (maybe it won an AOS award), you might want to make and sell a lot of copies of it. But there’s a problem. Orchids grow so slowly (many kinds only grow one leaf a year) that accumulating thousands of copies by division would take forever.

The solution is a process called mericloning. It starts by taking a growing shoot and dissecting the tip of the shoot under a microscope. Inside the tip is a small region of cells that have not differentiated, that is, they haven’t turned into leaf cells or root cells or whatever. They can still become any kind of cell. In plants these are known as meristem cells, and they’re the equivalent of human stem cells, which you’ve heard so much about.

These meristem cells are then put into a nutrient solution inside a sterile flask, like the method I described in an earlier article for growing orchids from seed. And if that were all that happened, the clump of meristem cells would grow into a plant and would yield one orchid.

But there’s a trick. If the flask is gently tumbled end over end, the little clump of cells doesn’t grow into a plant. Normally, gravity influences how the cells grow. Roots grow down; stems and leaves grow up. But when the cells are tumbled, they literally don’t know which way is up. They don’t know whether to become roots or stems or leaves. So instead the clump just grows into a larger clump of meristem cells, called a protocorm, which looks like a little green pea.

When the protocorm gets big enough to handle, it can be cut into pieces. These pieces are then put back in the flask and tumbled some more, and each piece grows into a bigger protocorm. By repeating this process, you can make as many protocorms as you want. When you stop tumbling, each one then grows into a plant, and voila! Thousands of identical plants.

The first time I actually saw the mericloning process at work was years ago on a visit to the Rod McLellan Co. in South San Francisco. They had a room full of what looked like miniature Ferris wheels, each one holding six or eight flasks. As the wheels slowly turned, the flasks got tumbled round and round.

The end result of this process is that growers can grow thousands of identical copies of an exceptional orchid about as cheaply as they can grow orchids from seed, so you can buy a clone of an awarded plant for a very reasonable price. With one exception.

That exception is the genus Paphiopedilum. For some reason, the cloning process has never worked for Paphs. So exceptional Paphs still have to be propagated by division, which means they’re rare and expensive.

As a hobbyist grower, should you buy awarded mericlones or un-awarded orchids grown from seed? There are pros and cons to both. With a mericlone, you know what you’re going to get, and it’s usually very good – otherwise they wouldn’t have bothered to clone it.

Species orchids are usually grown from seed, not mericlone, but that’s OK because species tend to be fairly uniform. With hybrids, there’s much more variation. So a hybrid grown from seed is a gamble. But that’s part of the fun. Chances are the flower will be nice but not of award quality. But there’s always the possibility of getting something really exceptional. And, of course, if you buy an orchid in bloom, there’s no gamble. If you like what you see, go for it!

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