

GLOS NEWSLETTER

GARDEN ISLAND ORCHID SOCIETY IS AFFILIATED WITH THE AMERICAN ORCHID SOCIETY

GARDEN ISLAND ORCHID SOCIETY UPCOMING EVENTS

General Meeting—August 11, 2012

The date for the August meeting has been **changed to Saturday, August 11th.** We'll start the business meeting at 6:30 pm and then our featured speaker will talk about Dendrobiums—all different types. Don't forget to bring a blooming orchid for the

display table. The meeting will be held in the United Church of Christ in Hanapepe.

The Orchids in Paradise show at the Farm Fair is August 22-26th. Other General Meetings 2012: October 12 and December 1.



Den. Polysema x eximum
Photo by Ada Koene

PRESIDENT'S MESSAGE

Time waits for no one. Our final plans for the Kauai Farm Bureau Orchid show will be revealed to you at the August meeting. I cannot stress enough the importance of participating in our fall show with the display of your blooming orchid plants. Kauai Farm Bureau has generously funded our fall show all these years and we have shown our appreciation to them with our beautiful display of orchids. So---don't be shy, bring your blooming orchids because every orchid is beautiful. Volunteers are needed and welcomed, so please sign up at the August meeting.

Carol Kanna, President

ORCHIDS IN PARADISE—FALL SHOW

The theme for the Orchids in Paradise show this year is “Japanese Tea Garden”. The show chair is Gwen Teragawa and the Display Chair is Diane Burton. Set-up will be Wednesday, August 22nd. Plants are to be tagged and delivered between 1 and 4 pm to Vidinha Stadium. We will need volunteers to come by 4 pm to help place the plants. We will also need volunteers for security, plant sales, and clean-up. Sign-up sheets will be available at the August meeting. Judging will begin at 9

JULY - AUGUST 2012

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am and last until about noon on Thursday, August 23rd. Those bringing plants to display and need name tags, should notify Karen Harlow via phone 346-6871, by mail PO Box 597, Kalaheo 96741, or by email harlows@hawaii.rr.com two weeks before the show. The latest any will be accepted are at the August 11th general meeting. Provide the complete name of the plant and the owner's name (as you wish it to appear on the tag).

BOARD 2012-2013

- * **President:** Carol Kanna
- * **Vice President:** Gwen Teragawa
- * **Secretary:** Kimberlee Kain
- * **Treasurer:** Lee Anderson
- * **Awards:** Mildred Konishi
- * **By Laws:** Elizabeth Borchelt
- * **Membership:** Bobbie Agena
- * **Newsletter:** Karen Harlow
- * **Show Display:** Nancy Nakama

We're on the web!
[www.gardenislandorchidsociety.org](http://gardenislandorchidsociety.org)

Did you know?

The 2012 Orchids in Paradise Show times are:

- Thursday, August 23rd – 5 pm to 11 pm
- Friday, August 24th – 5 pm to 11 pm
- Saturday, August 25th – 11 am to 11 pm
- Sunday, August 26th – 11 am to 3 PM

Membership forms are available on our website at:
<http://gardenislandorchidsociety.org/about/MembershipForm.pdf>



NEWCOMER'S CORNER by Elizabeth Borchelt

If you're new to the Garden Island Orchid Society, you've probably heard the terms Makana and Makana points bandied around by the president and other members. The Makana Program was established to encourage members to volunteer and participate in club activities. When you volunteer for specific activities you are rewarded by earning Makana points which you can redeem at the December meeting. A wide variety of orchid plants and supplies are available to choose from based off of the number of points you have earned through out the year.

I'm sure you're all ready to jump in and earn some points! What's the best way to do that? Serve in one of the officer positions, chair one of the standard committees or volunteer to help at the Spring and Fall shows. Sign up sheets for the Fall show to be held at the Kauai Farm Bureau Fair August 23rd through August 26th will be available at the next general meeting.

If you have any questions about the Makana program contact the chair, Nancy Nakama at 338-1423, email at nnkauai@hawaii.rr.com or catch up with her at the next meeting.



Elizabeth Borchelt with some of the plants she received for her Makana points last year.

Photo by Ryan Metzger

TIDBITS FROM DENNIS OLIVAS

Dennis provided the following tidbits for members.

Leaf shine:

- 2 oz. mineral oil
- 2 oz. 70% isopropyl alcohol
- 12 oz water

Please mark spray bottles as it can be harmful if ingested by anyone.

Place in a spray bottle and shake well before using. Use quarter sheet of paper towel (I cut them into 4s) per plant to prevent spreading of diseases.

Instant bug spray:

- 1 pint 70% isopropyl alcohol
- 1 pint ammonia (suds or not)
- 3 quarts of water

Shake very well and place into smaller spray bottle bottles. Spray directly onto the insects when present on plant or flowers. This will kill adult mealy bugs (but not the eggs) and aphids. Can also use on roses and other blooming plants.

ORCHID BASICS—AL SUGANO

Foundation of Orchids – good cultural practices are built on the foundation of the orchids. What I mean by foundation is to look at the orchid and know what the orchid is. It's like when you learn how to drive a car, it is a good idea to take a driver's education class first because you learn all the rules, laws, and good driving habits. This is done before you put your hands on the wheel. When you talk about cultural practices then if you don't understand the foundation of what the practices are, then the practice becomes like your enemy or not a good practice.

I've always felt when you join a society as a beginner you are pretty handicapped. We have an experienced speaker talk about some orchid culture using terminologies that are quite unique to orchids. The terms are so unique you won't find in a dictionary. When orchid culture started years ago, nomenclature was made up to fit what they saw. If you are not part of the orchid world, you wouldn't know what it means but it is used repeatedly by the orchid folks.

What is an orchid?

Orchids are so unique; they are different in the structure, not just color from other plants. Why is the structure so different? If you went to Northern Washington and went to a tulip farm, they give you a map and you go to site you are interested in. It looks like a rainbow of intense color, but you realize at the end of the day it is just a difference in color; a tulip is a tulip. The structure is the same. Go to the Portland rose garden, a rose, is a rose, is a rose.

Let's start out by what I define is an orchid. After I had accumulated a certain number of orchids, I decided to start selling some. I had an intelligent man come up to me and ask "What is an orchid". I was stunned. I had no definition in my mind. I started describing an orchid. Literature will give you a description. What makes me feel comfortable in defining an orchid is that it is a flower.

There are 6 symmetrical parts to a flower. There are 3 Sepals -- top (dorsal), 2 lower (laterals) and 3 petals – across, middle lip, and column. The column has the male and female parts on one structure. That is not common for all the rest of the flowers. Other flowers usually have two separate male/female structures.

Production – How are orchids created and where do they come from?

There are two types of orchids anywhere you go – species or hybrid.

| | Species | Hybrid |
|------------|--|---|
| Production | Likeness Unique Growth Trait Strong Gene Structure | Gene Structure Compromised Growth Trait Variable |
| Culture | Tolerant Resilient Adapts (30 to 100 degrees) | Pamper |



When Dennis came as the last speaker his title was a Whirlwind Tour of Orchids. He said they are tolerant, resilient, adapts to temperature – he was talking about species. Resilience is when he mentioned how often he waters it. When something shrivels, he waters it and it comes back.

A hybrid could be two species united. Like humans, we have been hybridized over and over again. The culture of hybrids is so different, you have to PAMPER it. It has been compromised so much. It usually depends on how many times it has been hybridized.

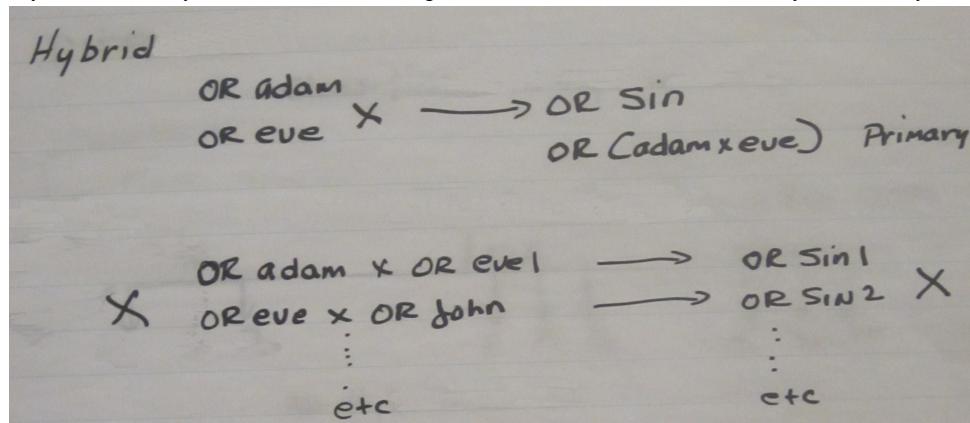
This is the difference between species and hybrid. Most of us will be dealing with hybrids because we buy pretty flowers. When you find something really attractive it has probably been hybridized many times because a grower goes

ORCHID BASICS (CONT'D)—AL SUGANO

through many trials until something comes up they were looking for.

We have very few species. Structure of the species is so adaptable to the environment it doesn't matter. Like Dennis said when he runs out of bark he uses rocks. When you talk about a hybrid it no longer fits that situation. The hybrid needs room service. The species can "go camping".

Hybrid—First you start out with a species (adam and eve) when they unite they create a hybrid – sin or (adam x eve).



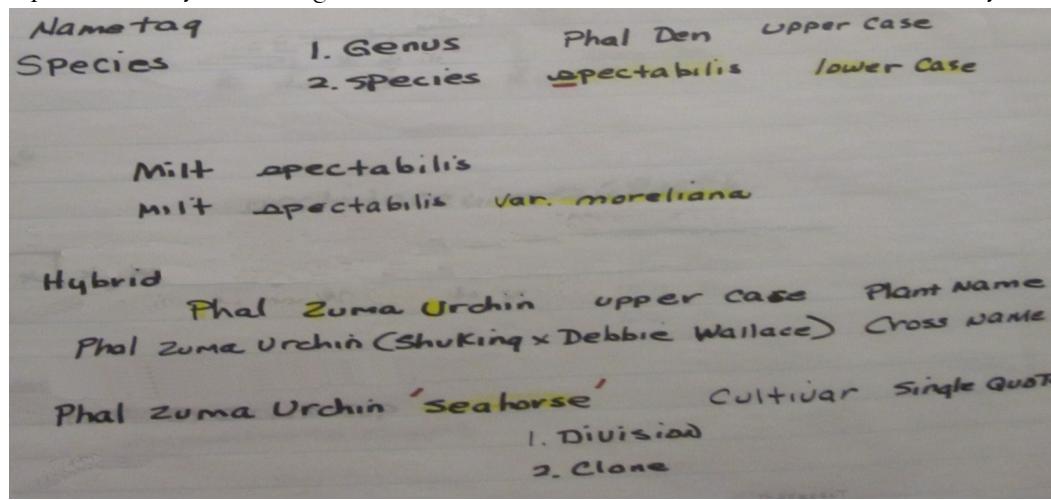
The first cross is called the primary. When they name it, it is either the plant name or the parent combination name.

Adam saw another eve which resulted in a different hybrid and Eve saw John which resulted in another different hybrid. This continues on. The siblings can then hybridize within themselves.

So it becomes explosive. If you have to trace back a certain orchid, you might have to go back quite a ways. This is the way the hybrid is really created.

How do you know if you are dealing with species or hybrid – by the name tag. On the name tag for species there are two names, one is called the genus (like nationality – example for humans is Filipino, growth of population). The genus name is capitalized. The species is lower case.

Species is really interesting because it is nature's control not man control. So when you find a species out in the wild



there are times when you find some species that are very, very interesting. Within a big population, you can find little pockets, these are identified with var (see left).

The name of the variety is also lower case. So everything connected with the species is always lower case.

When we get to the Hybrid, you now use Upper case. - Phal Zuma Urchin. This is the plant name. Sometimes the grower takes the time to write the whole thing out -- Phal Zuma Urchin (ShuKing x Debbie Wallace) – tells us the parents of the plant showing the cross name. Often when you take a group of orchids with the same parents one may come out very outstanding – like family or litter of dogs – one stands out. You can take the special one and give it a new name. This is called a cultivar and a name is given and put in single quotes. This is an exceptional plant that the grower has identified. If you want this exact plant, it will have to come from a division or a clone of the plant.

ORCHID BASICS (CONT'D) — AL SUGANO

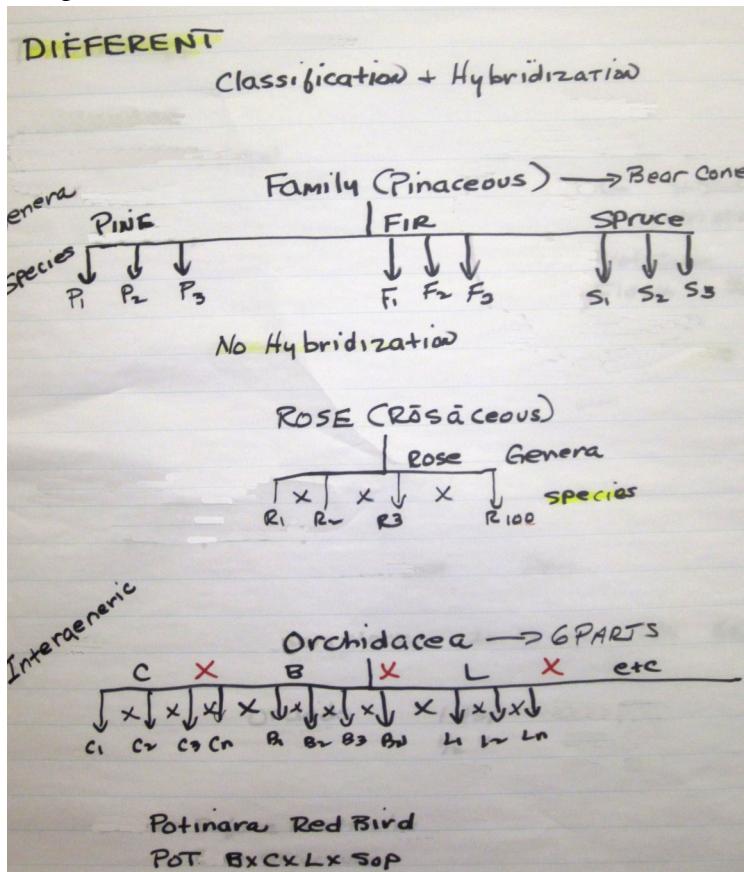
Different Structure – How do you identify an orchid? What makes it different than another orchid?

Why are orchids structurally different? It is because the way the orchids are classified and hybridized. I have a forestry background. All the forest trees that bear cones come under one big family name – Pinaceous (see diagram below)—

they are grouped together as a family. If you take the Pine, Fir, and Spruce, there is no hybridization. Once you have a ponderosa pine it will always be a ponderosa pine. If the forests could have been hybridization you could have gotten saw awesome looking Christmas trees with a great fragrance. Unfortunately it doesn't happen. This is what they call straight line genetics. There is no crossing.

Rose only has one genus (see picture) and about 100 species. They will hybridize and that is why you see miniature roses and roses of different shape but it is still a rose.

For orchids, the family is orchidacea. Families are divided into levels – genera. Cattleya-species going down and can hybridize across. So many different combinations. Most powerful is the ability to hybridize at the genera level—cattleya with x. You expand beyond the normal of other species/plants in terms of higher level of hybridization; this structure gives the orchid that awesome look in terms of



creation of look that you've never seen before...doesn't look like a normal orchid. This is called intergeneric – hybridization at genera level – conservatively, there are over 1,400 intergeneric crosses. Interestingly, in the orchids, there is a cross called Potinara. The Royal Horticulture Society puts out a handy reference that identifies the letters of the crosses. This is helpful to understand the nature of the orchid.

Seed Borne and Clones

To grow a seed borne orchid, a flask is used or some similar shaped vessel. The environment needs to be kept sterile. If a fungal spore gets into the flask, it starts to grow faster than the seedling and you will have lost the whole flask and will need to start over again. The first step in the flask is a solid gel. It is a nutrient gel for the seed to germinate and the roots to feed off. Next step once the seed becomes a good size, it is put into a compot--short for community pot. Last step the seedling is put into an individual pot. From an orchid perspective, when it is called a seedling it means it has come from a seedpod. Typically these are cheaper than clones.

For clones, it is a process called nourished tissue propagation. In the flask there is a liquid and the part of the plant that is being used to clone. There are parts of a plant you can use to start a clone. It must be part of the plant with cell dividing but not differentiating, this is called meristem. Examples are leaf edge, root tip, bud underneath the sheath, and some stem slices. All of these can be clipped off and put into the flask. You agitate the flask – stirring it. In time,

GARDEN ISLAND ORCHID SOCIETY

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ORCHID BASICS (CONT'D)---AL SUGANO

the plant part will continue to divide but because it is in motion it doesn't form anything but a callus. The callus is a glob like silly putty. When the callus is formed, you take the callus out and put it on a dissecting dish and start chopping it up into small pieces. This little piece is put into the hard gel like you do with a seed and starts to grow like a seed, then compot, this is called a mericclone. Nothing is perfect when it comes to the process. Majority will be exact clones but exceptions do happen.

Fertilizing and PPM (Parts Per Million)

How often do you fertilize? For Orchids, we use media that tend to dry or we let dry out. So if you use a high concentrate of fertilizer when the media dries out, the unused part of fertilizer crystalizes back into its original shape; over time a lot of salt accumulates. So as a guide, if you take 1 tsp. of 20/20/20 fertilizer and one gallon of water, the result is 200 PPM. Use $\frac{1}{2}$ tsp. to get 100 PPM and $\frac{1}{4}$ tsp. to get 50 PPM. My preference is to use $\frac{1}{4}$ because I fertilize every week. If you don't flush out the fertilizer with a good watering, the high salt can burn the roots, break the medium down, and other unhealthy things.

You should water the orchid before you fertilize. This is the only time I drench the plants to fully saturate and then let them drain out. The rest of the time I mist heavily. The epidermis on the root when it is exposed to air hardens like a dry sponge. It is not ready to accept the fertilizer; that is why you water first.