GREATER LAS VEGAS ORCHID SOCIETY

THE ORCHID COLUMN



SUNDAY, MARCH 5, 2006

Carol Siegel, Newsletter Editor

Proving once again that orchids are even more wonderful than football, our loyal and enthusiastic members crowded the meeting on Super Bowl Sunday. Everyone received a festive Valentine package of 20 orchid clips and a heart-shaped lollipop just because we love you. The food was great thanks to the culinary efforts of Melissa Knight, Jeannie Salles, Miles Hoffman, Gustavo Mattielo, and Alana Sullivan. Poor Daniel Vong, our favorite vendor, got stuck in traffic and didn't arrive at the meeting until AFTER we had all left to watch the Super Bowl. He promises to come back for our March meeting with his gorgeous orchids and a great raffle. The good news is that we made a lot of money on the plants that Alex and Eileen McKyton commandeered for our silent auction from Carmela Orchids and did well, too, on our raffle with the hotel plants that Tony Billitere brought for us. The nice people at the Mirage, Treasure Island, and Wynn donate their spent orchids to our raffle. Not only do we save these orchids from the garbage (horrors!), but the money we make on the raffle allows us to provide an excellent educational program and to donate money to conservation organizations. Thanks to Tony and the nice folks at our hotels.

Clarice Dean prepared our Species of the Month, Laelia anceps, a hardy, drought-tolerant orchid, widespread in Mexico, Guatemala, and Honduras. Requiring heavy watering from spring to autumn, they appreciate greatly reduced watering from late autumn to winter. The 16 to 24 inch gracefully-arching inflorescence emerges

from the top of a recently-matured bulb. The large showy flowers, sometimes fragrant, are normally rosy- purple with a three-lobed lip. Thanks, Clarice, for donating divisions of your plants.

THOSE DUES ARE DUE

Thanks to all those who have paid 2006 dues. If you have not paid dues for 2006 (\$25 for individuals, \$40 for couples), this will, unfortunately, be the last newsletter you will receive. I pay for postage and printing of the newsletter myself, and I can only send it to current members. Look on your newsletter envelope. If there is an (05) highlighted in yellow after your name, we have no record of '06 payment. You can pay at the meeting or send it to me made out to GLVOS: Carol Siegel 8601 Robinson Ridge Drive, Las Vegas, NV 89117.

FEBRUARY SPEAKER

The biggest proponent of outdoor orchid growing is Mark Dimmitt,

Director of Natural History at the Arizona-Sonora Desert Museum, who was our February speaker. I was invited to a Summer Solstice Party at his lovely home in Tucson.

There, in the magical sparkling summer air, nestled in the shade of enormous mesquite trees, were dozens of orchids, living happily outside in the desert. In his compelling power-point presentation,

"No Greenhouse? No Problem," Mark makes the case that if you find orchids with a similar native environment to that in Tucson, you can grow these orchids with a few modifications outdoors. He puts his orchids on benches and tables all summer in the shade of the trees and mists them automatically twice a day with regular tap water. In the cold of the winter, he brings them onto an unheated enclosed porch.

He likes some orchids that do well in lowland swamps and keeps them wet. "A swamp is a swamp," he says, even in the desert. Bletia purpurea, native to swampy areas from Florida and Sonora to Central America, do very well with just the addition of water. Bletilla striata, from the shady forest floor of China, can be grown in the ground. Phaius tankervilleae, an invasive weed in Hawaii, is a good choice for outdoor growing.

Mark also recommends growing "desert-type" orchids, like *Epipactis gigantea*, species native to hot, arid climates, some with tough leaves and pseudobulbs. He selects orchids that grow in the tropical thornscrub and tropical deciduous forest which grow in a desert-like climate 6-9 months a year and a jungle-like climate for 3-6 months. In the summer, they get more rain and humidity and suffer no frost in the winter. Many do well in the desert with extra water and protection from frost. Plants he has had success with include *Cyropodium punctatum, Encyclia adenocarpa, Oncidium cebolleta*, and *Rhyncholaelia digbyana*.

From the Old World tropical deciduous forest, the genus Eulophia does particularly well- E. burkei, E. herrerae, E. keitii, E. petersii, E. speciosa, E. guineensis. Moreover, he has had success with the genus Oeceoclades- O. calcarata, O.spathulifera, and O.roseovariegata, as well as with Dendrobium speciosum.

When Mark repots and divides plants, he usually puts one division outside under his trees and sees how they do. He is compiling a list of these successes. Many mini-cymbidiums

do well with a little extra care. He finds that Cymbidium canaliculatum hybrids, most of the Eulophias and Rhyncholaelia digbyana do as well outdoors as in his warm, bright greenhouse.

A word of caution, however. Ron Coleman, another advocate of some outdoor growing, grew two *Encyclia tampensis* for a year-and-a-half. One he showed me, growing outdoors in the shade, looked fairly healthy and had one bloom. The one growing in his greenhouse was spectacular, very healthy and covered with blooms. However, growing outdoors can still be a challenging and rewarding part of the desert experience.

UPCOMING EVENTS

The Nevada Garden Club Spring Show will be held on Saturday, April 1st from 10-4. We need your blooming orchids and your help for our display on the stage of the Garden Club Building. We will be putting together the display on Friday, March 31st after 4 pm. If you cannot make it, you can leave plants off at my house, and I will bring them down for you. (254-4168). We will be asking for volunteers to be ambassadors for the club at our meeting. The good news is that we can leave the display up until Sunday so that all the members can enjoy it. You can take back you plants after the meeting. We thank Tex and Gidget Severance for judging the show.

The Easter Show at the Cal, April 14-16th will be held once again at the Ohana Room at the California Hotel. This event, sponsored by our friends at the Torrance Cymbidium Society, features AOS judging and display awards and an orchid display by the club. We will be putting together our display on Thursday afternoon, April 13th. You can win an AOS award!! Diana Smith and Mike Levin have won it in the past!! Thanks to Mike Levin and the Severances for judging.

OUR MARCH SPEAKER DOUG CONKIN was born and raised in Southeastern New Mexico and currently resides in Glendale, California. The son of a floral designer and descendant on both sides from a long line of farmers, Mr. Conkin comes by his interest in orchids naturally. He began growing orchids at the age of twelve, and hee currently maintains a mixed collection of approximately 1,000 plants. A frequent and much-in-demand lecturer on orchids and related topics, Doug has spoken for orchid societies, botanical gardens including the prestigious Huntington Library and Botanical Gardens and commercial orchid nurseries across the western United States. In 2003, at the invitation of the Huntington Botanical Gardens, he developed and currently hosts a monthly series of classes about orchids and their culture. Mr. Conkin is noted for his ability to present the complex world of orchids clearly, concisely and in a manner suitable for the advanced enthusiast and yet easily understandable by the absolute beginner. In the summer and fall 1998, he finished the production of the first in a series of videotapes on orchids and their culture. The video, "Anyone Can Grow Orchids...Even You" made its debut at the East West Orchid Show in October of 1998 and received wide acclaim. Doug has written a yearlong series of articles, "Integrated Pest Management for the Orchid House" for The Orchid Digest magazine, he also serves on the Publications Committee for The Orchid Digest as an associate editor. Mr. Conkin is a Past President of The Southland Orchid Committee, and a probationary AOS judge. Doug will be speaking on integrated

pest management.

Following the newsletter are three articles I have written. One is about tetraploidy in

orchids (what?), The second is about what makes an orchid an orchid. The third is the publisher's proof of an article on buying orchids which will appear this summer in ORCHID DIGEST. In addition, you will find a member list for the current year.

Stay well, and keep blooming! Love Carol

ALL THE PEOPLE WHO MAKE IT HAPPEN:

CAROL SIEGEL- PRESIDENT CLARICE DEAN -VICE-PRESIDENT EILEEN MCKYTON- SECRETARY DIANA SMITH-TREASURER

AND

Dan Mumau, Michael Lawless, Marsha Hawley
- Membership Hospitality Chairmen

Eileen McKyton and Dan Hawley- Welcome Desk

Lillian Patterson- Photographer and Historian Dan Mumau, Mike Lawless, and Tony Billitere-Raffle Chairmen

Marsha Hawley- Fund Raising Chairlady Phyllis Bond, Leslie Doyle, Shelly North and Eileen McKyton- Special Events Chairmen Jeri Lee and Terry Wilsey- Nevada State Garden Club Representative

Alex McKyton -Building Chairmen and Webmaster

Tex Severance and Mike Levin- Show and Tell Gurus

Tex and Gidget Severance- Judging Chairmen Scotty Nogaim- Election Chairman, Raffle Lady

Terry Wilsey- Club Travel Agent Extraordinaire

Steve Ninemire Library Chairman Clarice Dean, Assistant Librarian

Clarice Dean- Trip Chairman

Shelly North-Classy Club Apparel Chairlady Daniel Vong-Favorite Member



SPIRANTHES INFERNALIS FOUND ONLY IN NEVADA

Spiranthes infernalis, found only in Nevada

COMING ATTRACTIONS

Our meetings are held at the Nevada Garden Club Building at Twin Lakes and Washington between Valley View and Rancho at the western edge of Lorenzi Park. The meeting starts at 2, but I open the building at 1.

March 5, 2006	Doug Conkin, "Integrated Pest Management"
April 1, 2006	Nevada Garden Club Show in our building
April 2, 2006	John Salventi, Parkside Orchids,
	"2005 Taiwan International Orchid Show"
April 14-16, 2006	Easter Show at the Cal
May 7, 2006	Harry Phillips, Andy's Orchids,
	"Tiny Treasures" (the Pleurothallidinae)
June 4, 2006	Jim Comstock "3-D Orchid Photos"
July 9, 2006	Eric Christensen
August 6, 2006	Barbecue in Mt. Charleston
September 10, 200	6 Marni Turkel, "How to Grow Orchids"
October 1, 2006	Mike Glikbarg, Orchids of Los Osos "Multifloral Paphs"
November 5, 2006	Bill Bergstrom, "The Orchids of Mexico"
December 3, 2006	Seventh Annual Holiday Party
January 7, 2007	Steve Frowine, "Orchids for Dummies" (the author)
February 4, 2007	Jason Fischer, Topic to be Announced
April 1, 2007	Fred Clarke, Sunset Orchids, "The Exciting World of
	Bulbophyllum"
May 6, 2006	Glen Decker, "European Orchid Growing"-"The
	Spectacular Phrag Kovachii" (a double-header)

Is That An Orchid? Carol Siegel

My daughter received lots of flowers after the birth of her second child. My four-year-old granddaughter loved flowers just like Grandma. She stood on tiptoes and smelled a Casablanca lily. "Granma, look! she said. "Mommy got an orchid." "That's not an orchid," I told her. "That's a lily." " It looks like an orchid. It smells like an orchid. How do you know it's not an orchid?" the munchkin demanded.

Hmmmm. Good question. Why wasn't the lily an orchid? How DO you know when something is an orchid or NOT an orchid. So I looked it up... Next time, YOUR grandchild or anyone else for that matter asks you, you will know.

Lilies and orchids have lots in common. They are both monocots so they are built on threes. They both have three sepals and three petals. They both have a female part, the pistil, with three parts. They both have colorful and often spectacular flowers. They both often are very fragrant. They both have their ovaries underneath their flowers. MacKenzie Black thinks they both descended from the same order, Liliales, so they have the sort of similarity you find in distant relatives.

But they ARE different. Let's find out some of their differences.

ORCHIDS ARE BILATERALLY SYMMETRICAL.

Lilies look the same in all directions. Orchids do not. Orchids are like us. We are different on the top half of our bodies from the bottom half. We are, however, the same on the left side as on the right side. We are bilaterally symmetrical. If you cut an orchid across the middle, the top half will be different from the bottom half. One of the petals of an orchid, the lip or labellum, is just spectacular, extra-fancy with spots and perfumes to attract pollinators. It is usually located on the bottom, not the top of the flower. If you cut an orchid down the middle, it is the same on the left as on the right. It is NOT the same in ALL directions. It is bilaterally symmetrical.

However, if you cut a lily in half across the middle, the top half will be just like, the bottom half, and if you cut in down the middle, the left side will be just like the right side just like a daisy. It has radial symmetry. It is the same in all directions. That is one important difference. Lilies are like daisies. Orchids are like us.

ORCHIDS OFTEN GROW ON TREES

Lilies always grow in soil in the ground. Although orchids do grow in the ground the majority grow suspended in air on the branches of trees. They are "epiphytes", air plants, with many specialized structures to help them endure drought. Some orchids have swollen stems, pseudobulbs, like a camel's hump, to store extra water. Many have succulent leaves to conserve moisture. Several orchids have thick aerial roots covered with an absorbent material called "velamen" which helps them absorb moisture from mists and clouds—rather like blotting paper. Many epiphytic orchids have chloroplasts in their roots and can produce food. Some orchids like chilochistra and microcoelia have lost their leaves completely and rely only on their roots only for photosynthesis! Many orchids are adapted to living on a tree, something a lily cannot do.

ORCHIDS HAVE MICROSCOPIC SEEDS

Orchids have huge quantities of microscopic seeds. Ruschi in 1986 estimated that a single fruit of *Cyrtopodium punctatum* produces over $7\frac{1}{2}$ million seeds!! The smallest number of orchid seeds is in a fruit of *Barbosella australia* with only 25,000 seeds—still a huge number when compared with the countable big seeds of a lily. Orchid seeds are so numerous that Charles Darwin once estimated that if all the seed in a single plant of *Dactylorhiza maculata* grew into mature plants, the great-grandchildren of a single plant would cover the entire surface of the land throughout the earth!!

Orchid seeds, designed to float on air, are super-light, six to eight cells covered with a transparent coat, one-cell thick!! The seed is so small that there is no room to pack in a sack lunch for the growing embryo. There is no endosperm, such as lilies provide for their babies. The little orchid seed is on its own and has to land on a mycorrhyzal fungus that will be its nanny until the orchid can grow leaves and roots of its own.

Orchids go through a transitional phase early in the development of the little orchid where the little ball of cells becomes a little, green amorphous mass, just 1mm long, called a "protocorm". Still an embryo, the protocorm has rudimentary roots and leaves, which will produce chlorophyll in a few months. During the protocorm stage, the orchid is like a child, living off its fungus. The protocorm will develop into an orchid, but the protocorm stage is a special characteristic of orchids.

ORCHIDS HAVE VERY UNIQUE SEX ORGANS

Lilies have separate male and female parts in the flower and lots of powdery pollen. Their six pollen-carrying stamen face in all directions in the middle of the flower. Orchids have very special sex organs. The last of the flowering plants to evolve over 120 million years ago, they have a very complex sexual apparatus. Their male and female parted are fused into a structure called the column about the size of the top

joint of a kid's pinky. Sometimes it looks like a doll, a bird, an insect, the neck of a swan, or a little face. It is usually white, green, or pink. Almost all orchids are hermaphrodites!! (Catasetum are one exception.) At one end of the column is the male part, the stamen and balls of pollen and at the other end two or three stigmas fused into a single sticky female cavity. Orchids are different from lilies in that they have one or two—not six—stamen which all face in only one direction. Male and female parts are separated by a rostellum, designed to prevent self pollination.

If you brush up against a lily, you will probably get orange pollen all over your shirt. Unlike lilies, there isn't any loose pollen in the majority of orchids. The pollen is shrink-wrapped into little rice-size, egg-yolk colored sticky balls called "pollinia" designed to be picked up and deposited by a specific insect, bird, or bat. Orchids seduce their pollinators into transporting their genetic materials with a series of lies, lures, and tricks. The pollinia lie in depressions covered by a hinged cap, where they look like a pair of eyes, according to Rebecca Northern! Pollinia come in sets of two—phals have two, catts have four, laelias have eight, brassavola twelve.

With at least 25,000 species, orchids have tremendous variation from the tiny *Platystele ornata*, a bouget of which can fit into your wedding ring, to the gigantic *Grammatophyllum speciosa* which can grow bigger than a bull elephant. For everything you say about an orchid, there is always an exception. We say orchids have three petals, but in stelis and masdevallia, the petals are so tiny that they are barely visible. We say that orchids have three sepals, but in paphs that bottom two are fused so it looks like there are only two. We say there are separate sepals and a lip petal, but in most dendrobium, the sepals and the lip are fused together. In coryanthes, the lip is modified into a swimming pool and in some Dracula into a mushroom. In 20% of orchids, the pollen is not formed tightly into a ball but is more granular. However, bilateral symmetry, the column, microscropic seeds, stamens facing in one direction will help you tell an orchid from anything else. So, if your grandchild asks YOU, I hope this helps!!

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Leroy-Terquem and Jean Parisot. Orchid Care and Cultivation. Cassell Publishers. London.1999.

Norther, Rebecca Tyson. Home Orchid Growing. Simon and Schuster. New York. 1990.

Did You Know You Were 2N? Carol Siegel

Lately, I have developed a passion for phragmipedium orchids. They like growing under my lights, their flowers are gorgeous, and they last for months. Some of the orchids say "Eric Young 4n" as one of the parents. "Is that good," I asked myself. "If 4n is good, is 50n better? Is 2n bad? What is n? What are they talking about?"

When you don't know something orchid, the place to go is the old-faithful best book of all time, Rebecca Tyson Northern's "Home Orchid Growing"—so I went. The whole "N" question deals with something called "polyploidy". A polyploid is a type of plant with one or more EXTRA sets of chromosomes. Most living things get half their chromosomes (the haploid number or n) from one parent and the other half (the other haploid or the other n) from their other parent. They are "diploid"—the have two half numbers of chromosomes or 2n from their parents. You and I are diploid—We are 2n!! Each one of our haploid sets represents the contribution from one of our parents to the unique people we are.

Sometimes, something unusual happens in plants. Instead of two sets of chromosomes, a plant will get an extra set- 3 sets-, and it is called 3n or triploid. Most triploid plants are sterile and cannot reproduce. One with four sets of chromosome is 4n or tetraploid and usually can reproduce. Five sets makes a 5n or pentaploid, and six sets a 6n or hexaploid. In humans, individuals with extra sets of chromosomes don't survive.

Polyploids occur occasionally in nature as a mutation. Sometimes, the extra set of chromosomes carries genes for good things in the orchid, and the plant that results is really superior to normal plants. Tetraploids (4n) are likely to be large heavy plants with large flowers of heavy substance and good keeping qualities. Of course, not all 4n are superior to 2n plants, but they sometimes are really exceptional and make wonderful breeding parents. Unfortunately, although 2n produce 80-90% viable seed, 3n sometimes give as little as 0.5% viable seed. 5n is very rare, and are not usually as good quality as 3n and 4n.

What happens to make a plant have an extra set of chromosomes? Occasionally, a reproductive cell does not undergo normal division to make a haploid cell and remains with all its chromosomes. This 2n cell will mate with a haploid cell and produce and individual that is 3n. If both reproductive cells don't divide normally into their half number, then one 2n cell and another 2n cell result in a 4n individual. Sometimes, one egg is fertilized by two sperm!

In breeding, sometimes triploid are produced by breeding a 2n with a 4n. Because amateur growers are usually not interested in breeding but just love the big heavy flowers, a 3N sterile plant is sometimes preferred for the Home Depot crowd.

The chemical COLCHICINE has been used for many years to create giant-sized plants and flowers (4n) and to make sterile hybrids produce seed. Colchicine produces man-made tetraploids (4n) by doubling the number of chromosomes. Colchicine upsets the normal process of cell division by interfering with the division process just at the point when the chromosomes have become duplicated.

The chemical is poisonous to plants and humans and must be used in a very weak dilution

So now I know—and you do, too!

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THOU SHALT NOT BUY

CAROL SIEGEL

Buying AN ORCHID is like falling in love. Your heart races at the sight of the breathtaking beauty, and joy fills your heart as your wallet empties. Your brain goes on sabbatical as your lust-to-possess takes over. Misty-eyed, you buy without thinking. Later, as you escort your mistake to the trash, you have regrets. It is, of course, easier to put an orchid that was a mistake in the garbage than it is to dispose of a beloved, but they are both painful experiences that you want to avoid. You are much more likely to find success with the orchids you buy if you avoid some orchids that are best NOT to buy.

THE MOUNT EVEREST ORCHID

When asked why they climbed Mt. Everest, the hardy explorers said they did it because it was there. Many of us buy orchids "because they were there." Acting on impulse, we grab up all the blooming orchids we can afford. Eventually, our greenhouse is full of bedraggled orchids we bought when they were in glorious bloom, and we didn't know better. Don't buy an orchid just because you can.

Most of us gather our collection in a haphazard fashion, buying whatever appeals to us at the moment. To maximize your chances for success, a better way would be to look at the plants you are currently growing and see which are doing well under the conditions you are able to provide. Buy those genera that love your benign neglect, your enthusiastic ignorance and your sunny windowsill. If all of your cattleyas shrivel, but your phalaenopsis never stop blooming, think about becoming a specialist in phalaenopsis. Buy other genera, like paphiopedilum, that like similar low-light conditions. Similarly, if plants like *Laelia* from Mexico do really well for you, think about buying more Mexican species and hybrids since your setup seems to mimic the wild growing environment.

Make a wish list of plants you would like to have. Learn about those plants. Find out if these plants will do well in your growing area. Read all about them. If masdevallias like cool temperatures, and your growing area is hot, pick something that enjoys warmer temperatures. Do all the research you can and then make a wish list. Prioritize your wish list. Then, when you see a plant that you really want and can provide a good home for, you will be all ready to make an informed purchase.

THE TEENSY-WEENSY BABY ORCHID

Don't buy a baby plant unless you think it out. Plants in 2-inch pots are sometimes very inexpensive. They are really cute, and you can buy LOTS of smaller plants for the price of just one mature one, but beware. Just as a baby is much harder to take care of than a ten-

year-old, very young orchids are much harder to grow than fully mature plants. Mature plants can roll with the punches you give them and will forgive you your lapses in care more easily.

In addition, most growers are very short on patience, and it may take a seedling up to 11 years to bloom—11 years in which you water, fertilize, repot and wait... and wait. The inexperienced may carefully and tenderly kill the wee plant with zealous care. Most orchids are sold by "pot size" Orchids in a flask or in a 2" pot will probably be much cheaper to buy, but when you add in your time and your expense over the years, it sometimes seems a foolish economy. Some people really enjoy being the nanny to the little seedlings, but if you are like most growers and want instant gratification, buy the biggest orchid you can afford

THE HARDWARE STORE ORCHID

Don't buy all your orchids in the hardware store. I know they are so inexpensive and so pretty and so available, and you are THERE anyway, so why not bring home a Home Depot orchid along with the wallboard! Many of us do, and some of us live to regret it!

While some hardware stores give their orchids tender care, most are really not orchid experts. Your poor orphan orchid may have been sitting on a dock somewhere in the heat, plunged into a dark box, left in a storeroom in the back of the store, crowded together with lots of other plants, and really neglected. Pick up the plant with the pretty flowers that has caught your eye. Is the pot really light? A light plant means that this plant has not gotten much water and is really stressed. The last thing an inexperienced grower needs is a stressed plant to take home (and stress even further.) Are all the flowers open? If they are, your flowers may not last very long when you get them home since they may already have been open a long time. I have seen buyers pass up a plant with only ONE open orchid in favor of one that is fully open. Not smart! Are there very few flowers? Remember that plants with lots of buds and flowers are worth more money than plants that only produce a few flowers. Do the leaves look healthy and light green? In a month from now, at most, you will be left with LEAVES not flowers and you want them to be really healthy. Are there any bugs on the plant? If there are, leave them in the store!! Even if you don't see any bugs, quarantine the plant like a thirdworld immigrant and keep inspecting it to make sure it doesn't have some stowaway bugs to infect your collection. If no one is looking, slip the plant out of the pot and look at the roots. You want to see lots of growing white-green roots and no mush. If you are satisfied, enjoy your purchase. Just be careful that the wallboard doesn't crush the flowers!

THE TAGLESS ORCHID

Don't buy orchids without tags. Orchids are supposed to come with tags. Those tags are supposed to say more than "Plant \$19.99". You may not care that your plant has no tag, but eventually you probably will wish you had gotten a tag with your plant. Your tag is like a baby's birth certificate. It will tell you the genus and species or hybrid of your plant. The tag will usually be written in Latin, a dead language that never changes and is uniquely suited as a universal identification system. If you go to a greenhouse in Ecuador, Sophronitis coccinea will still be Sophronitis coccinea. The tag will often tell you the parents of your orchid if it is a hybrid, sometimes where it is from, and what conditions it likes to grow in. It often informs you of whether your plant is a mericlone (a fairly exact copy cloned from one parent), a division (a physical piece of the mother plant), or a cross of two plants. If you cross one orchid with another, you get a lot of variety in the offspring as you do when you have your own children. Sometimes, an individual will name his particular plant with a cultivar name in single quotes like "Paphiopedilum lowii 'Carol' to mark a special plant. Special orchids often have some initials with a slash inbetween, like AM/AOS, which indicates that the plant has won an award. These plants will be worth more and probably will cost more.

If you want to enter a plant for an award at a later date, you will need to have a tag telling you what plant you have. Without a tag, it is nearly impossible to know what a plant is. When your plant is not in bloom, you will wish you knew what plant you have been watering all year! If your plant does not have a tag, ask the vendor for one. He often knows what the plant is, but has been too busy to put a tag in, or it has fallen out. On that note, always put TWO tags in your plant when you get it home—one at an angle in case one falls out. Always check your pot after you water it to make sure it still has a tag. Then, you can find it on the floor, in the garbage, or on the sink while you still know where it belongs.

THE JUNGLE-COLLECTED ORCHID

It is sometimes tempting to buy an orchid that nobody else has, a rare species that is difficult to get and all the rage. At some time, you may be offered a jungle-collected plant that is not legal. I, myself, have been offered plants like this as a compliment and proof of friendship. Run like hell!! Not only are you contributing to the extinction of orchids, but it could land you in jail!

The latest example of this was the scandal surrounding the discovery of *Phragmipedium kovachii* by Michael Kovach. Magenta, magnificent, and as big as a man's hand, the bloom took his breath away when he spotted it on a roadside stand in Peru. When he brought it to Marie Selby Botanical Gardens in Sarasota, it was hailed as one of the biggest orchid discov-

eries in 100 years. They even named it for him.

Two months later, his greenhouse in Virginia was raided by Federal agents. Selby was fined and had to write a formal apology *Orchids*, the official publication of the AOS. Kovach is awaiting sentencing for importing an orchid without proper authorization, a violation of CITES regulation. They all should have known better.

People often think that just one or two plants can't hurt. Mr. Kovach only took three orchids, but soon whole stands were wiped out. Dr. Harold Koopowitz, in his brilliant article in *Orchid Digest*, '*Phragmipedium kovachii in the Wild*', says that the first and second populations of *P. kovachii* have been completely and illegally stripped out and have been selling in Europe for \$1000 each!!

Ask the nursery where you buy plants if they grew the plant from flask. Nursery-grown can mean that the plant was ripped from the jungle and THEN grown for a few months in the nursery. You want to try your best to help protect native orchids. Make a commitment to buy only plants that have been grown in nurseries or imported legally. You can be fined as much as \$25,000 per plant for illegal plants. Ask questions and stay out of jail.

THE FUSSBUDGET ORCHID

Some orchids are really hard to grow. Others grow easily but are really hard to bloom (great...) Some are so fussy that they just up and die if you just look at them cross-eyed. You want to avoid these plants unless you have money to burn or are a really gifted grower.

How do you know if a plant is really demanding? Ask questions before you buy. When I first started growing, I fell in love with a gorgeous little *Sophronits coccinea*. It was so expensive that I won't even tell you how much it cost. I took it home, and it started dying as soon as I walked it into the greenhouse. It had a death rattle in no time. I should have asked—and the vendor should have told me—that this plant is very fussy, needs a cooler growing condition and a more experienced grower. Plants like *Paphiopedilum rothschildianum* are really hard to bloom, much more challenging than *Paphiopedilum lowii*. Who knew! Always ask before you buy a plant how hardy it is, how tolerant it is of inexperience, how easy it is to bloom, and how often it blooms.

Ask questions, save money, and avoid the trip to the garbage.

THE ALICE IN WONDERLAND ORCHID

Some orchids look like they belong on the set of *Alice in Wonderland*. They are too big, too small, too dry, too wet, too something that doesn't fit in your reality. Don't buy an orchid that is a mismatch for your growing area. I love great big gorgeous vandas. I have bought several in fits of ecstasy only to find that they

are just too big to fit under my lights on my cart. There is no way I can give them the high light they like under my setup. I also travel and can't mist and water them every day. They start out as beauties and end up as prunes in my setup. They are an Alice in Wonderland orchid for me. I just should not buy them. They are TOO wrong for me.

Every person and every growing area has its limitations. Don't buy an orchid that needs something you can't give. If your orchids need to fit under a shelf on your windowsill, and you fall in love with a big, tall dendrobium, do yourself and the dendrobium a favor and pass it by. Perhaps a miniature cattleya would have a better chance of survival for you. An orchid is a living thing and should only be "adopted" if you can give it what it needs.

THE STINGY ORCHID

Don't buy an orchid without knowing how long its blossoms will last. You shower love, affection, money and care on your orchids. You wait with anticipation for those little buds to open and then, some orchids just bloom for a couple of days and that's it for the year! They are so stingy with their blooming that you feel gypped. What did you do wrong? Why didn't they stay open for longer? Why, why, why?

All orchids have inborn clocks for how long their flowers will last under the very best of circumstances. Some, like *Vanilla flavorans*, last for only a day. Others, like some odontoglossums, can last a month. There are people who are thrilled to have a special orchid like a stanhopea bloom for just a few days. The heavenly fragrance and other-worldly appearance are enough of a reward for them. If you are not one of those people, learn which orchid blooms stay open for a long time and buy those that give you what you want.

If you want a plant that is always in bloom, phalaenopsis is a good choice for you. The little spike takes three months to bloom, giving you a thrill the whole time. Then, the flowers often bloom sequentially for up to three months, after which you can cut off the spike above the first or third node, and the spike may bloom again! Months and months of flowers-now that's MY kind of plant.

Phragmipedium spikes can last for months as well. Each of the sequentially-blooming flowers falls off looking fresh and unwilted so the plant always looks spiffy. On a mature plant, another spike seems to always be popping up as soon as the old one is spent. This is my favorite flower. Others say it is hard to bloom, but I seem to have lots of them always in bloom.

Paphiopedilum produce flowers that are sometimes so firm and long-lasting that you have to check them to make sure they aren't made out of wax. The sequentially-flowering ones like Paph. primulinum or Paph. lowii reward you with months of flowers.

Plants like Galeandra divas and Encyclia cochleata and

Psychopis papillio keep blooming on the same spike even after it looks like the spike is done. Don't cut that spike until you know that it is REALLY done.

There is, of course, something very special about the brief, magnificent flowering of some bulbophyllum, stanhopea, catasetum, and sobralia, but know what you are getting when you buy an ephemeral orchid to avoid disappointment.

THE JANE MANSFIELD ORCHID

Few of us can resist the big show-girl orchids that tantalize with their in-your-face gorgeousness. They take up lots of space and not everyone can provide the right environment for these beauties to re-bloom. If you bring home a lot of showy orchids and then never see them re-bloom, resist yet another showgirl and try one of the other of the more than 30,000 species and countless orchid hybrids.

Pleurothallids can be a fun subtribe of orchid to try. These small jewels take up very little room. A whole collection can fit on a table-top and delight you with their exotic blooms, best seen with a magnifying glass. In the space of one grammatophyllum, you can have 100 lepanthes, restrepias or pleurothallids. They require very little light and love to be moist and cool.

Try some of the bulbophyllums. With their quivering lips and trembling petals and weird flowers, they are an exotic world apart and, I find, very easy to grow and flower. Some, like *Bulbophyllum echinolabium*, produce flower after flower. I had 14 flowers bloom over six months on my plant. This plant is extinct in the wild, so growing it may help to preserve the plant on the planet.

Catasetums produce a glorious spectrum of flowers that fit in a small space. They thrive under intermediate to warm temperatures and can thrive in a living room window or under lights. Seedlings flower within two years, often flowering twice a year. One flower can perfume a whole room with its delicious fragrance. Different in that they often produce separate and different male and female flowers, they have a fascinating pollination mechanism that flings pollinia at an insect. Best of all, these plants take a dry rest in the winter—and you can practically ignore them until they thrust forth a new leaf.

Remember that a movie star orchid may not be right for you, but a character actor orchid may be just the thing and much more interesting.

THE NEIMAN MARCUS ORCHID

Don't buy an orchid just because it is expensive. Some orchids cost a fortune. Orchids of Los Osos sells its award-winning *Paph. Dollgoldi* for \$10,000 on e-bay. The first plants of *Phragmipedium bessae* went for \$2,500. Rare, unusual, desirable or awarded plants can often cost more than braces for your kid. Should you buy a very expensive plant? The answer is, of course, only if your mate won't find out (just a joke...)

The answer is, it depends. Some things are a musthave, and richer folk will pay for what they want. A breeder may find an expensive division worth the money for the money he can make. A collector may feel that an expensive plant is a once-in-a-lifetime opportunity. For people who like to win awards, an expensive plant may be so perfect it can win a coveted award.

For most of us, a rare plant sometimes means it is just hard to grow so that there aren't a lot of them. We don't want anything that is HARD to grow. A rare plant may just mean that it is NEW and so is in limited supply. I waited a decade and bought *Phragmipedium bessae* for \$25 instead of \$2500. I enjoyed it just as much. Sometimes, a plant is expensive because it has two or three or four spikes instead of just one. You may be happy to pay \$25 instead of \$250 to have just one spike of magnificent flowers to enjoy. Sometimes, the vendor is just greedy or paid a lot for the plant, and you can shop around and get the same plant for a lot less. You will find that certain vendors are half as expensive as others for pretty much the same thing. Go to shows and comparison shop. You will be surprised.

If you shop with a plan and buy orchids that fit your growing environment and budget, you will have much better success. Of course, if I could just follow my own advice...*