

Orchid Society of Santa Barbara



Meeting: Wednesday, February 14, 2001

MacKenzie Adult Building
at MacKenzie Park
3111 State Street (at Las Positas)
Meeting begins at 7:30 pm

PROGRAM

Our own **Jerry Rehfield** will speak about
Compact Cattleyas

Come hear a Valentine's presentation on compact – not miniature and not full size – cattleyas by Jerry Rehfield. Jerry promises lots of red flowers in his discussion of cattleyas that give good sized blooms on reduced sized plants. Bring your wallets for the raffle table, which will be supplied by Jerry.

CALENDAR OF UPCOMING EVENTS

Santa Barbara Chapter Cymbidium Society Meeting Wednesday, February 21, 2001
Cymbidium Society of America judging at 7:15 pm, meeting at 7:45 pm, at Carpinteria Public Library.

Spring Show Schedule, 2001

February 9-11, "Fascination of Orchids," South Coast Plaza, Costa Mesa
February 23-25, San Francisco Orchid Society Show, Fort Mason Center, San Francisco
March 3-4, Five Cities Orchid Society Show, South County Regional Center, Arroyo Grande

March 3-4, Palomar Orchid Society Show, San Marcos Community Center, 3 Civic Center Drive

March 16-18, San Diego County Orchid Society Show, Scottish Rite Center

March 17-18, San Gabriel Valley Orchid Hobbyists Show, L A County Arboretum

March 23-25, **Santa Barbara International Orchid Show**, Earl Warren Showgrounds

See OSSB on the web at www.west.net/~orchidsb

Summary of the 2001 January Meeting

> **Vice President Robert Hofberg**, standing in for Sandy Svoboda, introduced himself and welcomed new visitors.

> **Pay your 2001 dues!!!** Dues are \$20, payable to OSSB. If you don't pay at the meeting, send your check to Treasurer Carole Cowan, 209 Cedar Lane, Santa Barbara, CA 93108. Please make sure we have your correct address, telephone, and email.

> **Theft Alert!** Andy of Andy's Orchids reported a break-in by a knowledgeable thief who stole a number of species orchids. Andy reports that this man, who is 28-30 years old with long, strawberry blond hair and a height of 6 feet to 6 feet 2 inches, is someone he recognized by face at orchid shows. If you have any information about this individual, notify Andy or your society secretary (Heidi Kirkpatrick, g_pierce@juno.com or 563-2894), who will pass the message on to Andy.

> Group rates are available for the **San Francisco Show**, February 23-25. Check out www.orchidsanfrancisco.com or pick up a flyer at the February meeting.

> **Spring show season** is here! Keep in mind that the society will be looking for plants for the society display at Five Cities and at the International Show. If you will have plants for the displays, notify Heidi Kirkpatrick or our Head Display Installer Jeff Thompson. OSSB will also be looking for volunteers to help install the International Show display and help Carole Cowan with the society sales booth.

Program

Show chair and long time society member **Tom Ball** introduced our January speaker, our own **Paul Gripp**, a man who is responsible for Ball's (and certainly other

growers') orchid addiction. Gripp spoke to us about orchid adventures: searching for wild orchids in different parts of the globe.

Gripp has been to many orchid habitats, noting that most of his trips have been to see orchids, either in the wild or in foreign shows. Searching for those elusive plants and blooms is what makes travel enjoyable for him.

Most people think of exotic locales in connection with "orchids in the wild," but Gripp noted that there are orchids to be found along the coast in California, in Yosemite, and such Canadian vacation spots as the Vancouver area. Despite its reputation as an orchid haven, Hawaii has only a few native orchids. Most are naturalized imports, although visitors to such sites as Akaka Falls will see the "immigrants" growing very naturalistically.

One of Gripp's favorite orchids is *Laelia anceps*, so he has, of course, visited Mexico to see them. He notes that plants in Santa Barbara bloom one to two months later than those in their native habitat; be careful of bloom dates when trying to visit an orchid in bloom in the wild! Most information on *L. anceps* and its varieties and related species has come from English collectors, so visitors should be prepared for some name confusion amongst local growers. In addition, some varieties and species cannot be found in the wild, though they are plentiful in collections and as garden plants.

Another fun place to see orchids is Australia, home of *Dendrobium kingianum*, which is a very popular plant "down under."

Gripp reported that he returned home with 31 different kinds of *D. kingianum*.

India and Nepal are rich in orchids such as lady slippers and coelogyne.

Traveling in India can be a challenge and one must take care of regions of civil unrest, though tourists seem to be universally popular. Gripp reported trying to follow the footsteps of historic orchid hunters, such as Joseph Hooker, for whom *Paphiopedilum hookerae* was named.

Gripp observed that learning from

Sex, Lies and Kidnapping **Or a Look at the Wild World of Orchid Pollination**

books is fine, but nothing matches seeing the plants in the wild. For those who wish to travel, he highly recommends the World Weather Guide as a resource for determining when to visit a site. Orchid travel can be very rewarding, but Gripp added that one shouldn't drink the water!

By Heidi Kirkpatrick

Part 1

"The flowers of Orchids, in their strange and endless diversity of shape, ... appear to us as if they had been modeled in the wildest caprice, but this no doubt is due to our ignorance of their requirements and conditions of life." Thus wrote Charles Darwin in his treatise on orchid pollination.

Many of us first become aware of the peculiarity of orchid fertilization upon hearing about "Darwin's orchid," *Angraecum sesquipedale*. Upon inspecting the flower with its foot long nectar spur, Darwin hypothesized the existence of a moth with a correspondingly long proboscis to reach the tiny pool of nectar at the bottom of the spur.

Today's orchid experts can often offer equally specific guesses about an orchid's pollinator simply by studying the flower.

When we examine an orchid bloom, we notice that the pollen is not a dustlike coating of grains on the male parts of the flower as in common flowers like daisies. Instead, orchid pollen is clumped together in pollinia. An insect visiting an orchid bloom removes the entire clump all at once and deposits this mass onto the female part (stigma) of the bloom. Thus, orchid pollination is a one shot event, with each bloom capable of fertilizing only one other flower; affixing the pollen on a pollinator is too important to trust to a casual visitation. With this in mind, it is a little easier to understand why orchid flowers can be so complex in their efforts to guide the pollinator to the pollinia and the stigma.

Those who study orchid taxonomy and pollination know that pollinators are attracted by certain cues. Bee pollinated

orchids include some hobbyist favorites. Bees like flowers with a sweet fragrance during the daylight hours that they are active. They benefit from a landing platform near the pollen. While they have highly developed senses of taste and smell, they are predominantly blind to red, so bee-pollinated flowers usually have bright colors in violet, green or yellow shades. Many cattleyas and laelias are bee pollinated, with the lip or labellum that we find so decorative in fact forming a convenient landing platform for insects.

Some New World orchids are pollinated by hummingbirds and sugarbirds. These plants have highly colored red and orange flowers with little fragrance. Since the birds rarely land on the flower itself, the flowers are often pendant. These birds are attracted by nectar, which they may find in small amounts in deep containers reinforced to withstand bird beaks.

Some orchids, particularly many bulbophyllums, are pollinated by flies and beetles attracted by deception (an orchid lie). The flower smells rotten, which attracts a fly in search of food or a spot to lay eggs. These flowers have duller colors, often purplish reds that mimic rotting meat. Some have pungently sweet odors with shallow nectaries. Others smell dunglike.

Moth pollinated flowers, like Darwin's *Angraecum sesquipedale*, are white or light green with long nectaries that often look like spurs extending from the flower. Since moths are active at night, these blossoms have a sweet nighttime fragrance. The pollinia are deposited on the moth's

proboscis as it investigates the nectary, which has nectar only at the tip, if it has any nectar at all. Many types of moths are strong flyers and will hover in front of a flower while feeding. Blooms attracting these pollinators usually have small lips that do not provide a landing space. Butterflies, in contrast, land on flowers and are attracted by bright colors, particularly reds and oranges. Pollinia are deposited on the feet of the insects.

Orchid flowers are very particular about which insects pollinate them. In many cases, only a single species of insect can do the job effectively. Vanilla is a prime example. Darwin noticed that *V. aromatica* failed to produce its "aromatic pods" when removed from the wild, and concluded that an insect in its natural habitat was "specially adapted for the work" of pollinating the flower. Today, the vanilla beans prized by

cooks come from plants that are pollinated by humans. Removed, from nature, cultivated vanilla plants no longer have access to their natural pollinators. (Incidentally, the "bean" we use for flavoring is actually a desiccated orchid seed pod, with hundreds of thousands of tiny, dustlike seeds inside.)

The more fantastical orchid flowers have in common with their simpler brethren the need to attract an insect and subsequently guide it into contact with the stigma and pollinia. Keeping this in mind, it is easier to understand why these flowers have evolved elegant and sometimes convoluted mechanisms for this purpose. Next month, I will discuss some of these individual mechanisms, and reveal that orchid pollination can indeed be very wild and fascinating.

Announcements

> **Don't forget to pay your dues!** See page two for details.

> **New Members**

OSSB welcomes the following new members: Steve and Debi Bartlett, Chris and Karen Bierback, and Linda Grant. We're pleased to have these and all other new members join our group!

> **CSA Congress**

The annual CSA Congress, held in conjunction with the spring show here in Santa Barbara, will be on March 24, at the Holiday Inn in Goleta. The morning programs will cover cymbidiums, while the afternoon will be on paphs and phrags. The evening banquet will feature cocktails and the annual auction. Contact Al or Sandy Svoboda for more details.

> **AOS Grand Opening Celebration**

The American Orchid Society is celebrating the opening of its new International Orchid Center in Delray Beach, Florida, on March 3, 2001. All AOS members are invited to attend the ceremony. This facility contains not only a public orchid garden, but also houses the society's large library of books and memorabilia. The Center is intended to be a hub for orchid research. For more information, check the society's web page at www.orchidweb.org or RSVP via email to jwener@aos.org

Orchid Society of Santa Barbara
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