

Orchid Society of Santa Barbara



Meeting: Wednesday, May 9, 2001

MacKenzie Adult Building

at MacKenzie Park

3111 State Street (at Las Positas)

Meeting begins at 7:30 pm

PROGRAM

Butch Weckerle-Thrun will speak about

Five Lines of Miniature and Novelty Cymbidium Breeding

This is your chance to learn more about some of the smaller sized cyms that won't claim every inch of space on your patio. Butch Weckerle-Thrun is an AOS and CSA judge who has been growing for 20 years. As manager of the Rowland Collection, he is in a position to know a good deal about cymbidium breeding. (For those of you unfamiliar with the Rowland Collection, Patricia Rowland has been hybridizing miniature cymbidiums for some 30 years.) Weckerle-Thrun will supply the plant table.

CALENDAR OF UPCOMING EVENTS

Carmel Orchid Society Mayfaire

May 5-6, 2001

Crossroads Shopping Village, Hwy 1 at Rio Rd., Carmel, CA. Contact: Ida Hale (831)646-8724.

The Huntington Botanical Gardens Orchid Festival

May 12-13, 2001

The Huntington, 1151 Oxford Rd., San Marino, CA. Contact: Lisa Blackburn (626)405-2140,

or www.huntington.org (Note: no AOS judging at this show.)

Santa Barbara Chapter Cymbidium Society Meeting Wednesday, May 16, 2001
Cymbidium Society of America judging at 7:15 pm, meeting at 7:45 pm, at Carpinteria Public Library.

Summary of the 2001 April Meeting

> **President Sandy Svoboda** welcomed a number of guests and new members.

> **Show Report.** President Svoboda congratulated Jeff Thompson for designing the OSSB display at the Spring show, noting that it won second place for society displays under 100 square feet. OSSB received a \$100 check as prize money.

> **Report on the Laelias at the Zoo project.** (See the complete report on the last page of the newsletter.) President Svoboda and Paul Gripp reported on a recent trip to the zoo to evaluate orchids donated and mounted on trees there by OSSB.

> **Vice President Rob Hofberg** thanked Carol Krieger for the April refreshments and reminded members to sign up with Laura Cogan for refreshments at future meetings. He announced that Cal-Orchid now has a website and that Steve Monkhouse has produced a computer CD containing photos of his novel, intergeneric *Zygopetalum* hybrids.

> **President Svoboda** thanked two visitors, Larry and Charles, of Urban Camouflage for their donation of two attractive pots to our raffle table.

Program

Our April speaker was chair of the American Orchid Society Pacific South Judging Center, Karen Muir. Muir spoke to us about the Japan Grand Prix International Orchid Festival, also known as the Tokyo Dome Show – the “Superbowl” of orchid shows.

This show is the largest show in the world, with an attendance of 450,000 – with each adult paying \$16.50-\$18.50. The show runs for one and a half weeks in February and boasts exhibitors or vendors from 23 different countries. Though this is

not a prime time for orchid blooms, holding the show later in the season would interfere with the Dome’s primary purpose: Baseball!

Muir commented that while the US has some excellent hybridizers, Japanese plants are of incredibly good quality. The Tokyo show provides good motivation for this quality with \$150,000 in prize money. The grand champion plant of the show earns its owner \$20,000 and a new Mercedes. Not surprisingly, the grand prize winners have been professional growers ... until 2000, when an amateur won with his *Masd. coccinea*, receiving a standing ovation from a very conservative audience.

This very large show boasts some very large displays of impeccable installation. Plants are often presented in masses of color; a sea of white phalaenopsis can be very impressive. But there are also smaller, tabletop displays, often with only a few plants artistically presented.

Judging and judging categories are not exactly like our familiar AOS and CSA judging. While there are awards for best displays and best plants (plants entered for judging are not installed in displays), there are also categories for artwork, fragrance, and foliage. The handbook notes explicitly that “entries which harm the dignity of the festival will be disqualified.” This includes mislabeled plants.

Muir noted that plants at the Tokyo Dome Show are invariably exquisitely grown, then showed slides of several examples, including *Lc. Mini Song* (*Lc. Mari’s Song* x *Lc. Mini Purple*), *Soph. Arizona*, *Paph. Knight’s Chalice*, *Phal. Cygnus* and *Lyc. skinneri*. Most of us will never visit the Tokyo Dome Show in person. At least we could enjoy it vicariously through Muir’s slide presentation.

Show Table

The May show table boasted some splendid plants brought in by members. Al Svoboda showed that great and historic breeder, *Paph.* Winston Churchill. Jerry Rehfield brought several floriferous miltonias, which need frequent prepotting because they hate salts. (Note that

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

By Heidi Kirkpatrick

Part 3

When most of us hear the word "pollination," we think of bees. But flies perform this task for many orchids, often falling for similar trickery on the part of the orchid flower. *Trichoceros antennifera* is found at higher elevations in Columbia to Peru. In these areas, the female of a particular species of fly will land on a flat object in the sun to display herself when she is ready to mate. *T. antennifera* takes advantage of this activity with a stigma that reflects sunlight like the female fly and bristles that are flylike. Other members of the Pleurothallid alliance engage in similar mimicry, including members of the genus *Telipogon*. While these flowers do not appear particularly fly-like to us, the illusion is sufficient to lure the amorous male flies.

Flies pollinate more than just the more unusual and obscure members of the orchid world. The very popular genera *Paphiopedilum* and *Phragmipedium* are partially fly pollinated. When we look at our paphs, we notice that the staminode (the shield-shaped structure just above the pouch) has a waxy or oily appearance. This appears to attract flies, who attempt unsuccessfully to land on the staminode. They slip off and fall into the pouch. Once inside the pouch, a fly has no room to maneuver its wings and can only crawl, following the line of tiny hairs inside the pouch in an attempt to escape. The hairs lead past the stigma and pollinia of the flower, so the hapless fly becomes a pollinator.

Some orchids take this theme of capturing their pollinators to greater extremes. Some species of *Bulbophyllum* are rather rough in their treatment of their fly pollinators. Flies, attracted by the putrid scents of the flowers, land on the hinged lip, which throws the insect against the precise spot needed for pollination. If the pollinator is of the correct size (from the flower's point of view!), it often will be hooked

the pansy orchid miltonias are now called *Miltoniopsis*.) Fred Lucas showed an unusual *Thunia* species, a deciduous warm grower with white flowers. Don Brown's *L. Santa Barbara Sunset* is a fine outdoor grower. Alan Chovil's *Ansellia africana* has better color when grown outdoors. Thanks to all who brought plants!

or pinned against the column for a short time. In its struggles to free itself, the fly either accumulates the pollinia or has a previously acquired clump of pollen ripped off by the stigma.

Members of the genus *Pterostylis* of Australia and New Zealand also insure pollination by capturing insects. These usually greenish orchid flowers have a hoodlike shape formed by the cupped petals and sepals. Most species have a foul odor to humans, but one that attracts small gnats. These insects land on the lip, which is sensitive to weights of as little as one milligram! The lip hurls the insect against the stigma inside the hood and forms a seal with the petals and sepals so that the insect is trapped inside. To escape, the gnat must crawl past the anther. After some time, the lip relaxes and resets itself for the next victim.

When we learn about the complex pollination strategies of orchids, it may seem amazing to us that they ever propagate themselves. But pollinators can be very efficient.

C. H. Dodson found that a single bee managed to pollinate 150 out of 700 *Barkeria lindleyana* flowers in the space of two days. After he captured the bee, no further flowers were pollinated. Some bees can smell if another bee has visited a flower and will avoid that flower on the assumption that it already has been emptied of nectar. This enables to the bee to visit a large number of flowers.

Orchid flowers are equally efficient at preventing cross pollination, which is why there are relatively few natural hybrids in the orchid world, despite similar species occupying the same habitats. Most orchids can be pollinated only by insects of a certain size. Those that are too big cannot get into the flower (and sometimes get stuck trying) while those that are too small cannot reach the pollinia or cannot force the flower open.

Some New World orchids live even more dangerously. *Catasetum bicolor*, *Cycnoches egertonianum* and *Mormodes powelli* can breed with each other and are pollinated by the same species of Euglossine bee. Each flower avoids cross-pollination by depositing pollen on and receiving pollen from only a particular spot on the bee's body. *Gongora grossa* and *Coryanthes elegantium* share a similar seemingly risky pollination strategy; again, evidently, it works, as natural hybrids commonly are not seen in nature.

When outside pollinators cannot do the job, some orchids self-pollinate. This is more commonly seen at the edge of a species' range where it extends past the habitat of its natural pollinator. Other orchids, such as *Orchis* or *Epipactus* will self-pollinate after being open for too long without a visit from a pollinator.

Next month, I will conclude my series on pollination with a look at some of my favorite pollination stories, including how *Coryanthes* and *Catasetum* get pollinated.

A Report on Laelias at the Zoo

One of the missions of OSSB is to educate the public about orchids. In this spirit, the society began an ongoing project several years ago to mount orchids on trees at the zoo. This project was the brainchild of Paul Gripp and then OSSB president Pat Siordia, who envisioned orchids in bloom in the trees that would draw the attention and appreciation of zoo patrons. To this end, a handful of OSSB members donated plants and time, wiring the plants to several trees along the kiddie railroad track and access road just inside the zoo. The plants were chosen for their adaptability to an outdoor environment with little care, which meant such species as *Laelia anceps*. (Besides, Paul, loves *L. anceps*.)

Since the project began, some plants have been added. Though the zoo management assured the society that the sprinklers would reach the orchids, it has been evident that this was not the case. During the summer of 1999, society members dragged hoses and sprayers to the zoo on a regular basis to water during the hottest months.

Just prior to the April 2001 meeting, society members made another trip to the zoo to evaluate the plants. Though some had died, 50 are still alive and some appear to be thriving. Twelve new plants were added, but the issue of watering the orchids remains. President Sandy Svoboda reported that the zoo's head gardener (Abel Landeros) has generously agreed to install sprinklers/misters for free if the society pays for the cost of materials. Since a sprinkler system already exists in the area, all that is needed is to add misters in the trees at the height of the orchids, at an estimated cost of \$300. At the April meeting, Jerry Rehfield moved that the society pay the cost of supplies. The motion was seconded by Heidi Kirkpatrick and Randall Umland and passed unanimously by the members in attendance at the meeting.

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

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