Sarcochilus australis

MARIBYRNONG ORCHID SOCIETY

(The FRIENDLY Society)

OCTOBER 2009 BULLETIN

www.mosorchid.org

Affiliated with the Australian Orchid Council
Incorporated in Victoria Reg No 1193Z

Disclaimer: The Maribyrnong Orchid Society Committee will not take any responsibility for actions taken on advice or views expressed in: this or any future Monthly Bulletin, or by Guest Speakers. It is always advisable to get a second opinion.

BULLETIN CONTRIBUTION DEADLINE – 3rd Thursday of the month

Next Meeting

The next meeting of the Maribyrnong Orchid Society will be held at the Maribyrnong Community Centre, Randall Street, Maribyrnong on Tuesday the 13th October, 2009.
The Early 'new growers' group starts at 7.15pm and is conducted by the informative Steve Stebbing. This group runs for approximately 30 minutes prior to the start of the monthly meeting. We also have 'Pots and Ferts' and plant sales tables operating at every meeting. Members may bring 10 orchids to be sold on the sales table each month. The Society deducts 15% commission on the sale of all plants. Please note that all plants must be labeled correctly and state whether they are hot/cold growing and expected floral colour, if not in flower. Plants are also to be listed on a sales form, available from members on the Sales table, to be filled out by the selling member.

Guest Speaker this month

This month at the meeting, the members will be given an overview of the AOC Conference. Also a walk through of the Maribyrnong Website.

Supper Roster

For the October meeting we kindly have Francis Wilde and Margot Lattimore on Supper Duties. All members are welcome to bring a plate of goodies to be enjoyed after the Evening's Speaker has finished their presentation.

New Meeting Commencement Time:

We wish to advise our members that meeting nights in the future will commence at 7pm. Members cannot enter the hall until this time.

ORCHID SHOW CALENDAR

Maribyrnong 2009 Orchid Shows

Sarcochilus Festival: 14th & 15th November

All Maribyrnong Orchid shows are conducted at our club rooms, which are located at Maribyrnong Community Centre in Randall Street.

President Report October 2009

I would like to sincerely thank everyone who attended our AOC Orchid Conference and Show at Werribee.

This show took an enormous amount of planning, so our deepest thanks and gratitude to the Conference Committee for all the time and effort put in to organize this wonderful event.

Just as important, I would like to thank all our wonderful and dedicated helpers, without whom the Orchid Show would not have been the success it was. Your time and personal assistance is to be commended.

Our next show will be the Sarcochilus Show which is in November. Please remember the members wearing their name tags get in for free.

See you all at the October meeting. Please do not forget that the meeting begins at 7pm.

Anthony Scerri

Judges Results

There are no Judges results for September in this newsletter because a meeting was not help in that month because of the AOC Conference and show.

Christmas Dinner

At our next two meetings we will be taking names down for the Christmas Dinner that is held at the Club rooms in December instead of the Regular meeting.

The price is yet to be finalized, but perhaps this will be known by the time of the meeting.

Australian Orchid Foundation Annual General Meeting

All are welcome to attend the AOC general meeting at:

Acacia Room
at the Austin/Repatriation Hospital
(Repatriation Campus)
Heidelberg (Melways 31 - G3 – G4)
(If parking in the grounds, enter from Waterdale Road.)
on
Sunday 25th October 2009
at 2.00pm

Immediately following the AGM there will be a Presentation

Fundamentals of Orchid Breeding by Ken Siew

Ken is from New South Wales and his areas of interest are orchid evolution, genetics/breeding and judging.

He will present both the fundamental and important concepts necessary for an enlightened approach to Orchid breeding.

AOC Conference news

It is indeed a pleasure for the Conference Committee can quite proudly report that the Conference & Show went off without any major problems, a testament to our 5 years hard work and planning.

The Conference brought together 170 registrants from local, interstate and overseas areas. The 12 lectures were marvelous being held in a wonderful Performing Arts Theatre. All presenters gave interesting talks on a wide range of topics.

The show venue was a very large exhibition centre that we thought would never be filled. How wrong could you be?

Thirty displays exhibited over 1300 plants and entries to their best advantage, one from NSW and two from W.A. A Floral Art display complemented the orchid exhibits and was a highlight.

The Australian Orchid Foundation and the Department of Sustainability and Environment also did displays.
We also had two static displays, one of a stamp collection put up by Graeme & Gaye Cheque from Tasmania and another of photos of Cypripediums. The Cypripedium display was put up by Dr Nile & Lois Dusdieker registrants from USA.

The Best in Show (or Grand Champion) was a Phal amabilis 'Ben Yu' owned by a Queensland grower Dr G. McKay.

The list of winners both Champion and classes, including photos of the Champions are on our web site www.mosorchid.org and also on the web site of the Australian Orchid Council.

There were 20 vendors, including 2 from overseas that brought to the public a wonderful array of products. All of this made a wonderful display for the 2000 visitors to enjoy.

The net financial outcome of the show is still to be determined all invoices have not yet been received, but if a smiling treasurer is anything to go by, a profit was made, to be shared amongst the Associate Clubs.

Bent innards give orchid its kick

A flower mechanism for smacking pollen onto bees opens up diverse possibilities for floral architecture

By Susan Milius

SNOWBIRD, Utah — Like so many people, *Catasetum* orchids get rough because they're bent out of shape.

Male flowers in this tropical genus don't wait for a visiting bee to load up on pollen by nuzzling against it, explains Daniel Fulop of Harvard University. When a bee lands, brushing a flower's long trigger hairs, a floral structure slams a pollen mass onto the bee's back.

After studying 16 species in the genus, Fulop and Harvard colleague Jacques Dumais have now figured out how the pollen smacker works. Its power comes from the sudden release of a bent strip of tissue attached to the pollen mass, Fulop reported July 27 at the Botany & Mycology 2009 meeting.

"It was just wonderful to see this mechanically complex problem dissected and explained," said meeting organizer Wendy Silk of the University of California at Davis. She notes that the work is appropriate for the 150th anniversary of Darwin's *On the Origins of Species*, in which he wrote briefly about *Catasetum* pollen delivery.

Based on Fulop's calculations, if the blow a bee receives from the floral structure were scaled up to human size, it would be equivalent to getting hit with a lump weighing 6 to 16 kilograms, the heft of one or two bowling balls, moving at up to 8 kilometers per hour.

Bees seem to grow wary after such a thumping and avoid similar blossoms, according to earlier research. In *Catasetum*, helmet-shaped greenish female flowers don't look like the flashy and wildly diverse male flowers, so the bees are still willing to deliver pollen to the female flowers.

Only a small percentage of orchid species fling their pollen, and the 150 or so species of *Catasetum* do so with particular finesse, Fulop reported.

A Catasetum flower attracts male bees with floral scents that the bees collect for mating displays. Near the male flower's pocket of volatile perfumes, along the middle axis of the bloom, lies a long, multipart structure holding two pollen balls. At one end of the structure lies a sticky foot and a broad strip of tissue, called the stipe, which curves over a bump in the middle of the flower and connects to the two balls and their long cap at the other end.

When a bee lands and follows the scents, it brushes a pair of long trigger hairs beside the pollen-holding structure. Fulop and Dumais found that the hairs react when displaced as little as 0.1 millimeters. And, with high-speed video, the team found that male flowers of *C. pileatum* need only 20 milliseconds to react before hammering the bee, which takes about another 25 milliseconds.

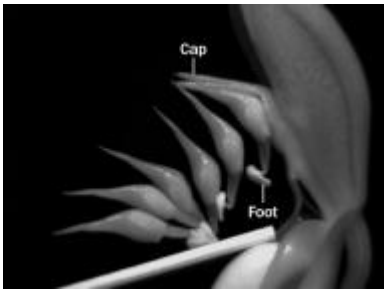
As soon as the hairs detect a touch, the pollen structure starts ripping loose from the flower at the end with the foot and the stipe, Fulop reported. The stipe abruptly unbends from the curved surface of the flower underneath. Pollen balls and stipe swing out and away from the plant.

Both would somersault beyond the bee, though, if it weren't for a refinement at the other end of the structure. The last part to break loose, the end with the cap, gets pushed back against a floral spur. The spur gives a bit at first and then springs back, batting the departing structure — pollen, stipe and all — toward the bee. The sticky foot on the structure fastens the pollen balls in place.

What puts the zing into the action is the stipe, according to Fulop and Dumais. When it finally tears loose from its bent position in the flower, it powers the pollen shot.

With the precise targeting ability of this pollen flinger, a flower does not need all the contours and other devices that some other orchids use to guide bees to rub against pollen. Fulop proposed that this method of pollen delivery could help explain how the genus has evolved such an extraordinary diversity of male flower shapes.

A Composite image shows male flower of the Catasetum tabulare orchid firing its elongated pollen-holding structure. The energy for the pollen shot comes from the sudden unbending of tissue at the bottom.



http://www.sciencenews.org/view/generic/id/46006/title/Bent_innards_give_orchid_its_kick