



2015 MARCH WORKSHOP

Held at Kyla Hall, Tuross Head on March 21 and 22

with speakers

Kevin Hipkins from Royale Orchids

Clive Hall from Mt. Beenak Orchids

Wally Rhodes from Camira Orchids



Clive

Wally

Kevin

Kevin Hipkins **Hybridising Cymbidiums.**

Kevin's long involvement with the orchid world has seen him embrace many roles, but it is his work as a hybridiser that he clearly enjoys. He describes himself as 'the master of the ugly' with his different and unique cymbidium crosses.

He does not believe that the pinnacle of cymbidium hybridising has been reached. Neither does he believe that big is best. 'Dinner plate' cymbidiums are not for him.

Kevin uses species heavily in his crossings. There is a 7 year turn around in each generation.....a long, slow process. He maintains there is never a bad cross in his line of hybridising as a species cymbidium is only one or two generations away, so disasters don't really occur.

His interest began with *Cymbidium tracyanum* and he created a new gene pool to increase the ploidy from diploid (20sets of chromosomes) to tetraploid with double the chromosomes. Triploids can be created, but these don't breed so are to be avoided.

Among the species used by Kevin are *Cymbidium erythraeum*, *iridioides* and *hookerianum*. Every species he uses adds its own distinct characteristics.

Erythraeum contributes free standing spikes, great flower lasting power and vigorous growth. *Cymbidium insigne* contributes shorter foliage, long spikes and early flowering habits. Other species are used for colour, flower life etc.

Kevin's current line of breeding has produced lovely whites, feminine pinks, wonderful terracotta shades, greens, reds and the magnificent practically black *Cymbidium* Hot Chocolate Royal 'Fudge' HCC/AOC awarded in 2013.

His imaginative approach to hybridising also stretches to his name choices with Deathwish, Euthanasia and Mary MacKillop amongst them. He has been frequently awarded for his species and hybrids and is continuing to produce lovely and intriguing new crosses.

Kevin gives credit to Andy Easton who assisted him in the early stages of his hybridising and still has an input into the Royale program.

Deflasking Seedlings. a practical demonstration.

This is the method Kevin uses for all genera except paphiopedilums.

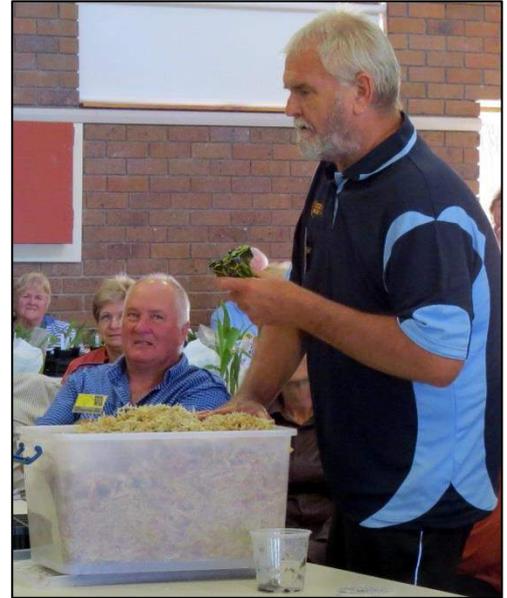
The flasks arriving from the lab. are first hardened off for some time.

The sphagnum moss he will be using is prepared.....picked clean of debris and kept just damp.

Cleanliness is of utmost importance.

Kevin uses A grade New Zealand sphagnum available in bales from Garden City Plastics.

1. Seedlings in the flask are checked to make sure their roots are green. They are then removed from the flask. They are not treated in any way.
2. They are washed clean, gently pulled apart and graded according to size. Kevin discards the weak and sickly as he is looking for sturdy, quick growing plants.
3. Each plant is cleaned around its base and excess rubbish is removed.
4. The larger plants are wrapped in sphagnum and pushed very firmly into individual compartments in disposable trays. Smaller plants might be bundled into twos and threes before planting. They are graded by size in the container.
5. Trays are placed under cover and kept warm.....no lower than 12 degrees.
6. They are watered normally and fertilised with inorganic fertilisers such as Peter's. Worm wee however is fine to use.



The amount of time these seedlings spend in the tray depends on the genera. Some might stay in the trays for only 6 months but other genera such as *Sophranitis coccinea* seedlings might need 12 months before being potted on.

Potting Mix.

Below is Kevin's current mix:

Coconut husk which has been washed 3 times to remove salts

Ash from a nearby coal burning station

Perlite

To this is added micro fine lime, dolomite and clay breaker.

All are mixed together.

As this is an inert mix, healthy microbes need to be created.

This can be done with 'goodies' from a hydroponic shop or worm wee.

To help initiate flowering, cool night temperatures are critical. Watering late in the day in summer can help.

CLIVE HALL.

The Modern Masdevallia:

Clive has been involved in growing and hybridising masdevallias for many years. He purchased his first plants in Toowoomba and had an association with Ray Thompson, an early masdevallia aficionado from Victoria.

He believes imagination is essential to be a good hybridiser and the selection of flowers is vital. Two good flowers put together will generally produce a good flower.

Clive is trying to make masdevallias easier to grow. They dislike neglect and hate hot dry conditions. He has a great selection of species to work with so can utilise their peculiarities and characteristics in his breeding program.

eg. *Masdevallias infracta, mendozae* and *datura* are warmth tolerant whilst *Masdevallias ignea* and *coccinea* prefer cool conditions.

M. veitchiana was used widely in early hybridising as it is a strong, vigorous grower.

Clive is breeding for large flowers and colour variations. He uses the alba form to achieve colour differences. He avoids muddy colours.

He considers *M. Copperwing* a great plant to use in crosses.

He works with intergenerics as in his *Dracula* crosses and will remake old favourites such as *Falcata* as he believes old crosses are not necessarily bad.

He has bred for stripes as in *M. Antizana* and *M. Harlequin*.

He says that primary hybrids tend to grow well. They have many seeds. Later generations have fewer seeds and so fewer seedlings.

All flasking is done on site. From making a cross to flowering can be as short as two years....much quicker than cymbidiums.



Clive says it is easy to grow masdevallias if you get it right. He defines his methods as simple.

This is what happens at Mt. Beenak Nursery.

There are two growing environments

.....the main glasshouse and the cold house (igloo)

The Main Glasshouse:

Covered with marix cloth for frosts

Scoria on the floor

Natural dam water used

Open benches

Cold House:

80% black shade cloth with white on top for summer

Misters and sprinklers in both houses.

Masdevallias need light to flower, so whilst the houses are heavily shaded in summer they receive bright light after Easter with shading removed.

They like morning sun.

The plants also need night temperatures to drop in late summer /early autumn to induce flowering, so plants are watered in the evening during summer.

Masdevallias need re-potting every year. They hate stale mix and respond well to fresh mix.

If a plant looks sickly, the roots are checked first of all.

Clive uses commercial Osmocote with high potassium levels as his fertiliser once a year at re-potting time.

He uses Companion Essential to increase microbial action.

He pots in Orchinata bark without treating it. Sometimes he mixes the bark with super coarse perlite to help with water absorption but can't see a lot of difference in the plants growth patterns.

He double pots all plants for insulation purposes.

On very hot days he sprays the leaves with water several times a day to lower their temperature. He endeavours not to wet the potting mix.

Potting:

Plants come out of the flask into strawberry punnets with either a peat and perlite mix or straight sphagnum.

They are next moved to a 50ml. tube and then onto a 65 ml. pot where they will flower.

Clive uses Orchinata bark classic (small).

He twists the plant into the pot at re-potting time, adds bark, a sprinkle of Osmocote and fills the pot with bark. The rhizome of the plant must be above the bark.

Then he waters the plant.

If a plant has few roots he creates a twist of wire to hold it in the pot.

Masdevallia Problems:

Clive uses Eco -fungicide or rose spray on the leaves, for fungal problems.

Black leaf tips indicate too much heat. This will be followed by leaf blackening and dropping.

Leaves are kept cool by watering them on hot days.

Masdevallias can suffer from Yellow Bean Virus. If all three of the following problems occur, isolate the plant to observe it further.....black spots under the leaves, curled leaves, white marks on the leaves. Plants suffering virus should be destroyed.

Presenting Masdevallias for Showing:

Whilst you should buy the flowers you like and not what you think the judges will like, here are a few tips for presenting your plant at its best if you wish to show.

Once a plant is not a species, it should conform to straight symmetrical flowers.

The flower should stand up and look at the judge.

The dorsal should be straight and the flower symmetrical.

Patterning should be even.

Crossed legs are O.K. as long as they don't reflex.

A miniature Masdevallia should be full of flowers. An intermediate plant should have several flowers. A single flower is acceptable on a large plant.

Staking of plants presents the flowers at their best. Florist wire, 18 gauge powdered coated green is unobtrusive .

Odd numbers of flowers look much better than even numbers.

Re-potting of Sarcophilus:

Clive re-pots in early spring or autumn.

He keeps plants in their 50ml tube until they are bulging out.

When ready to re-pot he waters the plant, snips off roots hanging out the bottom of the pot and removes broken roots and dead or mushy roots.

Clive prefers a deeper pot though he admits sarcs look great in shallow pots.

He twists the plant into the pot tucking in the aerial roots if they will fit.

He fills the pot 1/3 full of bark, adds a pinch of Osmocote and then fills the rest of the pot with bark, packing down the mix. He likes a solid surface to tap the pot to ensure the bark settles. (Clive uses a marble slab on top of stainless steel benches)

The plant is thoroughly watered.

During the year he uses a seaweed mix every 5 to 6 weeks and a general purpose food every now and then.

He uses a systemic insecticide called Crown for mealy bugs.

Clive's message.....

Sarcs grow best facing West.

Tips for re-potting Odontoglossum:

Bulb rot is a common problem. Remove the plant from the pot, wash it, cut out the offending bulb and treat with lime or sulphur. Then re-pot in sphagnum moss and keep fairly dry.

Do not over-pot plants. Do not pot when in flower or before new growth starts.

Don't let sickly plants flower and it is probably best not to allow flowering in mid-summer.

Red spider mite, mealy bug and scale really drag the plants down. Use Crown for mealy bugs and scale and Eco Oil for spider mite.

Flowers always appear on the side of the bulb with the longest leaf. If yours don't, chances are a bug has helped itself to the first flower spike.

Clive Halls – Oncidinae Hybrids

During a slideshow of magnificent Oncidinae Alliance plants, Clive touched on the complexities, and confusion, of describing this group of hybrids given the various changes in nomenclature since the introduction of DNA testing.

Clive's breeding program aims to achieve advances in flower shape and intensity of colour, on a strong growing plant.

His Nursery near Healsville sits in a heavily treed valley, 200m above sea level, adjacent to MtBeenak, 800m. As neighbours' trees have grown, Clive no longer grows Cymms and Catts. He is concentrating on Masdevallia, Odonts and Oncids as well as having a flirtation with further development of some of Neville Roper's Sarco. progeny. He grows under polycarbonate, lined with bubble wrap and shade cloth in Summer. Sides can be opened to create good airflow.

WALLY RHODES

Paphiopedilum.

One of Wally's passions is growing Paphs. (The other is fishing.) He has been successfully growing these rather touchy plants since the late 1960s. He admits they are hard to grow unless the rules are carefully followed.

Paphs. used to be very expensive and good plants still hold their value overseas.

New Chinese Paphs. are easier to grow.

Paph. malipoense is being used to put size and perfume into flowers whilst the *maudiae* types sell well and are used as cut flowers overseas.

Australian growers are well recognised overseas.

Multifloral varieties are popular in Taiwan and are being bred to flower more quickly.

How Wally grows his Paphs.

Plants are grown in a heated glasshouse with a minimum temperature of 12 degrees.

Wire benches are on rollers and plants are in trays.

The roof is lined with heavy duty plastic and the sides are open in summer and closed in winter.

An aluminium ceiling is pulled over at night.

The most important feature of Wally's glasshouse is an automatic fogging system which produces 48 to 52% humidity. It runs on town water and aims to imitate what happens in nature on the mountains in Taiwan. This is an automated system which allows Wally to leave his plants for several weeks at a time.

Deflasked seedlings are soaked in Envy and kept in 2 hot boxes at 25 degrees with Marix cloth over them.

Potting:

Wally pots in Orchiata bark and mainly uses 9 to 12 mm. He finds the smaller grade a little flaky and hard to use. It also lays flat which isn't good.

To the bark he adds.....

10% charcoal in the same size as the bark

5% perlite as close to the above size as possible

5% chunky polystyrene

The last 3 additives help to keep the mix springy.

He re-pots in Spring before the October long weekend or if necessary in Autumn.

He does not over-pot his plants and would expect to get 3 to 4 growths into a square 1 1/2 inch pot. His advice is to pot to suit the root ball. He trims dead roots, nothing else.

The root ball is twisted into the pot. The plant should be able to hold the pot even before the mix has been added. Then the mix is added.

Plants are then flushed with water until clear and not watered for 10 days, just misted.

Same sized pots are kept together. Wally uses a test pot as an indicator of plant progress.

He re-pots every year.

Watering:

Wally uses tank water. Paphs can be over watered. Control of both moisture and air movement is vital.

The ph level should not get below 5.5.

A colleague of Wally's believes Paphs. should not ever be flushed with pure water.a stock solution should be used.

Fertiliser:

Wally uses Peters 20/20/20 at 1 gram per litre.

He fertilises at every second watering.

Wally uses a truncheon to check fertiliser levels....should be 300 parts per million of full strength fertiliser.

Planting:

When de- flasking, if Wally gets between 12-15 plants from a flask of 20 he considers that's a reasonable success rate.

When de-flasking to small pots he always plants to the side of the pot. He uses square pots as they pack into a tray well.

Plants are grown East to West . New growth points to the North and new flower spikes should face North.

Flowering:

Whilst yoyos can be used with care, the following technique should ensure well presented flowers. When the flower bud is fat, tilt the pot on a 30 degree angle. This causes the flower to lift its head. When almost out, tilt in the opposite direction on a 30 degree angle until fully out. Then return the plant to an upright position. Once flowering the plants need an even temperature.

Pests and Diseases:

Mealy bug will lodge in the sheath at the back of the flower. Treat with Confidor or Lebaycid.

Fungus will occur with high humidity. Green Paphs. are particularly susceptible. From November to March spray fortnightly with a fungicide.....Mancozeb, Captan or Proplant.

Wally uses a systemic fungicide, Ridomil, which he only has to use twice a year.

WALLY RHODES

Phalaenopsis of Taiwan:

As an orchid judge of many years and with an interest in several nurseries in Taiwan, Wally has been able to participate in a number of orchid shows in this country and visit the nurseries which produce these amazing orchids.

Below are his first hand observations of Phalaenopsis Production in Taiwan.

Phalaenopsis production for the overseas markets is big business in Taiwan.

In 2010 it was an \$82,553,700 business and by 2013 it had grown by another 18%.

The state of the art orchid houses are enormous, spotless, computerised and scientifically run.

The human factor is evident at re-potting time when rows of contract workers pot up the plants.

Rows and rows of identical plants receive water and fertiliser calculated by computers.

Root growth is constantly being monitored.

Plants are purpose grown to suit particular export markets.eg. for smaller leaf span, for flower numbers etc.

One nursery is experimenting with plastic sleeves to create space by lifting the leaves. These also help to eliminate collar rot.

These enormous nurseries are owned by wealthy Taiwanese who often have nurseries in the U.S. and other countries.



The Orchid Shows in Taiwan are amazing with imaginative and startling displays and plants we can only dream about. Flowers line up with no over lapping and are wired to sit perfectly. Thousands of people flock to see the displays and on day 1 of the most recent orchid show at which Wally judged, 56,000 people poured through the doors.

On display was the wonderful Sogo Yukidian 'V3', a huge white flower and the most famous phalaenopsis in the world which can produce up to 33 flowers per spike and can produce up to 3 spikes.....truly a sight to behold. It is famous also for the length of time it holds its flowers.

Perhaps it is just as well we can't produce these magnificent flowers. How on earth would we transport them to shows or fit them on the show bench?



Notes taken by EOC Member Sue Carroll.