



monthly bulletin vol. 44 no. 5

may 08

President : Murray Aldridge
Secretary : Louise Gannon 02 9524 9072
Treasurer : George Birss 02 9520 3946

Correspondence to : The Secretary, 36 Raglan Road, Miranda, NSW 2228.

Meetings held at the Uniting Church Hall, cnr. Flora and Merton St., Sutherland on the Second Monday of the Month. All Visitors Welcomed. Visit our Website on www.ssos.org.au

Editor : Kevin Wilson Email : pkwilson@wix.com.au

Minutes from the April 08 Meeting.

Prior to the Monthly Meeting, the President, Mr. Murray Aldridge took the Beginners Class at 7:30 p.m. speaking on judging, both at the Monthly Meeting and Show levels. At the conclusion, he declared the April 2008 General Meeting open, calling for a motion that the minutes as printed in the Bulletin were a true record of that meeting, Motion moved by John Costa.

Correspondence.

Earth to Joy. Catalogue.
Aranbeen Orchids Listing & 2008 Open Day
May 17th. 18th. Deception Bay.
Societies Bulletins.
Orchids Australia.
Australian Orchid Review.

Murray, then reminded members of the Forthcoming Bus trip to "Orchids out West" 2nd. - 4th. May, and that 4 seats are still available. Check with Jan Robinson (ph. 9520 6920) for details.

Murray extended the members thanks to June Hyde and Tony Costa, for doing the Supper Duties in Madges absence. He also thanked Dennis Wood as our Host for the evening, and that Paul Wheeler will be the Host for the May Meeting.

The May meeting will be our Auction night as previously announced, and there is a short listing of some of the plants to be available, besides what extra plants presented by members are brought along on the night. Just bring along your spare plants that you wish to sell. The usual 15% commission on sales applies, and we would request that you have two tags in each pot, one

with the plants name, (and colour if known to help the auctioneer) the other with your name and if required, the Reserve price. The Reserve must be at least \$15.00 or more. All plants to be healthy, and established, with a limit of FIVE plants per member. Donations would gratefully be accepted.

Quite a few members are not signing the attendance book, a requirement by our Insurance Cover. Please ensure you do, it can be found in the Entry Foyer.

Murray then asked for all judges to be available to meet with him at the next meeting. He also asked, if any person was willing to help by becoming a member of our committee, they would be most welcome. If you can see Murray or Louise.

If you ordered a copy of " The Wonderful World of Sarcophilus Orchids" or "The A.O.F.Common Cultural Problems and their Solutions" your copy Is with the Secretary to be picked up.

Lucky plants. G.Hart. J. Hart. G. Birss.

Plant Raffle. K.Wilson. J. Hart. J. Robinson (2).
B. Warren. B. Pethybridge. G. Macnamara.
R. McNicol.

After supper was taken Murray, with the help of the owner and growers, gave us another of his knowledgeable "Plant Descriptions" which is always an interesting part of a meeting.

Thank you Murray for that and also the Beginners Class.

Dates to Remember.

2nd. – 4th. May. Bus Trip. Orchids Out West.

12th. May. SSOS. Monthly Meeting. Point Score & Auction

18th. June SSOS Set-up & Show, Judging.

19th. – 22nd. June SSOS Show (TAKE NOTE THAT THE CLOSING TIME ON SUNDAY WILL BE 1HR.LATER, MAKING IT A 4 p.m. FINISH)

21st. – 22nd. June Royale Orchid Fair, 1360 Breises Rd. Peats Ridge.

15th. – 17th. August. St. Ives Orchid Fair, St. Ives Showground.

Judges Roster for May 08.

	TEAM 1	TEAM 2	TEAM 3
LEAD JUDGE	G HART	I CHALMER	W CHAPMAN
JUDGE	D BROOKS	K WILSON	E BEEHAG
JUDGE	S T HO	J HART	I WARE
ASSOC.	J MOSS		
WRITER	M HITCHCOCK	J ROBINSON	S CROSBY

Editors Corner.

For Sale

Do you require a glasshouse, bush house, benches, galvanized pipe in various lengths or gauges, (¾" up to 2") glass or galv. Mesh, then we may be able to help. Past President, Bert Cardwell wants to dispose of all this material and houses, they would have to be taken down and removed by the receiver. The glasshouse and bush house have stone guards. The costs to be negotiable. For further information, phone number, please contact Kevin Wilson.. 9523 4336

Just a few terms you might find handy.

Lead – An immature vegetative growth on a sympodial orchid that will develop into a flower-producing structure.

Lip – A modified petal of the orchid flower, specialized to aid in pollination and different from the other petals.

Node – A joint on a stem or pseudo bulb from which a leaf or growth originates

Offset – A vegetative division or lateral shoot. Synonym. Keiki.

EVER WONDERED.....

Ever wondered why people clink their glasses before drinking a toast? Well, it used to be common for someone to try to kill an enemy by offering him a poisoned drink - so to prove to a guest that a drink was safe, it became customary for a guest to pour some of his drink into the glass of the host, then both would drink at the same time. When a guest trusted his host, he would then just touch or clink the host's glass with his own.

Invented in 1825, "limelight" was produced for lighthouses and stage lighting by burning a cylinder of lime, which produced a brilliant light. In the theatre, performers on stage "in the limelight" were seen by the audience to be the centre of attention. So now people in the public eye are said to be "in the limelight".

The call "mayday" that ships and aircraft in trouble use as their call for help comes from the French word "m'aidez" - meaning "help me" - and pronounced, and now spelled in English - "mayday".

Someone who is feeling great is said to be "on cloud nine" because they are feeling really 'high'. Types of clouds are numbered according to the altitudes they attain, with nine being the highest cloud. So if someone is said to be on cloud nine, that person is floating well above worldly cares.

You may wonder why zero in tennis are called 'love'. This is because in France - where tennis first became popular, a big zero on a scoreboard looked like an egg and so was called 'loeu' - French for 'egg'. When tennis was introduced in the USA, Americans pronounced it "love".

MONTHLY JUDGING RESULTS

For : Apr-08

OPEN JUDGES CHOICE**Winner Drac. Sux** G. Hart**INTERMEDIATE JUDGES CHOICE****Winner C. Portia 'Nel'** S. Vavayis**NOVICE & JUNIOR JUDGES CHOICE****Winner Neofinetia falcata** D. Coulton**CLASS # 1 AUSTRALIAN NATIVES**

- 1st Den. bigibbum var. bigibbum K. Wilson
 2nd Acianthus exsertus J.W. Moss
 3rd Den. bigibbum var. compactum K. Wilson
 4th Den. bigibbum var. compactum Costa / Crosby

CLASS # 2 SPECIES PAPHIOPEDILUM

- 1st Paph. victoria-regina G. Hart
 2nd Paph. spicerianum G. Hart
 3rd Paph. primulinum G. Hart
 4th Paph. primulinum G. Hart
 5th Paph. kairittii G. Hart

CLASS # 3 CATTLEYA OVER 110mm

- 1st Blc. Mount Sylvan 'Susan' A. Husted
 2nd Blc. Goldenzelle 'Tokyo' J. Hart
 3rd Blc. Mem. Crispin Rosales 'Carmela' J. Hart
 4th Blc. Burdekin Delight 'Dreamtime' T&J Hyde

CLASS # 4 NOVELTY PAPHIOPEDILUM

- 1st Paph. Jacqueline Hopkins S T Ho
 2nd Paph. Greyi x micranthum G. Hart
 3rd Paph. Dragon Ruby x Fremont Peak S T Ho
 4th Paph. (Supersuk x Singapore) x California Raisin S T Ho

CLASS # 5 CATTLEYA OVER 80 TO 110mm

- 1st Slc. Erin Kobayashi 'Lahania gold' J. Hart
 2nd C. Portia Cannizara 'Bexley' J. Hart
 3rd Slc. Erin Kobayashi 'Lahania gold' T&J Hyde
 4th C. Portia Cannizara Costa / Crosby

CLASS # 6 PAPHIOPEDILUM

- 1st Paph. Whitemoor Norriton Costa / Crosby
 2nd Paph. Rosy Dawn J.W. Moss

CLASS # 8 CATTLEYA UP TO 80mm

- 1st Ctna. Capri 'Lea' J. Hart
 2nd Ctna. Capri 'Lea' J. Hart
 3rd Ctna. Brandi J. Hart

CLASS # 9 AUSTRALIAN NATIVE HYBRID

- 1st Pter. Sentinel J. Hart
 2nd Den. Brinawa Costa / Crosby
 3rd Den. Mekong '#1' P. Wheeler

CLASS # 10 SPECIES ASIAN

- 1st Bulbo. rothschildianum N. Roper
 2nd Den. cuthbertsonii S T Ho
 3rd Stenoglottis longifolia R. Moar
 4th Dendrochilum magnum D. Wood
 5th Dendrochilum cobbianum G. Hart

CLASS # 12 SEEDLING

- 1st Paph. Harold Koopowitz G. Hart
 2nd Paph. Fuerte Gold S T Ho
 3rd Paph. Bengal Lancers Costa / Crosby
 4th Paph. Red Magic x Paph. fairrianum G. Hart

CLASS # 13 ONCIDIUM

- 1st Onc. Sharry Baby 'Perfumed Princess' Costa / Crosby
 2nd Onc. (Yurla x Crispum) x Yurla S T Ho
 3rd Onc. Alolita Ewanaga Costa / Crosby

CLASS # 14 NOVELTY PHALAENOPSIS UNDER 75mm

- 1st Phal. Little Slipper 'Cathie' T&J Hyde
 2nd Phal. Fortune Budha x Brother Super Stupid T. Thorburn
 3rd Dtps. Leopard Prince x Phal Leopard Prince Costa / Crosby

CLASS # 15 ONCIDIUM INTERGENERIC ALLIANCE

- 1st Colm. Wildcat 'Carnival' Costa / Crosby
 2nd Howeara Lava Burst 'Puanani' N. Roper
 3rd Colm. Wildcat 'Doris' G. Hart
 4th Bealleara Marfitch 'Howards Dream' L. Gannon

CLASS # 16 MISCELLANEOUS

- 1st Phrag. longifolium x pearcei J.W. Moss
 2nd Zygoneria Adelaide Meadows N. Roper
 3rd Bulbo. dearei x Wilmon Galaxy Star D. Wood
 4th Miltassia Dennis Kleinback Crowhurst Costa / Crosby
 5th Zygo. Advance Australia R. Moar

CLASS # 17 DENDROBIUM HYBRIDS

- 1st Den. Fantasy Land x Dal's Surprise Costa / Crosby
 2nd Den. Chao Praya Fragrance Costa / Crosby
 3rd Den. Sedgefield x Tophert 'Wilko's Best' J. Costa
 4th Den. 'Tophat' x Sedgefield J. Costa

CLASS # 18 VANDACEOUS NOT VANDA

- 1st Sartylis Jannine Banks 'Tinnonee' Costa / Crosby
 2nd Ritctm. Ladden Gold Costa / Crosby
 3rd Sartylis Blue Knob T. Thorburn

CLASS # 19 MASDEVALLIA & DRACULA SPECIES

- 1st Drac. amelia G. Hart
 2nd Drac. ripeyana G. Hart
 3rd Drac. cordobae G. Hart
 4th Drac. vesteipililo G. Hart

CLASS # 21A PLEUROTHALLIDINAE HYBRIDS

- 1st Drac. Sux G. Hart
 2nd Drac. Swampfox G. Hart
 3rd Masd. Marguerite 'Firewalker' J. Hart
 4th Drac. Lirtgie x gongora G. Hart

CLASS # 21B LAELINAE SPECIES

- 1st Epi. imatophyllum var. album G. Hart
 2nd Cat. bowringiana T. Thorburn

CLASS # 22 MINITURE CYMBIDIUM UNDER 60mm

- 1st Cym. Zig Zag 'Kiwi' E&A Marks

CLASS # 23 SPECIES OTHER THAN ASIAN OR PAPHIOPEDILUM

- 1st Rossioglossum grande Costa / Crosby
 2nd Ornithora radicans P. Wheeler
 3rd Lemboglossum bictoniense D. Wood
 4th Milt. clowesii T. Thorburn

CLASS # 23A OTHER PLEUROTHALLIDINAE SPECIES

- 1st Rest. cuprea N. Roper
 2nd Rest. homsleyana N. Roper
 3rd Rest. antinifera N. Roper
 4th Pleuro sp 1 G. Hart
 5th Pleuro recurva G. Hart

CLASS # 24A NATIVE SARCANTHINAE HYBRID

- 1st Sarc. Jill N. Roper
 2nd Sarc. Jill S T Ho
 3rd Sarc. Misty x hartmannii D. Wood
 4th Sarc. Red Imp S T Ho

CLASS # 27 - NOVICE - NATIVE & NATIVE HYBRID

- 1st Sarc. Starstruck x hartmannii D. Coulton
 2nd Liparis reflexa J. Robinson
 3rd Liparis reflexa D. Coulton

CLASS # 28 NOVICE - CATTLEYA

- 1st Catt. unknown G. Dodd
 2nd Catt. Henrietta x Choc Drop x Waikiki M. Luk
 3rd Catt. unknown B. Warren
 4th Catt. unknown B. Warren

CLASS # 29 NOVICE - MISCELLANEOUS

- 1st Zygo. Blue Eyes D. Coulton
 2nd Missa. Citron M. Hitchcock
 3rd Zygo. unknown G. Dodd
 4th Zygo. unknown J. Robinson

CLASS # 30 NOVICE - SPECIES

- 1st Neofinetia falcata D. Coulton
 2nd Epi. porpax M. Hitchcock
 3rd Pleuro stricta D. Coulton
 4th Dendro. cobbianum D. Coulton

CLASS # 34 INTERMEDIATE - CATTLEYA

- 1st C. Portia 'Nel' S. Vavayis
 2nd Blc. California Girl S. Vavayis
 3rd Blc. Dream Trader S. Vavayis
 4th C. unknown S. Vavayis

CLASS # 35 INTERMEDIATE - MISCELLANEOUS

- 1st Missa. Charles M. Fitch G. Birss
 2nd Masd. Marguerite G. Birss
 3rd Milt. Bluntii x Candida D&M Hannah

CLASS # 36 INTERMEDIATE - SPECIES

- 1st Cat. bowringiana G. Birss
 2nd Coel. ovalis G. Birss
 3rd Cym. erythrostylum G. Birss

SUTHERLAND SHIRE ORCHID SOCIETY INC.**2008 AUCTION LIST**

<u>NAME OF PLANT</u>	<u>RESERVE \$</u>	<u>DESCRIPTION OF PLANT</u>
C. shroederiae X c. forbesii		Mauve petals, yellow lip with red stripes. Feb. - April. Cold growing
Z. Artur Elle 'Asane' X		
Z. Blackii 'No, 5'		Cold growing
Onc. Sang Chan.		Yellow flowers. Cold growing
Ptst. nutans		Green flowers. April - Oct. cold growing
Neo. porpax	\$15	Winter - Spring flowering. Bush house
Laelia gouldiana		Red. Autumn flowering. Bush house
Odm. hallii		Brown and yellow Winter flowers bush house
Lyc. deppei		Spotted. yellow lip, summer flowers
Angust. Apollo		Yellow, Summer flowers, bush house
Paph, Envy Green	\$20	Green Yellow, parvi type pouch
Blc. Sylvia Fry 'Supreme'	\$15	Exhibition mauve. Piece of Grand Champion Sutherland Show
Phrag. longiflorum	\$15	Green/brown with red twisted petals
Blc. Burdenkin Wonder 'Belinda'		Exhibition, dark purple
Paph exul	\$15	Species, green white, similar to insigne
Stanhopea grandiflora		White flower
Paph. stonei x malipoense	\$25	Large tan flower with brown striping. Three flowers to stem. Cool growing
Paph. rothschildianum x Supersuk	\$20	Large yellow/red/tan flowers Three flowers to stem. Cool glasshouse
Sarc. hartmannii	\$20	Large multigrowth plant. Ex Deans at Dural. Good quality white flower
Paph. Drayton Pepper x delenatii	\$15	Raspberry pink & white flower on a tall stem
Paph. Doctor Toot	\$20	.Paph delenatii x kolopakingii 3 to 4 large pink/white flowers of good shape
Onc. Sharry Baby 'Sweet Harmony'		
Coel. cristata	\$30	
Den. Annes Rainbow Surprise 'Karen'		
Coel. flaccida		
Coel. Unchained Melody		
Cymb. Sarah Jean 'Ice cascade'	\$25	White, pendulous, cool growing flowers Aug-Oct. in spike
Cymb. Sarah Jean 'Ice Cascade'	\$20	As Above
Cymb. Tuffet X		
Minneken 'Beni Bouton'	\$20	Cool growing, in spike
Maxillaria porphyrostele		Yellow, cool growing
Milttassia Charles M. Fitch		Mauve flowers, cool growing flowers April
Blc. Chunyeah 'Good Life No.1' X Blc. Tainan Gold 'Golden Swallow'		Large yellow with red lip seedling in 100mm pot

Blc. Chinese Beauty 'Orchid Queen' AM/OSROS Pot. Little Toshie 'Yellow Rose' AM/OSROC	Purple, white splashes with purple lip, yellow throat, cold growing. seedling in 100mm. pot
Blc. California Girl X C. loddegesii 'Streeters Choice'	Yellow flower with bright red lip cold growing. seedling in 100mm pot
Epc. Rene Marques 'Flame Thrower'	Large white with pink & yellow blush cross with open cat. species, cold growing. seedling in 100mm. pot
Dendrobium densiflorum	Light green petals, large yellow lip with touches of red
	Cold growing seedling in 100mm pot
Dendrobium virginalis	egg yellow flowers, Oct-Nov. flowering cold to Intermediate
	Species. pure white flowers, soft cane, shortish spike

There will be more plants on Auction Night which has not been listed.

Please Note : Reserve Price Starts at \$15.00

COCO HUSK as a POTTING MEDIUM by Brian Milligan

Coco husk, the chopped, dry outer coating of the coconut, has become a popular potting medium over the last year or two. The majority of commercial growers in Europe have also changed to coco husk, and many cymbidium growers in Australia are also claiming great success with its use. However, growers of other genera have had mixed success here - a well known Victorian paphiopedilum grower found that his slipper orchids did not grow as well in coco husk as in pine bark, while others have been unhappy with the performance of their phragmipediums in coco husk. This article relates some of my experiences with coco husk as a potting medium for a range of orchids.

Coco husk is marketed in compressed blocks of dried material. Before use it must be soaked in water, which causes the coco husk to swell enormously in volume. Considerable quantities of salt are released in the process, sufficient to kill many orchids if not removed. I soak the coco husk in water overnight, then decant the slurry through a sieve, and repeat the process twice more (soaking overnight each time), after which the water contains a negligible quantity of salts. A cymbidium grower has told me that this is over-kill, and that I am removing some useful potassium salts in the process but I believe that it's better to remove all (or most) of the salts present. and then to replace any 'good' salts by application of liquid fertilisers.

I have found that the quality of coco husk varies from batch to batch. Most coco husk floats when it is soaked to remove salts, and I prefer to use this material. Some batches contain a considerable amount of material that sinks, and I discard this., as it retains too much water when used as a potting mix. Initially I blended the coco husk with 20% (by volume) of perlite, in line with an early recommendation. However, I found that it gave no better results than coco husk alone, and eventually gave up adding perlite, as it roughly doubled the cost of the potting mix.

A major advantage of coco husk is that it is much easier on the hands than pine bark at repotting time, and much more easily removed from the roots than bark. Also, it does not deteriorate as rapidly as bark does, and therefore re-potting should not need to be carried out so frequently. Certainly, in the 18 months that I have been using coco husk as a potting medium, no appreciable deterioration appears to have taken place.

A possible disadvantage of coco husk is that it retains water much longer than does pine bark. In terms of water conservation this may be a good thing but only if plants grown in coco husk are kept separate from those grown in bark, and watered separately. Those growers who use sphagnum moss as a potting medium will already have encountered a similar problem. Probably coco husk falls between bark and moss in its ability to retain water. A useful tip for those who are unsure when their orchids need water is to keep several

'control' pots containing only coco husk (or bark, or moss) in their collection, and to water them at the same time as the orchids. Simply upend these pots to determine whether the material near the bottom of the pot is wet or dry, and therefore, whether your orchids need to be watered again or not.

After 18 months using coco husk/perlite mix (4:1 by volume) and coco husk alone as potting media, I am pleased with the results in some cases, less so in others. Best results have been obtained with cymbidiums and lycastes. All of the cymbidiums that I checked had good, healthy roots, including those back-bulbs that I removed during re-potting in November 2005. The presence of perlite in the mix seemed to make no difference to the orchids' growth. Those lycaste hybrids that I had potted in coco husk/perlite mix did as well or better than those potted in bark. A pair of *Lycaste Shoalhaven* back-bulbs, potted in coco husk had leaves 200 mm tall and a well developed root system within five months — remarkable results for such a short time. On the other hand, one pair of *Lycaste Macama* back-bulbs potted at the same time failed to strike, while the new growth from a second pair was only 20 mm. tall. However, that's about par for the course — in my experience a 50% strike rate is as well as can be expected for lycastes, provided that one uses pairs of pseudobulbs, - it's much lower if one uses single bulbs.

My greatest success has been achieved with the Madagascan species *Angraecum magdalenae*, which has struggled ever since I acquired it six years ago. Since potting it in coco husk/perlite a year ago it has developed two new basal growths, while the main plant has flowered for the first time, and the pot is now filled with new healthy roots. I suspect that I have not provided it with sufficient water in previous times. Several coelogyne species have also done well when potted in coco husk, especially those that spent the winter in my heated glasshouse. The New Guinea native *Dendrobium lawesii* is also doing well in the new mix, while others have obtained similar results with *Dendrobium victoriae-reginae* potted in coco husk.

Results with *masdevallias* were mixed. *Masdevallia Parlatoriana*, which is a vigorous grower, thrived and flowered prolifically but other, less vigorous, *masdevallias* seemed to struggle in coco husk/perlite, and one or two died. There seems to me to be no advantage in transferring the rest of my *masdevallias* from my traditional bark/sphagnum moss or moss/polystyrene foam potting mixes. Australian native *dendrobiums* have grown reasonably well in coco husk but the mix remained wet for too long after watering during winter. The same applies to soft-cane *dendrobiums* — their keikis have grown well but need to be watered very sparingly during winter.

Please bear in mind that the above results apply to orchids grown for only 12-18 months in the new mix. Whether those orchids that are growing well continue to do so in future remains to be seen. After all, most potting mixes give good results for the first few months before beginning to deteriorate, sometimes becoming acidic with deleterious effects to many orchids. My recommendation is to try a few orchids in the new mix for a year or two first, and not to embark on a major re-potting program until you are happy with the results.

GROWING LYCASTES by Julian Coker

The genus *Lycaste*, named after the beautiful daughter of King Priam and Queen Hecuba of Troy, contains about fifty species that are found from Mexico to Peru. They are both epiphytic and lithophytic and grow under cool intermediate to cool glasshouse conditions, depending on the particular species. *Lycastes* range from being fully deciduous each year to retaining their leaves for 18-20 months, and require a rest period during the winter prior to flowering and recommencement of their growth cycle in spring.

Lycaste plants are characterised by large pseudo-bulbs that support two to four large ribbed leaves. Flowers arise singly from the base of the pseudo-bulb and are long lasting, 4-8 weeks being common. There is occasionally an autumn flowering from the old pseudo-bulb but the main flowering occurs in the spring. Generally one flower of excellent quality develops first from the base of the newest pseudo-bulb and this is followed by the spring flush. From 3-10 flowers per pseudo-bulb are usual, especially for hybrids bred from *Lycaste skinneri* but 30+ flowers over a period are possible from the deciduous species and their hybrids.

Lycastes respond well to good culture, which is essential for best results. They are best grown in a cool intermediate glasshouse at a minimum temperature of 3-5°C, although cymbidium conditions in a fully enclosed glasshouse during winter are quite satisfactory. Adequate sunlight, water and feeding during the growing season, coupled with moderate humidity and constant air circulation, will allow for the development of the large pseudo-bulbs necessary for top flower production.

During winter maintain a relatively high light intensity but decrease the frequency of watering and fertilising. Appropriate watering throughout the year is essential. Copious amounts are required during the growing season together with the application of a balanced fertiliser. At maturation of the pseudo-bulbs (when the small sheathing bracts turn brown and fall off) decrease the frequency of watering considerably for those species that retain their leaves and be even more severe with the deciduous ones until the flowers or new growths appear. Pseudo-bulbs should be allowed to reach the stage of minimal (not excessive) wrinkling to create stress and thus initiate flower production. Seedlings should be kept moist at all times. Water directly into the pot, rather than over the leaves, and avoid getting water into the new growths. Lycastes are especially sensitive to chlorine, so avoid using chlorinated tap water.

Lycastes are best grown in well-drained, black plastic pots. The compost must be free draining yet be able to retain adequate moisture and nutrients to supply the plant. High-quality cymbidium compost is ideal. Re-potting is done in spring, after the plant has flowered and when the new growths have become established. Re-pot before the plant outgrows its container, leaving two or three pseudo-bulbs and the new growth on the leading part of the plant. Lycaste skinneri and hybrids in which this species is dominant are best grown in pots. Back-bulb propagations may be attempted but leave at least two pseudo-bulbs attached to each other. If the plant loses its roots or shows signs of dehydration, transfer it to Sphagnum moss to re-establish a root system before returning it to the growing compost.

Lycastes are subject to the same pests and diseases that trouble other orchid genera. Virus disease, rots and the cosmopolitan pests may all cause trouble and their rapid diagnosis and effective treatment, together with an environment that limits their occurrence, is essential. Of special concern are rots, e.g. Erwinia, that affect the pseudo-bulbs, and scale which can heavily infest the whole plant. Ants often draw attention to the presence of scale.

Lycaste Species.

Lycaste aromatica, found from Mexico to Guatemala, is both epiphytic and lithophytic. It is deciduous and very floriferous, bearing up to 18 flowers per pseudo-bulb. These appear in spring immediately prior to the appearance of the new growth. The flowers are fragrant, the sepals and petals are green-yellow and the labellum and column bright orange-yellow. For optimal growth it requires cool intermediate conditions.

Lycaste cruenta is the most common lycaste in Guatemala. It is epiphytic, deciduous and produces 3-5 flowers from the base of the new pseudo-bulbs in spring. The sepals are green-yellow, the petals bright yellow-orange and the labellum and column are orange. The inner parts of the segments are spotted red and the base of the labellum sports a bright red splash.

Lycaste deppei is found from Mexico to Guatemala and is both epiphytic and lithophytic. It is common in cultivation. Flowering later than the other species. Often during summer. Three to five flowers appear in succession from the base of the pseudo-bulb, prior to the development of the new growth. The flowers have olive-green sepals overlaid with red, white petals, a yellow labellum and a white column. It grows easily in a cool glasshouse.

Lycaste lasioglossa is a terrestrial species from Guatemala. It produces up to seven flowers from the base of the pseudo-bulbs in spring. The large flowers have red-brown sepals, yellow petals and a furry yellow labellum. Red spotting occurs on the inner parts of the segments. Cool glasshouse conditions are suitable.

Lycaste locusta grows in Peru at the southern end of the Lycaste range. Two to three striking green flowers are produced from each pseudo-bulb in spring. It may be grown in a cool glasshouse but is seldom available.

Lycaste macrophylla is one of the most diverse of the species. Its range extends from Bolivia to Nicaragua, where it grows both as an epiphyte and a lithophyte. The flowers generally have brown to green-brown sepals, white petals and a white labellum. The petals and labellum may have red markings on their inner parts. It usually flowers in the spring and grows best in cool intermediate conditions.

Lycaste skinneri is the queen of the lycaste species and is correctly named due to the priority rules of nomenclature. *Lycaste virginalis* is synonymous but is not the preferred name. Epiphytic in nature, it ranges from Mexico to Guatemala and Honduras, it is the national flower of Guatemala. The flowers are large and attractive, the sepals varying from white through pink to deep rose and the petals from white to reddish violet. Three to five flowers are produced from the base of the pseudo-bulb in spring. They last 4-6 weeks in good condition. This species is best grown in a cool intermediate or cool glasshouse.

Lycaste hybrids. *Lycaste skinneri* has been by far the most important species used in hybridising, especially for show-bench breeding. There is an 80% content of this species in the two well-known Australian hybrids, *Lycaste Koolena* (hybridised by Leo Giles) and *Lycaste Macama* (hybridised by Fred Alcorn). The other two species important in show-bench breeding are *L. cruenta* and *L. macrophylla*. Other species, namely *L. deppei*, *L. aromatica*, *L. locusta* and *L. lasioglossa*, have also been used to widen the colour range, to increase the flower count and to extend the flowering time. Famous parents include *L. Imschootiana*, *L. Balliae*, *L. Sunrise*, *L. Auburn* and *L. Koolena*. *L. Macama* is currently the most highly developed show-bench grex.

PERLITE and PEAT POTTING MIX for ORCHIDS by Bruce Bennett

Perlite and Peat is an alternative potting mix to use when things go wrong with your orchids. It's easy to use, it's cheaper and more readily available than good quality bark, its components are not broken down by bacteria (which robs plants of nitrogen), it's easily removed without damaging roots during re-potting and it's suitable for use with a low nitrogen fertiliser.

Chillagoe Queensland perlite is sold in 100 litre bags and is available in a number of grades. 'Super Coarse' is suitable for most plants, while 'Jumbo' is better for plants with large roots. Tip the perlite into water and screen off to remove dust. Perlite is neutral (pH 7) and sterile. Canadian Peat is sold in 275 litre bales, rather large for an individual but two or more growers could share a bale. When sieving perlite and breaking up peat, use a facemask to avoid breathing the dust. For general use, mix 8 parts perlite to 1 part screened peat, adding 5 g of lime per litre of peat to give a pH of about 6.5 (a more water-retentive mix comprising only five parts of perlite to one of peat has been used during the recent drought). Add any fertiliser of your choice. Mix damp but not wet, so that the resultant mix flows easily. Peat holds water very effectively and releases it reluctantly. Hold the plant in the pot and fill around it the mixture with potting mix. Bump the pot on the bench to settle the mix but do not try to compress it (as you might do with bark), or you may block drainage and aeration. You may add a long acting fertiliser and top the pot with small round river gravel to improve the appearance and deter weed growth. High light levels and air movement will help prevent bacterial and fungal infection. Plants potted in this mix seem to tolerate higher light levels than similar plants grown in other media. *Paphiopedilum*, *coelogynes*, *bulbophyllums*, *dendrochilums*, *oncidiums*, *prosthecheas*, *lycastes*, *catasetums* and many other genera all grow satisfactorily in this mix.