

Miniature and Novelty Cattleya Orchids



Miniature and Novelty Cattleyas are not really new. Some of the current small Cattleyas have recently been remade, but were registered almost 100 years ago. **Sc. Batemanniana** was registered in 1886, Sl. Orpetii in 1901 and Sl. Psyche in, 1902.

Growing small Cattleyas can become a challenge as they come in such a wide range of vibrant appealing colours of red, orange, mauve, pink, white, splashed and flared. They are space saving, small pots are easily managed. Plants can be flowered in (50mm) pots and some as early as 18 - 24 months from the flask giving you an early indication of the potential of a cross. Flowering season is throughout the year; some plants can be flowered twice a year.

HOW TO GET STARTED

Our advice to anyone deciding to try growing these (or any other) orchid is to check the conditions of your own local growers, seek help at specialist orchid nurseries, or your own orchid society. From these sources you can obtain personal help, or borrow orchid culture notes. Buy a few reasonably priced divisions of plants which are in sheath and you have seen flowering. Then you know that the plant can flower, and if it does not do so within the next two years, your culture or conditions may be incorrect. Once you feel you have mastered the growing techniques, then purchase small seedlings or mericlones. When beginning, please do not buy expensive plants, as it is disheartening to lose a plant, but it is worse if it was expensive. You have a better chance buying in your own area as the plant would be acclimatised and is not set back as happens at times. Finally, always remember a good orchid requires the same space and fertilizer as a poor flowering orchid. Be ruthless; cull out plants, which may not have your expectations.



Blc Goldenzelle

BASLC REQUIREMENTS

BaSlcally all orchids require a growing medium, light water and fertilizer, and air movement. It is helpful and a general guide to know how genera grow in nature, then try to simulate these conditions and environment. Most are epiphytic, growing on trees, can be high or low altitude, or in rain forests, but baSlcally dry out easily, and have plenty of air movement.

GROWING MEDIUM

Personally, I believe the mixture only provides a means of holding the plant in the pot and acts as a moisture and fertilizer reservoir. Providing you water accordingly, a variety of mixes can be used. Bark requires more water than a sphagnum moss mix. In fact there are growers using rubber tyre pieces and medium stone mix; they all drain, yet retain some moisture.

LIGHT

Ideally, your orchid should have fairly even light throughout. Place it in a position in the yard which has very little restriction due to trees. If trees are a problem, you already have a percentage of shade. In this case careful consideration should be given to the shade cloth you intend to use. If building a hot house more than likely you will be considering fiberglass. If this is the case you will most likely get leaf burn during the hot summer period, this will decrease as the fibreglass weathers with age.



Lc Pirate King

WATER

Watering is a most difficult subject; there are so many variables such as mix, pot size, air movement, light and air temperature. When we commenced, growers told us "When a plant needs it", "Feel the pots, if light water, if heavy don't" and "if you think it needs watering, wait until tomorrow". All true, but it takes practice to know one's own conditions, as all houses seem different. As a general guide, in summer we water every second day and in winter once a week or even longer. In summer if the expected temperature is to be high, we mist the house if watering has not occurred that morning. Remember, in cool temperatures, less light and less water are needed. Flush pots occasionally to leach out any salts. Use rain water if you have it try not to water late at night, allow time for plants to dry out. This prevents rots and fungus forming by water trapped in leaf axils.

FERTILIZER

Fertilizers are usually applied after leaching or watering. Do not fertilize a dry plant. We use only half strength; weekly in summer and every two weeks in winter. Because of the variety of plants in any orchid house it is hard to place plants in a position so that this one does not get a high nitrogen mix or a blossom booster. In our collection where plants are growing and maturing at different times, one would have to selectively fertilize plants at both stages. We now feed high nitrogen for two or three applications, then high potassium on the 4th application. To provide a "variety" to plants, we use a combination of brands, as one may have minor trace elements that other brands do not. One half a teaspoon of Epson salts to ten litres of water is used in all fertilizer applications; this acts as a conditioner. Also seems to stop plants from yellowing.



Blc White Elegance

AIR MOVEMENT

Air movement is very important. In summer, with moist floors it will cool plants and even in winter air movement is necessary. Air movement in a wet environment tends to reduce Botrytis infection and does not allow any dead air pockets to breed fungus.

TEMPERATURES

Miniature Cattleyas, possibly because of the *Sophronitis coccinea* influence, seem to tolerate lower temperatures below the optimum (9 degrees C) of their larger brothers.

HUMIDITY

Humidity in our hot, dry summers is very important. We believe plants survive extreme summer conditions by increased humidity. Keeping one or two benches low, and having moisture retaining floor material can do this. Containers of water placed throughout the house is successful, (remember to tip out to control mosquito larva) or below bench fogging nozzles to increase humidity. This tends to keep the plant leaf temperature below 37 degrees C. Above this temperature; moisture in the leaves commences to boil, resulting in tissue breakdown and bad leaf sunburn. Plant growth may slow or stop under these conditions.



POTS

Pots should be squat, with plenty of base drainage. You add extra holes around the sides as this helps the air movement.

REPOTTING and DIVIDING

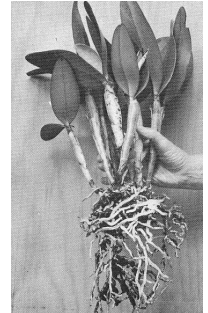
Repotting and dividing are done when plants are commencing to grow. This is when the new roots on the forward growth are about 1-2cm long. Reasons for repotting are: - the plant has one or two growths over the edge of the pot, the mixture is two to three years old and possibly breaking down, perhaps the plant is not growing well and tending to shrivel. Repot it, chances are the mix has broken down, is retaining water and the roots have rotted. When repotting, use a pot large enough to accommodate two year's growth.

Keep the back of the plant on the pot edge, as plants usually grow in a forward direction. Take care not to damage the new roots, because if they are broken they will not re-shoot. Old dead roots can be cut off, whilst long roots can be trimmed. They will branch out in re-growth. Keep the mix up to within 2cm of the top of the pot, but try not to cover the rhizome. A stake tied to the old canes will prevent a plant from moving and breaking the new roots until the roots establish and anchor the plant in the mix. When dividing a plant, try to keep each piece to a minimum of 3 to 4 canes. Do not over-pot. Some people use the back-cut method on their plants. After flowering, the rhizome is cut through (remember 3 to 4 canes each, so the original plant would need to be of 6 or 8 canes). This cut is separated with a plastic tag or similar. The rear section of the plant, which had dormant eyes, may shoot and produce new roots and growths. The plant (now in 2 sections) is repotted as above. The rear section is already growing and does not seem to be set back as much as if it was just cut off and repotted without back cutting.

PLANT LANGUAGE

Understanding or observing plant signs or “plant language” may help to correct culture or conditions before the plant is lost. A healthy plant is a happy plant and grows well.

Leaves are one of the best indicators; ideally they should be thick, and strong (not floppy) and green - yellow in colour. Floppy leaves indicate possibly insufficient light, but yellowish-green colour indicates that fertilizer and light are correct. As a guide, if the amount of light is approximately right, pink - mauve Cattleyas will develop a mauvish tinge to the leaf extremities, much more light will cause sunburn. If leaf growth is lush green it can indicate a lack of light, or over fertilizing. When the leaves on the forward growth become shriveled, it usually indicates root loss; repot and check. Old canes and leaves naturally shrivel after several years.



Pseudobulbs also indicate plant condition. Under good culture there should be good bulb progression; each growth bigger and taller than the previous one. Of course, if repotting has occurred the next growth could be set back. Shriveled forward bulbs indicate a lack of water; maybe because of not watering enough or because of root loss making the plant unable to absorb water.

Plant roots should be strong; white with a 1cm green tip. Growth should be even; uneven growth indicates setbacks in growth.

Tips to aid Flowering - If a sheath starts to yellow cut the top off, then slit down the sides. You will see flower buds in the leaf axis; take care not to damage these. If you do not split the sheath, these buds will probably rot off anyway. Also split the outer material on the cane near the leaf axis, as this tends to form a water-retaining cup and rots flower sheaths or leaves at their base.

WHAT TO TRY

Today there are numerous hybrids available. Listed are a few species and hybrids that have consistently produced a fair percentage of good seedlings, with the properties passed on: -



Cattleya aurantiaca: clusters of small, yellow- orange flowers.

Cattleya luteola: yellow medium size, slightly open flowers.

Sophronitis coccinea: cool growing, red, and usually two flowers. Parent of Slc. Bright Angel, an outstanding flower.

Sophronitis cernua: being used to produce reds in lieu of Sophronitis coccinea, seems more heat tolerant, produces small plants that bloom as young plants. Parent of Slc. Kevin Hipkins.

Laella briegeri: an exciting yellow, small size dominant, but is producing flares. Parent of Slc. Dorothy Worden, Slc. Mine Gold, Slc. Barefoot mailman and Lctna. Flying colours (all flared)

Laella pumila: produces round shape, mauve colour dominant, and usually only two flowers



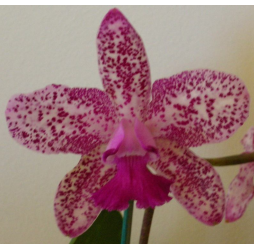
Slc. Hazel Boyd: many different clones some seem to have been over produced and suffer deformities. Colour of clone is variable, but it has produced numerous hybrids.



Slc. Kauai Starbright: used extensively, shape and lip dominant.



Blc. Waikiki Gold: producing round shape, medium plant size.



C. Penny Kuroda: has been used to try to produce spots similar to parent.

Slc. Tangerine Jewel: produces small flowers, red colour not usually dominant Produced Slc. Roger Cole, reds-yellows, Slc. Roblar and Slc. Seagulls Mini-Cat Heaven.

Slc. Precious Stones: a Stewart hybrid has been producing glistening reds. It is the other parent of Slc. Bright Angel. A top plant and parent.

Please attempt a few "small" Cattleyas; you will be rewarded with flowers throughout the year, with a wide range of colours. They grow easily. In one set of judging rules, miniatures may be defined as plants no taller than 12cm (5"), including the inflorescence; in another it may be 15cm (6") excluding the inflorescence.

These notes have been used at our Cultural and New Grower's Meetings. They are from various sources and we thank the authors. All articles are supplied in good faith and the Bribie Island Orchid Society and its members will not be held responsible for any loss or damage.