

A.S.G.A.P. INDIGENOUS ORCHID STUDY GROUP
NEWSLETTER NO. 6

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Once again the newsletter,

As you will see from the content, and contrary to my thoughts on the inaugural copy I am still providing all copy for each edition. This is O.K. but I wish it was otherwise. If I run out however, this will suffer, so please group members, contribute, even if it is only occasionally or in a small way.

As you may guess, some of the articles I use could be nomenclature dated, what with our busy botanists changing names etc. If you know the plant by a new name please adjust to your liking.

All articles used however are mine to use, if this is not so it will be so stated.

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As mentioned in other copy I still am very alert to what is going on in indigenous orchid crossings, and having recently walked through TROPPO JOHN'S (John NEWBURN) Beachmere wholesale nursery, I am delighted to see the amount of improved species, both indigenous and from austral-asian species he is producing.

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Just a reminder, all this year subscriptions will be due 1st June, FEE IS STILL \$5.00 and payable then, not a few months later, which occurs too often.

Sincerely,

Len Butt (Leader)

CULTIVATION of AUSTRALIAN NATIVE ORCHIDS

by L. P. BUTT

(A series on cultural methods of growing indigenous orchids in the home garden, the writer firmly believing that this will be the only satisfactory method of preserving our orchid flora.)

FIRST of all, let it be understood that there are really no hard and fast rules for growing these orchids, and although the basic methods are similar, some growers are getting good results with methods entirely unsatisfactory to other species.

There is nothing very complicated in the successful cultivation of native orchids — just commonsense rules, the first and most important of which is to make very sure the orchid you obtain is a healthy plant, with "eyes" for growing, or with reasonably good chance of developing these "eyes."

The "eye" that produces the budding offset is generally at the base of a pseudo-bulb or cane stem of the orchid. Never buy a weak or sickly looking orchid, and in every case make sure you spray or dip your purchase in a fungicide to eradicate the chance of fungus growth developing from plants that have been stacked together on a store counter. Anyway, if you buy from a reliable nursery these troubles will not arise, as such plants are generally already established and kept clean at the nursery.

Orchids collected in their natural state are easy to cultivate because all that is required is to imitate their surroundings and method of growth. This, however, is not possible for most folk because of strict Government plant protection laws, so most bought specimens come with no cultural instructions, and their eventual demise is a disappointment, and probably even leads to a vow to leave indigenous orchids alone in future.

In an effort to counteract this lack of "know-how" I will try to give as many of the proven methods of cultivation as possible.

ESSENTIAL REQUIREMENTS

The first essential requirement for growing native orchids successfully is to maintain the correct nutriment in the pot, raft, block or basket in which you plan to grow the orchid.

Most well-known orchid composts contain small quantities of nutrient chemicals essential to plant life, these being organic matter and moisture, calcium, magnesium, potash, phosphorus, iron, aluminium, nitrogen and silica.

All orchids obtain their feed from water passing through their compost and collecting minute quantities of these chemicals. In nature, the orchid obtains this from the mass of decaying matter of vegetative origin, and also animal and bird droppings which collect around its roots in the tree, rock or terrestrial domain where it chooses to grow.

For dendrobiums in the native orchid field I like to use staghorn peat liberally throughout my composts, whether it is in small broken pieces in the pot mixtures, or in thin slices used as a layer between orchid and bark when securing to a tree. The reason I choose this medium is because this peat is rich in nitrogen and organic matter, and has a pH of 4.99, which is higher than most other orchid composts.

Two good examples of our very versatile dendrobiums are *Den. canaliculatum* (the onion orchid) and *Den. Kingianum* (the pink rock orchid).

The former occurs along the coastal belt of Queensland from the far north to central areas. Its natural host plant is the *Melaleuca* (tea-tree). This beautiful orchid has swollen pseudo-bulbs and cylindrical grooved leaves not unlike an onion in appearance. The shape can vary from globose to an elongated swollen pseudo-bulb. The flowers are most delightful, and except for size rival the glorious exotic *Vandas*. Although sepals and petals are generally yellow there is a far Northern variety with coffee colored sepals

and petals. The labellum is cuneiform in shape and a purplish colour, with light margins.

Although it will grow to perfection on tea tree blocks or branches in N. Queensland, it is not always so in the south-east corner of the State. If attached to living tea trees I find it grows very well, and flowers well. A friend of mine used rolled pieces of old coir mat with quite good success. Of course, liquid manure applied regularly is essential to normal growth in the Brisbane area. A word of warning — this orchid is frost tender!

Den. kingianum is a rock or cliff-face orchid growing over a wide area. It occurs in N.S.W. and southern Queensland, and has such a wealth of variant colours in its blooms that an entire collection could be taken up just with colour forms of *kingianum*.

The pseudo-bulbs are swollen at the base and attenuated towards the apex; some forms are short and stubby, while others are as long as 12 inches.

Many composts and growing mediums have been used for *Kingianum*, and I have seen it successfully grown in commercial cymbidium mix, staghorn peat and also in the mix I personally use, which is German peatmoss, tanbark, tree fern fibre, charcoal pieces and small pieces of staghorn peat, in equal parts.

Remember always that copious spraying of fungicides and occasional spraying of insecticides will ensure you of clean, healthy plants.

Australian Native Orchids

by L. P. Butt

It has always been much of a puzzle to me why a certain section of exotic orchid enthusiasts use the word "insignificant" when describing our native orchids. To me this is a kind of sacrilege, because every day spent among indigenous orchids of our country reveals a new wonder, also a constant reminder that Australians can be justly proud of our many species of orchidaceae.

This month I will discuss a few more of our beautiful Dendrobiums, with special mention for our so-called "White Cookies".

The recent Show by the Queensland Orchid Society brought to my notice a fine young plant of *Dendrobium dicuphum* (Muell), with one long spray of blooms, yet holding its own with the multi-coloured hybrids placed around it.

This beautiful Dendrobe is somewhat smaller in bloom than *Den. bigibbum*, but the shape shows a definite relationship between the two orchids. Creamy white in colour, it has a definite purplish-red blotch in the labellum of each bloom.

All the specimens I have seen have rather short, thick pseudobulbs not unlike *Den. compactum*, and approximately 7 - 10 narrow leaves. However, this is often narrowed down to two because of the deciduous nature of this orchid. It can have up to about 18 or 20 blooms on a healthy pseudobulb, and about the best specimen I have ever seen had four such spikes.

I do not approve of common names for any native plant, but sometimes it does help an amateur to get to know the plants better. If such a name was forthcoming for *Dicuphum* it could easily be dubbed the "Darwin Orchid" as it occurs in this area and the northern areas of the Northern Territory. Some have been reported in the Gulf of Carpentaria and Cape York, but I have no confirmation of this.



Dendrobium hololeucum
(Photo by L. Butt)

Mr. A. W. Dockrill, noted taxonomist, says it extends also to Groote Eyelandt.

Growth and cultivation are as with the "Cookie" we know so well, and the flower period is from April to August generally, but my specimens have always flowered only in April around the Brisbane area.

Enthusiastic collectors from a local native orchid study group have informed me that pseudobulb canes as long as those of *Den. bigibbum* have been reported. Indeed, the Rev. Rupp spoke of a grandiflorum type with extra large flowers.

Another fine "Cookie" type occurs in our Cape York Peninsula, north of Cooktown. This is *Dendrobium hololeucum*, the white Cooktown orchid.

JESI bloom.

Many hybrids have arisen with *hololeucum* as one of the parents, and some claim that one of these, Mauna Kea, is about the best. The parentage of this hybrid is very apparent when it is placed alongside our *hololeucum*.

Before leaving the subject of dendrobes for now, I must mention once again *Dendrobium compactum*, which occurs only in an area around Cairns. This short, thick version of our "Cookie" is ideal for use as a pot-plant, and is very easy to handle if exhibiting native orchids. The colors of the individual blooms vary from a dusty mauve pink to deep purple.



Dend. "compactum"

The plant is hardy and will stand quite a bit of adverse treatment. Indeed, a few plants I have seen were in such poor mediums that even a straight "Cookie" would have literally "turned up its toes".

Just to add a little spice to the great *Dendrobium bigibbum* controversy which is ever with us, I recently saw a plant of the Cooktown Orchid type which I am informed on good authority was collected around the Keatings Lagoon area of North Queensland. The very pale shell pink sepals and petals were in contrast to its dark purple labellum. This species was very similar to the hybrid *Den. phalaenopsis* var. *schroederianum* which occurs in the Timor area.

If the collector has not got his labels mixed, this could well be another link in the chain of events that will eventually sort out all the Cooktown varieties satisfactorily.

Epiphytic Native Orchids

by L. P. Butt

ALTHOUGH this article is primarily for the native orchid grower the instructions given apply quite readily to most exotic indoor plants and in particular ANTHURiums and allied genera.

The application of liquid manure in its various forms is always beneficial to garden plants and particularly so to the potted plant, which cannot send young roots out for sustenance. This is because manures in liquid form provide nutrients that are readily acceptable to the root systems of most orchids and if drainage is adequate to other indoor plants also.

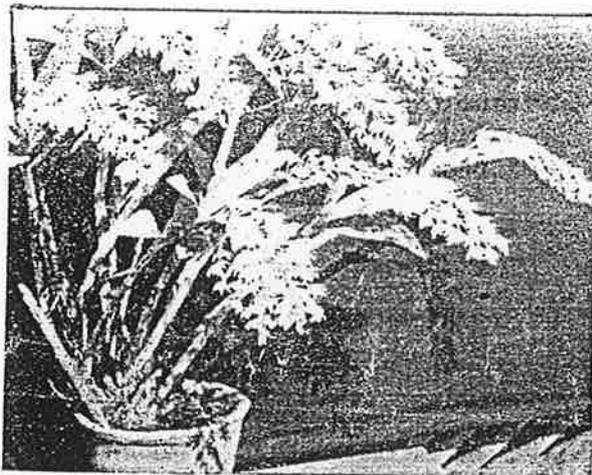
Like most things, however, liquid manure of the organic type should be used and not abused, and its application reserved for healthy plants with vigorous root systems.

Organic animal manure should be soaked for about one week and the liquid strained off will serve as quite a good fertiliser providing a weak solution is used first and the strength gradually increased over a regular period throughout the growing season of the individual plant only. As a precaution, make sure that the compost of your plant is wet before applying any liquid manure.

Many patent lines of soluble liquid manure powders are now available, generally rich in the basic nutrients to ensure good growth of your plant and quite often with the addition of trace elements. These are also advertised as foliar feed fertilisers and can be sprayed over leaves without a detrimental effect.

From my limited experience in the use of such fertilisers I have found that native orchids of the epiphytic type will thrive on the application of these manures.

The best method of application is by using a tub or cut down a 44 gallon drum as a liquid manure drench and completely immersing or "dipping" all your native orchids



Dendrobium gracillimum, showing effect of regular liquid manure feeding.

once every three weeks during their growing season. This should be tapered off during the dormant spell which is required by most orchids. Most native dendrobiums will respond quite readily to such treatment, and those growing on tree-fern rafts, baskets, or tea tree logs, are no exception. The one exception here is the native growing naturally on a garden tree. In this instance a liquid manure spray around the roots once a week will suffice.

Regarding the foliar feed fertiliser, I have had reports from some exotic orchid growers that some of the earlier foliar manures left an acid sediment in their compost. Personally, I have never had any experience of this, but mention it here as a precaution when using such fertilisers.

The effect of this would only be harmful over a long period of sediment build up, and for the native orchid at least, I have noticed no ill-effects, but considerable improvement in growth.

One *Dendrobium Kingianum* of mine was looking much the worse for wear after being removed from a dry cliff face where it was drought stricken. Four months of liquid manure treatment and now the small clump is now a mass of new green leaves and pseudo-bulbs, with every hope of a good flowering season in spring.