

SUTHERLAND SHIRE ORCHID SOCIETY

Cocopeat

There is a variety of products derived from the husk which surrounds coconuts that are suitable for horticulture. Most of these products are imported from southern Asian nations as a by-product of commercial coconut farming. Some brands are identified as 'coir' and some as 'coco' but they are essentially the same material. Cocopeat is marketed in a variety of grades and sometimes with fertilizer additives - read the label carefully! Most orchid growers seem to only use the coco products that do not have fertilizer added as they prefer to exercise control over this aspect of their culture, at any rate the effectiveness of additives would largely be lost after the soaking and flushing process outlined later in this article.

Cocopeat is readily available from supermarkets and department stores in blocks ranging in size from 'bricks' about the size of a thin house brick to 'mega blocks' about the size of three loaves of bread. Blocks consist of coconut fibre that has been milled into different sized particles which are compressed and dehydrated prior to packaging. These blocks need to be soaked in water to rehydrate and decompress prior to use on plants. Be warned that the expansion potential is quite large so don't jam a whole dry block into a small bucket and then add water unless you have a use for split buckets.

In Sydney there are basically two grades commonly available, a fine grade that is mostly seen as the smaller brick (but is available as a block or a pack of several bricks) that, when soaked, forms a substance that appears similar to peatmoss. This cocopeat seems to be suited to moister growing/fine rooted genera and is most commonly combined with the larger grades of perlite. It seems that you would probably need to use more perlite than cocopeat (say 70% perlite as a starter and then experiment) or you are likely to create a 'too wet' mix. In my limited experience oncidium, ornithorynchum, pleurothallids, maxillarias, restrepias and promenaeas have grown well in this type of mix. A note of caution here is that this type of mix absorbs and stores a large amount of water so be careful with the hose - especially if you are used to growing in a free draining mix. My early attempts were less than spectacular probably due to me using too little perlite and then packing the mix too tightly into the pots to have good drainage.

The second grade of cocopeat available in Sydney is marketed as 'mulch'. Mulch usually comes in the larger sized block and is comprised of a whole variety of particle sizes varying from dust up to large chunks. A single soaked block goes close to filling a builders barrow. I use a ten millimetre sieve to remove the fines which I use for seedlings or as potting mix. The coarse material can be used in combination with a number of other ingredients or on its own as some Melbourne growers do. Generally Victorian growers are far more advanced with cocopeat and are growing a wide variety of genera in it, they also seem to be able to access a wider variety of grades. I have been experimenting with combinations of cocomulch and 'Maidenwell stone', river pebbles and/or coarse pinebark. No one mix seems to be better or worse than the others in my initial experiments with sarcophilus, Den, speciosum, pescatoreas, cattleyas, coelogynes and varicosum type oncidiums. This type of medium may be packed a little more firmly into the pot than the finer grade without compromising drainage too greatly. Individual chunks hold water within their fibres but there rarely seems to be free surface water on the outside of the pieces.

Treatment of Cocopeat

The dry blocks need to be hydrated by soaking in water, generally soaking for 24 hours then draining off the water (re-use it, don't waste it!) followed by at least one flush with fresh water. There is some concern that cocopeat may be high in some salts (my local importer insists that it is a potassium salt and not sodium) and very low in calcium and magnesium. The Antec Website (USA paph. grower) recommends that the final soak should include some calcium nitrate and magnesium nitrate which should NOT be flushed out, I have been following their advice but many coco users do not.

Unlike most other organic ingredients that orchid growers have been using cocopeat is supposed to be very slow to break down due to its high lignin content and therefore releases very little nutrient for

plant growth which may have implications for fertilizing programs. I have been routinely top dressing with a dusting of blood and bone and dolomite lime (combined 50:50 in a commercial salt shaker) as I report. Seaweed extract also seems to work well with cocopeat mixes. Users of cocopeat may benefit from using slow release fertilizers during the growing season as the dense nature of the fibre prevents the granules falling through onto roots and burning them.

My major disappointment so far has been the lack of success when using cocomulch in gutterguard cylinders for epiphytes. My original interest in coco was for this purpose as I thought that it would retain moisture for long periods. It actually dries too rapidly for newly mounted plants to establish roots under shadehouse conditions despite daily watering. Once you can get some roots into the fibre then growth is fine. I am now looking at using it differently perhaps adding stones or finer cocopeat to the mix.

Conclusion

All that I can say with confidence is that cocopeat will not kill your orchids. If you have been growing in an open pinebark mix then overwatering may well be a problem for you until you learn to adjust. As supplies of good bark at an affordable price become harder to find cocopeat may be the answer or at least part of the answer. As my initial results have been promising I intend to continue experimenting with different mixes and fertilizer before I decide whether 'cocopeat is the new pinebark'.

If you want to know more try the following internet sites:

- <http://www.cocopeat.com.au>. The website of the NSW importer, Galuku, it has lots of information about their products.
- <http://www.ladyslipper.com>. The AnTec laboratories website, there is lots of information about growing paphs but if you go to their 'reading room' there are a couple of cocopeat articles.

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