

‘Softcane’ Dendrobium Culture – (expressed in southern hemisphere season months) – Jim Brydie, updated 2026

First, let me explain what a ‘softcane’ Dendrobium is.

You may not know this but the genus Dendrobium is rather huge at around 1200 naturally occurring species, found from India, all through Asia, Australia and the Pacific Islands. They came in all shapes and sizes and they not all grow the same.

The group we call ‘softcanes’ are the 60 or so species and thousands of hybrids in Dendrobium section Dendrobium. In other words, the ones based upon Dendrobium nobile and its close cousins. The picture at the left is of an old Den. nobile plant tied onto a tree trunk many years ago.

Den. nobile and its cousins are nearly all tough, easy to grow orchids so long as you understand just a little about them and the way they grow. The ‘stems’ otherwise known as canes, have a rather soft textured feel to them compared to the stems of most other Dendrobiums, hence the nickname ‘Softcanes’.



1. Growth Cycle - The most important thing you need to know about growing softcanes is that they come from an area that has monsoon like rains for about 6 months of the year, and surprisingly little rain for the other 6 months. This pattern has led to them evolving a very seasonal growth cycle where they grow like crazy for six months (late Nov through April in Australian time), and they sit more or less semi dormant for the other six months. They are not completely dormant in the dryish period and still need some water and, but by far the dominant growing period is the 6 months from Nov to April in Australia.

Temperatures are moderate all year round where they grow in nature but they tolerate our winter cold (in Sydney) because in our winter they are semi dormant. During this period I do not give them any fertiliser, and only give them the bare minimum of water to avoid excessive desiccation. They are still alive and photosynthesising, just at a very low rate.

If you overwater, or feed them heavily during the dormant period, they may keep growing a little but at best all you are doing is making the plant taller and more clumsy than normal, and at worst the roots may rot away and the plants will be in poor condition to flower properly when the season changes. A mistreated softcane will often produce many baby plants with roots (‘keikis’) along the canes from what would have been flower buds. It is a survival mechanism.

2. The Change in Season - Around September, plants break dormancy and buds begin to develop on the flowering canes. Please note that the canes that flower each year are actually the two year old canes and not the latest, freshly grown, one year old canes – an idiosyncrasy you need to take into account when staking. Peak flowering time is around mid Oct, although some plants flower a little earlier, some a little later and as flowering is affected by daylength, it is affected by the latitude of your location.

At this time the plant has not yet begun its new seasons growth cycle. It is flowering in accordance with its genetic rules and the end of its winter dormancy period.

In Oct., while the plant is still in flower, the new seasons growths (new canes) will begin to show at the base of last years canes. **However**, you do not start fertilising or full watering until these new growth are well under way, ie at least 7 to 10 cm tall. This is the time the plant begins to produce a new flush of roots for the coming season. The plant hasn’t really started its new seasons growth cycle until this point so don’t start early.

3. Fertiliser – Your objective is to grow a good strong cane during the summer and early autumn, to get good flowers in following seasons. Most Sydney growers start their feeding program for the year in the 1st week of Nov.

I recommend you start by applying soluble fertiliser once per week. I use it at half the strength recommended on the packet. The aim is to get the maximum growth into the new cane during its short growing season without making the new growth too soft and sappy. The aim should be for a fully grown cane, between 60 and 90 cm tall, by early April.



I believe this can be achieved with the right fertiliser application. (for me that is always soluble fertiliser at half strength) – once per week in November, twice a week between December and the end of February, and back to once week for March. By that time the new lead will have just about reached its maximum height.

5. **Growing** - As the cane grows, you will notice that the leaves are produced on alternate sides as the growth develops and the cane (pseudobulb) grows taller. Leaves emerge from the top of the growing cane and as the cane expands upward, the new leaf moves to the side and a new leaf appears from the top as noted in the red circle in the picture above.



6. When the growing season ends, the last leaf produced will be left standing vertical on top of the cane. ***When you notice that the newest leaf isn't moving down to the side, this tells you growth has stopped. You should now stop applying fertiliser. NO MORE FERTILISER IS GIVEN UNTIL GROWTH STARTS AGAIN NEXT SUMMER (about November).***

5. **Staking** - New growths are a bit soft and sappy until they set and mature. They mostly grow upright but they are a bit top heavy and can end up laying horizontal or pendent unless you stake them. Staking allows you to guide the growth upright and to support it until it sets. If you don't stake them, the plant can end up looking like a bit of a

sprawling mess. You can use green twisty wire or butterfly clips or any number of other clip devices to hold the growing cane to the stake but as the new growths are still actively growing, don't bind them too tightly. The ties are meant to keep it upright, not to lock it to the stake.

6. **Watering** – Obviously, water application somewhat parallels the application of fertiliser. It is impossible to be too specific in advising how often to water because the need varies substantially depending on the weather. However, as a guide, one might start with once or twice a week in October in warm fair weather, and increase from this up to perhaps daily or every second day in the middle of summer when it is hot and dry most days in Sydney.



Water early in the day so that the plants are surface dry by nightfall, and if you happen to water while the plant is in flower, water the pot and don't wet the flowers. Wet flowers can get fungal spot damage.

By March, you would be back to about once or twice a week again. In winter, if weather is really dry, water about once a fortnight or once a month just to stop excess shrivelling of the canes. Water less in wetter periods. Use your common sense.

7. **Repotting** - There is no need to pot every year but organic based potting materials like pine bark, have a prime life in the pot of 2 or 3 years so you should repot before it breaks down too far. In addition, as the plant gets bigger, the old bare, but still green canes will become more visually noticeable. Remove old canes when they get too old.

As to when to repot – the most practical time is as soon as possible after flowering. The idea is to repot before the newly developing, and easily damaged roots and leads get too advanced. If you wait too long, the new and fragile roots tips will be too long and it will be impossible to repot without damaging them or the developing shoots. Young shoots snap easily. However, practicality sometimes demands potting action at other times as well.

When dividing an old plant, preferably divide plants into slightly larger clusters. Small divisions of just a few canes take a long time to get going again. I recommend leaving at least 3 years growth behind the new shoot on the newly divided plants. Even bigger plants make excellent displays. Old spent canes still act as a food reservoir for new growths so don't instantly cut them all off.

Select the smallest pot that will accommodate the number of canes on the piece to be repotted, plus space for 2 or 3 new canes after each new growth. The new roots on the developing growths need to quickly fill the pot or the mix will stay too wet too long between waterings.

The mix I suggest is : 50% medium size orchid bark (12-18mm), 35% Cymbidium mix (a finer mix of composting bark bits), and 15% crumbled polystyrene foam. After repotting, sprinkle a teaspoon of Dolomite over the top of the mix and water it in. The dolomite is a form of calcium and will reduce any excessive acidity from the bark. Don't apply Dolomite more than once per year.

Because softcanes have tall narrow canes and are grown in small pots, they are notoriously top heavy and easily knocked over. This is less a problem when the plant is grown hanging up, but when they are in flower and you wish to take them inside or show them, place the growing pot inside a heavier ceramic display pot to stabilise it upright.

8. **Flowering and shade** – Softcanes grow well under 30% or 50% shade from October through to April, and in calculating the proportion of shade, take into account the effect of any tall shade trees or buildings. If you have to grow in a shady, light compromised area, use lighter shade cloth.

To get the best flowering, with flowers along most of the full length of the flowering cane, the plant needs to be exposed to higher light, especially in winter to help it harden up and mature.

In the cooler months, when the sun is lower in the sky and temperatures rarely get above 20-25°C, softcanes will take full sun so long as they aren't overly soft from being grown in deep shade.

Note again that softcanes flower off the two year old canes. The lovely new cane you grew last season will not flower in the season after the one in which it grew. It must wait one more year. Because of this unusual second year flowering characteristic, professional growers go to the trouble of rearranging and re-staking the canes of their show plants in July so that the flowering canes are positioned on the outside of the pot where they will get the maximum light. This isn't really necessary for the average grower but it does result in flowers over a greater length of the cane.

You don't have to do it but next flowering season take the time to observe at a society benching what a difference it makes. You might decide to do it too.

A note about Fertilisers – In the earlier sections I specifically recommended soluble fertilisers because I believe that type of fertiliser best helps me keep track of when to next apply fertiliser.

Many growers use slow release pelletised fertilisers very successfully so perhaps the problem for me is just a personal one but unless I put a tag in the plant pot recording the date I applied fertiliser, I am never able to know whether the slow release pellets I could see on the top of the pot were still functioning or not. They generally only last for 3 to 6 months, and in addition I believe that the rate of release of nutrients from slow release fertiliser pellets is affected substantially by day temperature and the moisture level of the medium.

I do use slow release pellets when repotting but I use them as a booster and not as a feeding program.

A third alternative, pelletised organic fertilisers like Dynamic lifter are very useful, but they contain a lot of fibrous solids that eventually clog the air spaces in the medium of epiphytic orchids as the pellets decompose and they may create a need to repot more often.

Colours - The species *Den. nobile* is nearly always the same purplish colours as in the picture at the top of this article, but hybridisation with other species has managed to give us a wonderfully wide range palette of colours and patterns in the softcane hybrids. The pictures below show some lovely examples. If you are looking for a specific colour, ask one of the experienced growers at your society – they may be able to supply you a piece.

