

Watering

By Dr Fred

The watering season is here and in summer it is difficult to keep up with demand. It is a bad time to go on holidays! The old watering rule of once a week in winter, once a day in summer is not a bad one. In a very hot summer you may even need to water twice daily.

If the water goes not run freely through the potting mix this indicates that the orchid needs repotting. Free drainage is essential for all orchids.

Most orchids can be allowed to almost dry out between watering but those with fine root systems should not be allowed to dry out for significant periods. For these orchids (eg Odontoglossums and Miltonias) humidity is important. During the summer they should be placed on a gravel tray with water. This provides the necessary humidity without giving them wet feet and cools the plants, especially those which do not like our hot summers.

Remember that watering and humidity are not the same. Humidity is water vapour in the air.

Overwatering in an attempt to increase humidity can cause problems; instead consider hosing down the shade-house floor, grow ferns under benches, and using gravel trays.

Smaller pots dry out faster than larger ones and terracotta dries out faster than plastic.

The frequency of watering also depends heavily on the nature and coarseness of the potting mix used. This is one reason why it is advisable to standardise your mix. A simple test to see if an orchid needs watering is to stick a finger down into the mix. If it feels dry, water it.

In warm summer weather:

Some potting mixes, such as those based on bark or coconut chips, are slow to wet and absorb water. In general two short waterings a few minutes apart will allow the mix to absorb more water than one longer watering. The second watering can also be combined with feeding. While this is good in summer, during winter when you want the plants to dry out quickly, one watering is enough. This pattern of double watering is also suitable for the rest of the garden, pot-plants and lawn.

Alternatively, the pot can be placed in a saucer, watered until the saucer is full, and then left for an hour to absorb what it needs. But remember to come back and empty the residual water before nightfall in cooler weather!

The popular practice of periodically immersing orchids in a bucket of weak fertilizer solution is now discouraged because of the potential for spreading fungal and other infections.

Because most plants need sunlight to provide the energy to transport water, watering in the morning is usually best. There are some exceptions with CAM positive orchids. These orchids, adapted to harsh conditions, do part of their photosynthesis at night to save water in anticipation of a hot dry day. They include the Laelia-Cattleyas which may prefer evening watering.

If the weather is very hot I may water everything twice a day to cool them. This is particularly important in February/March for the large cymbidiums. This regular drop in evening temperatures is the natural trigger for flowering in these plants. It is not so for miniature Cymbidiums.

Another function of watering is to discourage pests and flush out any toxic build-up of salts left over from fertilizers. This occurs naturally with heavy downpours and is one reason why orchids exposed to the elements seem to do better than those sheltered year round in protected porches and pergolas. A heavy watering should be done regularly in summer but is not necessary every time. It should include the foliage.

In winter and cooler months:

Watering requirements are different for monopodial orchids and sympodial orchids with backbulbs. The former are adapted to daily tropical downpours but like to dry out at night. The latter are adapted to tolerate dry cold seasons by living off their backbulbs and morning dew. This period of dormancy must be respected.

Winter watering should always be done sparingly. Orchids in a dormant phase cannot utilise excess water. Fungal disease thrives in wet feet at night, so water only in the mornings to give plants time to dry out by nightfall. Avoid watering the foliage as water trapped in the crown also leads to rot. Clearly in winter that saucer of water under the plant has to go!

Fungal disease can be a problem among your garden orchids during wet cold winters, so be prepared to shelter them, perhaps under the eaves of the house.

More orchids are killed by over-watering than under-watering. During Canberra winters my Cymbidiums survived and thrived with shelter from frosts and one morning watering a month.

Growth spurts:

Spring and autumn are great times for orchid growth so be prepared to increase watering and feeding accordingly.

Most commercial orchid growers combine watering and fertilizer in a regular, second daily program in a controlled environment. Combining the two makes the most of the growing season and is of course more economical of effort. Avoid applying strong fertilize solutions to dry plants as it can cause burning. In general water well before feeding.

I have a Magamp dispenser on my hose year round and this ensures an adequate supply of calcium and magnesium but is not a substitute for feeding.

Most commercial hose fittings were not designed for small pots or hanging orchids. I designed a short homemade flexible plastic nozzle which produces a much thinner, slower, controllable stream of water. This reduces water consumption and makes it easier to reach difficult areas such as overhanging baskets without water running back down the raised arm.

Water quality is blamed for many cultural shortcomings. Sydney water is very good, but rainwater is a great option to have available as your collection grows.