

by Jan Robinson

## “Orchid Ailments And Their Management”

The majority of the health problems we have are caused by one thing and one thing only--That Woman. "We" are a small collection of orchids doing our best to survive in a suburb of Sydney, but we are constantly under threat by the actions of That Woman. What have we done to deserve this? Some of us come from the tropical jungles of the Americas, or the cool rainforests of Asia, or, at the very least, the prime conditions of commercial orchid nurseries. To our horror, we have been plucked out of these wonderful environments and somehow ended up here with That Woman, fearing for our survival on a daily basis. Here are some examples of the numerous maladies that we have had to endure due to the irrational, illogical, insensitive and uninformed actions of That Woman.

***MALNUTRITION.*** Initially when That Woman first became interested in orchids, she had no clue about feeding us. Water and the odd bit of foliar feed once in awhile was all we got. Please note that when there are hardly any new growths on your orchids, or the new growths are smaller than the old growths, then your orchids are starving and you need to do something about it!! Luckily That Woman attended a New Grower's class and learned about the benefits of fertilisers---but then the pendulum swung to the other extreme!

***OBESITY.*** For a while, That Woman fed us with a hand sprayer, one of those pump up ones. She had heard the phrase "weekly weakly" in the New Grower's class and tried to follow that rule with her hand sprayer. We were much happier, much less hungry, and our growth habits were much improved. But then That Woman's hubby rigged up a bulk spraying system, one where she could mix up 100 litres of fertiliser at a time and totally saturate us, which she did with great enthusiasm and appalling regularity. No thought was given to the fact that we are a varied collection of orchids, ranging from large specimen-size plants to tiny seedlings just out of flask, or that we have different feeding requirements. Nor was there any consideration given to the impact of complete "saturation" of our potting media with fertilisers versus the previous light spraying technique. It was only when symptoms of obesity such as horribly swollen pseudobulbs, new leaves not unfurling properly because they were too fat, and mutated labellums began to appear that That Woman realised we had a problem with excessive food intake. Please don't overfeed your orchids!! In the wild, we rely on slowly decaying organic matter for our nutrition--don't try to supersize us with commercial products. Forget about trying to "hurry us along" to flowering size by feeding us too often. Think carefully about your fertilising regime and the possible consequences of what you are doing, particularly before making any major changes. Trust me, it takes a long time to recover from the effects of obesity.

***DEHYDRATION.*** Lack of water at our location is caused by one thing -- That Woman being too lazy or "busy" to turn the watering system on frequently enough when it hasn't rained for awhile. If your orchids have a good root system and the "drought" doesn't last too long, they will usually spring back to life after a few good drinks. However, if your orchids are totally dehydrated because they have no roots and cannot absorb any water or nutrition, then you have a real problem. Shrivelled pseudobulbs can be a symptom of root ailments. There is only one way to tell for sure--take your orchid out of the pot and have a look at its root system. If there are only old dried up roots and no new healthy ones, then some first aid is required! That Woman is having some success with sphagnum moss as a remedy for this, especially for genera such as oncidiums, coelogynes, lycastes and anguloas. Cut off all the old dead roots and firmly pack the shrivelled pseudobulb and any live roots with sphagnum moss in a pot barely big enough to hold the bulb. Be patient, it takes time to recuperate from severe dehydration, sometimes years! When you see the

pseudobulbs start to fatten up and a new growth develops, you have succeeded in treating your plant for dehydration.

**ROOT ROT.** The other extreme from being dehydrated is getting so much water that the potting mix stays too wet and the roots of your orchids rot. Root rot is bad news and the mortality rate is very high for plants that succumb to this ailment. That Woman is an expert at causing root rot, especially in her glass house. When her columnar oscillating fan stopped working, she foolishly replaced it with just a small fan that only blew air in one direction. Without considering the effect that this change of air flow might have on us, That Woman also decided not to repot any of her paphs that live in the glass house that same spring and left us all in a mix of over 50% cocochip. How stupid was that?!! If the amount of your air flow changes for any reason, think about the impact on your orchids and make adjustments accordingly. Don't wait until your plants start to die to make a change. Treatment for root rot includes repotting your plant in fresh mix after cutting off all the rotted roots, giving it a good dose of Seasol or Auxinone, reducing watering for several weeks, and crossing your fingers that your plant pulls through this crisis. Repot your orchids on a regular basis, don't wait until your potting mix has broken down to a gluggy mess and rotted all the roots of your plants to take some action. Yes, it is a big job to repot your entire collection every few years. Yes, it may cost you a few dollars to buy new potting mix. Yes, it is a pain to wash and sterilise your old pots before reusing them by soaking them in bleach. But we're worth all the work and expense and we will reward you with fantastic flowers if you treat us right.

**CROWN ROT.** Not only has That Woman been known to rot our feet, she has also rotted some of our heads! Crown rot happens when water stands too long in the top of your orchid before evaporating or being absorbed. If this happens during the summer, the water may heat up and literally cook the top of your plant. If it happens during the winter, your plants won't be happy, either. At least this orchid ailment is a bit easier to spot than root rot, as you don't have to take the plant out of its pot to see what the problem is. Brown soggy leaves around the top of your plant are symptomatic of crown rot. If you're lucky, your plant will recover and put out a new growth. More than likely though, your plant is a dead duck. Crown rot, or "damping off," is also deadly for developing buds. If water stands in the sheaf of your paphs where the buds are forming, they will go black and not mature--and you will have to wait another whole year for the chance of getting a flower. Some growers apparently use hydrogen peroxide to treat crown rot. Don't tell That Woman, we don't want to have all our heads drenched in that mixture!! Check your orchids a few hours after watering them. If water is standing in the top of a plant, drain it by tilting the plant on its side until the water runs off. Or soak up the water by dabbing it with a piece of paper towel. Sometimes That Woman puts a few stones between a pot and the tray it is standing in so that the pot sits at an angle and water can drain naturally out of the top of the plant. Sometimes you have to think outside the square to solve an orchid problem.

**SUN BURN.** Now this is a good one! What person in their right mind decides to move several trays of *Cattleya* seedlings from their usual spot of nicely filtered light into an area of much brighter sunlight ---the day before temperatures are tipped to reach the high 40's? THAT WOMAN, of course! For once, the weather forecast was right and for the three days that temperatures hovered around 47.5 degrees, That Woman sat in front of a fan inside the house drinking cold drinks without even a thought about her poor *Cattleya* seedlings. Didn't she get a severe shock when she saw those seedlings, hardly recognizable and covered in third degree burns! Their lovely fat green leaves had turned pitch black. Several days later, the black leaves fell off the plants, revealing burned black pseudobulbs as well. What is the treatment for sun burn? Move your plant into a shadier spot, give it a big drink, and hope for the best. But beware, leaves with sunburn spots can become susceptible to fungal infections and other nasty ailments. So if the leaves of your burned plant don't actually fall off, try cutting off the damaged bit (with sterilised secateurs of course). And next time, pay attention to the weather forecast and move your plants **out** of the sun on hot days, not **into** the sun! Wet the floor under your benches and move plants that normally hang up high in your bush house to down lower. Even orchids that are used to growing in the direct sun (*Dendrobium fimbriatum* and some cymbidiums here at our place) can get sunburned in days of extreme heat. It only takes a few minutes to move your plants into a temporary shadier spot---it may take years for them to recover if you don't, if they recover at all.

**HYPOTHERMIA.** This is another orchid ailment that is directly attributable to That Woman. We get hypothermia when we are simultaneously too cold and too wet. This is easily preventable by (1) providing us with cover (maybe even a bit of heat) during the winter, and (2) being careful how you water us during cold periods. Only water on a sunny day; water before midday so our leaves have time to dry off before the sun goes down; and don't water us too frequently. Make sure there is good air circulation around us to dry off our foliage after watering. Remember, many of us require dry winters to initiate flower spikes in the spring. Most of us orchids have a much better chance of surviving in winter if we are cold and dry rather than cold and wet. Symptoms of mild hypothermia include leaf spotting and plant rot. Mild hypothermia may cause your orchids to be susceptible to fungal attacks. Severe hypothermia causes death. Spray with a fungicide if you must, but it's much better to just keep us dry during cold periods.

**ALCOHOLISM AND BUG INFESTATIONS.** That Woman hates insects. One of her favourite evening activities is to creep around the bush houses with a torch, hoping to find some unsuspecting grasshopper or slug to squish with great gusto. She does not like to spray with insecticides as a preventative method, she waits until she sees actual damage before taking any action. Somewhere That Woman read that methylated spirits is a good remedy for all types of scale on orchids, especially since its use is non carcinogenic to the grower, and it supposedly kills scale on contact. In typical unthinking style, That Woman got an old toothbrush, dipped it in some straight metho, and launched into a vigorous scale eradication program. The mature cattleyas didn't mind too much, as removal of all the old bracts around the pseudobulbs with the toothbrush revealed quite a few hidden nasties that were sucking the life out of the plants. When no more scale was visible, That Woman then gave the cattleyas a thorough rinse with clean water. After waiting all of 24 hours and seeing no ill effects on these few trial plants, That Woman then proceeded to give the metho treatment to any and all of the rest of us that had even one spot of scale. In her tooth brushing enthusiasm, That Woman slackened off with the rinsing procedure after applying the straight metho--and guess what happened? Yes, she burned the soft leaves of young cymbidiums, oncidiums and lycastes. They literally turned brown in a few hours after receiving the metho treatment. The treatment was worse than the original ailment!! Please think about the possible impact of any new procedures/chemicals/insecticides before adopting them for your entire collection, and wait at least several weeks if not several months to see what the effect has been before deciding to apply it to all your orchids.

**INFECTIONS.** That Woman is a master at encouraging infections, especially fungal ones. The worst example of fungal contamination happened last summer when That Woman overwatered all her *Sarcochilus* collection during a bout of hot, humid days. She did not realise she had a problem until leaves started falling off her sarcs by the handfuls. That Woman found out later she had caused a catastrophic case of the dreaded fusarium fungus! This horrible malady invades our roots first, causing severe rot before destroying stems, leaves, and everything else in its path. CPR is immediately required if your plants become infected with the fusarium fungus: **C**arefully take the plant out of its potting medium ("carefully" because you don't want to damage what few roots there may be left); **P**runed the rotted roots, leaving only the healthy ones; and **R**inse all the old potting mix off your plant. Then soak it in a bit of anti-fungal solution such as Mancozeb before repotting in fresh mix. Give your plant a drink of Seasol or Auxinone to stimulate new root growth, and once again hope for the best. There are many other varieties of fungal infections besides fusarium that are detrimental to your orchid collection. Glomerella is a common one that creates horrible brown and black lesions on orchid leaves. Botrytis is another one, it attacks the actual flowers of your plants. Once again, this is a case of an ounce of prevention is worth a pound of cure. Don't overwater your orchids, especially when the natural humidity is already high. Proper air movement is critical to keeping fungal infections at bay. If something is preventing good ventilation, like the neighbour's new garage blocking off one side of your bush house, invest in a cheap fan or two. Never be tempted to buy plants that do not look healthy, no matter how cheap their price may be! Bringing new fungal-infected orchids into your collection is a recipe for disaster. Keep dead leaves and pseudobulbs trimmed off your orchids, they are great places for fungal diseases to incubate.

**The 'V' word.** The 'V' word throws That Woman into an absolute panic attack. She has no quarantine area and believes in immediate euthanasia of any orchid that shows even the slightest sign of unusual ring spotting on the leaves. Goodness knows how many

perfectly good orchids That Woman has sealed in a plastic bag and dumped unceremoniously into the rubbish bin, fearing they were infected with a virus. (She would never put a sus plant into the green waste bin, in case the bin contents get mulched and distributed and thereby transmitting the virus to other plants and gardens.) She has never sent a leaf to a lab for a proper scientific diagnosis. "If in doubt, throw it out" is her motto. That Woman is a stickler for soaking her secateurs in bleach after every use, and she never ever reuses any potting mix. One reason she hates insects in her collection so much is because they have been known to transmit viruses. Over-the-top behaviour? Perhaps. But at least we haven't been wiped out by any virus like so many other orchid collections over the years.

**That Woman**, what a menace. Luckily she is going on holidays soon so we can have some well-deserved respite. We hope you never make any of these same mistakes with your own orchids. If you do, at least don't publicly admit it--to do so can be very embarrassing.



Figure 1 dehydration





Figure 2 obesity



Figure 3 sunburn

