



Orchids Outside the Pot

by Sue Bottom, sbottom15@hotmail.com

Sometimes cattleyas get away from you. It is a bulb or two out of the pot but that newest growth has a flower sheath and you do not want to disrupt the blooming cycle. Then you get busy with something else and before you know it, the plant is growing along the outside of the pot. You know how much damage you'll do to the root system if you try to separate the plant from the pot and you don't really want to break the pot... so now what can you do?



1. This *Rl. digbyana* grows mostly on the outside of the pot and usually has 12 to 14 blooms in the spring.

C. violacea and *C. walkeriana* are good candidates for growing on the outside of the pot.

You have many choices, but the easiest thing is just leave it alone. Let it grow out of the pot if that is what it wants to do. As long as the media inside the pot is not decayed or a threat to those roots, let the plant grow and attach its roots to the outside of the pot. Often you can use a double wire hanger and hang the plant to keep it from becoming unmanageable and spilling out over your bench. You end up with a plant growing as a mount on the outside of the pot. Some plants are better suited to growing outside the pot than others. The plant must have a strong bulb and flower stem to support the flowers because staking them is problematic. The *Brassavolas*, *Rhyncholaelias* and smallish, crawling Cattleyas like *C. aelandiae*, *C. schilleriana*,



2. This Ctt. (Lc.) Acker's Spotlight 'Pink Jewel' HCC/AOS blooms three or four times each year. It is a vigorous grower than has enough substance to present itself and its flowers well with no staking.



3. The roots are happily attached to the outside of the clay pot that is hanging from a two-wire hanger for stability. It has been growing this way for more than three years. But someday...



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4. This bifoliate seems to be having an identity crisis, blooming as if it were a Stanhopea.

Sometimes you can take a plant overgrowing its pot and drop it in a large wire basket. As long as the roots are growing well and the media is not decaying or becoming too salty, there is no reason to repot the plant and force it to have to recover from the trauma of transplant shock. It may not be the most attractive way to present the plant, but it will grow and bloom in the basket and the foliage and flowers will partially hide the basket.



5. The Rby. (Blc.) Golden Tang overgrew the two-wire hanger, so it was dropped in a wire basket and continued to grow outside the pot.

If hanging space is limited, you can also drop a pot in a larger pot to stabilize it. This works particularly well for bifoliate cattleyas that resent repotting unless the new roots are just starting to emerge from the plant. If the rhizome has started growing along the outside of the pot, simply choose a large enough pot and tilt the pot containing the plant so it is stable in the pot.

Dropping an overgrown plant into a larger pot is an easy way to solve a short-term repotting problem, but it is also a “pay me now or pay me later” situation. You are trading off an hour or so of hard labor removing the overgrown plant from the pot and resituating it in its new home for a more difficult repotting experience a year or three from now. The more overgrown the pot, the more likely the inevitable repotting will require radical surgery.



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If your goal is to grow a specimen plant or you have a plant that is finicky about repotting, emulating the Russian matryoshka doll is one alternative.



6. This unifoliate C. River City x Rlc. (Blc.) Nacouche has earned its bench space. It throws off multiple leads and has fragrant blooms from each.



7. The plant has outgrown the second pot. It could be dropped into a third pot, but sometimes you just have to break down and carve up the plant.



8. The roots grow happily in the space between the two clay pots, maybe even better than they grow in the medium inside the first pot. What does that tell you?

There is really no limit to how many times you can drop a smaller pot into a larger pot as long as the roots inside the older pot are not compromised. The approach works best for a plant growing in multiple directions that fills the pots evenly, rather than one that is growing in one direction along the rhizome. Of course, the day will come that you either run out of pots or out of bench space and then you'll have some decisions to make.

Cattleya connoisseur and hybridizer Keith Davis offers a practical approach for repotting bifoliate cattleyas that often sulk after their roots are disturbed:

Here is the most fool-proof way to propagate difficult and rare bifoliate. This can be done any time, but just so happens that new roots are poking out and a new eye is swelling. In a couple of years when the 5 in pot fills completely with roots, it can be cut loose and will be totally established with no stress or worry about losing it.

I wet the aerial roots until they are saturated, then sit down and very carefully loosen them from the mother plant's pot outside edge. At that point, I can very carefully slide the kid's pot upwards with the roots going into the pot. Being saturated, they can bend and not break. Once the new pot is all the way up to the bottom of oldest mature bulb (in this case, one lead that is blooming), then I tie it in place by melting holes in the plastic pot with a wire and running twist tie through the holes and around the appropriate bulbs so that it is held up.

If I put in any mix in the new pot, as with this one, I fill the bottom with broken peanuts, not whole ones, then add a very airy mix part way up. Once I see old roots branching and new roots reaching down into the pot about 2 inches, then I can fill the pot with mix.



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9. Keith Davis has an almost foolproof way of propagating the difficult to repot bifoliate, as with this blooming *C. leopoldii* var. *alba*.



10. Keith attaches the next generation's pot to the mother's pot using twist ties to hold them together and at the proper elevation.

photos courtesy of Keith Davis

After 19 months, there are 3 large mature growths and a new growth just starting. As the roots grew down into the 5 in (13 cm) pot over time, I slowly added cypress mulch that had been sifted through a ¼ inch (0.6 cm) hardware screen of all the fine particles. During the last 6 months, the pot was filled. The pot is overflowing with roots, even out the bottom holes.

To separate, the twist tie is taken loose from the nurse pot. Clippers are sterilized with my "hell in a bottle" torch until scalding hot. While still hot, the "cord" is cut. Hot clippers are sterile and kill spores that would be pushed into the cut areas. Cold sterile blades can push spores into the cut and cause infections that could ultimately be fatal.

The cut is dusted with powdered Banrot using a soft artist's brush. Both the mother plant and "baby" are treated this way. Many alternative products can be used, but Banrot seems to be extremely effective. My bag is more than 20 years old and not yet half gone. I have never had a cut get infected using this and the hot clippers. When the cut is made, you should hear a "sizzle" and see steam.

When it is time for mother and child to part ways, the new division is fully established with its own mature root system and will not stress at all. The eye on the mother plant closest to the cut will likely sprout in a matter of days. Both plants should make full sized growths and bloom at a mature plant's potential. If this procedure had not been used but rather the new growth just cut off and potted, the new growths on the division would likely be smaller than the old growths for



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several years. There would also be a good chance that the plant may go into shock and never recover. Over-the-pot, no shock, no stress... just be patient.



11. After 19 months, there are 3 large mature growths and a new growth just starting (pencil point). As the roots grew down into the pot over time, sifted cypress mulch was added to the pot.



12. The pot was tied up with twist tie to the mother pot. The nurse pot is overflowing with roots, even out the bottom holes.



13. To separate the plants, hot clippers are used to cut the "cord". When the cut is made, you should hear a "sizzle" and see steam. Hot clippers prevent fungal spores from being pushed into the cut areas.



14. The cut is dusted with powdered Banrot using a soft artist's brush. Both the mother plant and "baby" are treated this way. Notice how the hot clippers actually melted the upper part of the pot.



15. The new division is fully established with its own mature root system and will not stress at all.

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Your repotting skills improve with each year you grow orchids. It can be very intimidating in the beginning, but you learn something with each orchid you repot. As you watch the plant grow into its new home over the next few years, you can tell when your approach worked or a different approach might have been better. Try some of these alternatives to conventional repotting techniques, particularly for those orchids that resent their roots being disturbed.