

Caring for the roots of the *Clivia* plant

The article in *Clivia News* Vol.26.2 of 2017 by Dr. Lena van der Merwe about “Take good care of the roots of the *Clivia* plant” is to my mind the most valuable contribution to all *Clivia* lovers during the past 20 years made by any person. With this huge wake-up call we all know now why the Chinese growers are decades ahead of us, and we might never be able to bridge the gap?

So far I am amazed that the *Clivia News* letter box is not flooded with contributions of members sharing their experiences about this important matter?

Harold Koopowitz wrote in his book “*Clivias*” on page 101+: “The most important needs are the correct amount of sunlight, soil aeration and adequate drainage. The latter two parameters are interconnected. If a deep container is needed for land- or hardscape purposes, then part of the depth of the pot can be filled with broken crocks, Styrofoam chunks, or gravel (first make sure that there is sufficient drainage at the bottom of the pot). The so-called Styrofoam peanuts are excellent for drainage and plant roots seem to like them, but one should avoid concave Styrofoam chips or other shapes with indentations where water can accumulate.”

On page 102 he wrote: “*Clivia* will succeed in a variety of soil types provided they are well drained and have sufficient organic matter. Many of the currently available soil mixes used in pots have little sand or inorganic matter incorporated into them, and after a year or two, the soil level in the container will start to drop and the plants will sink down in the pot, spoiling the effect. To maintain the soil level, at least half of the volume of potting soil should



Lovely mix after 15 years



Mix close up

be gravel, pumice, coarse sand or small chunks of lava rock about 3/8 inch (1 cm) in diameter.”

Take note that he does not mention any bark chips. I will never use bark chips in my growing mix, because you never know whether they are

well composted.

In our house we have an inner court with eight large cement pots containing 55 mature *Clivia* plants.

This area has an open roof and it normally gets quite hot and wet (from rain) and is therefore very prone to mealie bug, because of the lack of air flow.

Lena told me that I need to check the roots of all the plants in these pots, after taking care of the mealie bug, “because they show signs on the leaves of root-stress”.



Not any healthy roots



Out of the cement pot



Plants before re-potting

To me, apart from the occasional dry leaf tips the other leaves did not look too bad. Please see photo when they flowered in September, 2017. Before I started to replant them, I knew that they had been in the same growing mix for longer than ten years. When uprooting them, on January 18, 2018, I found that they were all planted on March 15, 2003 in my home made mix. (Info I got from the plastic markers that I submerged inside the mix).

So to the day the 55 plants were in the same mix for 14 years 10 months and 3 days!!!

The growing mix was a bigger shock to me than the condition of the roots and their tips. The whole block of mix was like Lena indicated

“a block of very fine concrete” with hundreds of dead *Clivia* roots. Clearly a matter of: “What is left in the mix or what is short in the mix; the plant’s roots do not even want to touch it and thus try to avoid it completely!”

We watered the pots the day before repotting and that is why the growing mix shows a solid block and not dry fine sand, as in Lena’s photos. At least, it absorbed the water well.

Amazingly no earthworms were found in any of the pots. Looks like they died off due to a lack of oxygen too!

The roots of all the plants chose to sit on top of the mix and some over the edge of the pot. Please see the photos.



Rooi Kleipot '17



Roots on top of mix clearing having huge oxygen problems.



The mix 14 years later

Maybe I am biased, but to me their roots looked a bit better than the roots in Lena's photos.

What I saw was that the roots "tried to avoid contact" with the growing mix as far as possible.

To avoid this situation in future, I will be using coarse crusher sand in my growing mix.

What I was thankful for was that my plants had survived so well in the same mix for nearly 15 years. I also feel that my home made mix is near perfect, but not for 15 years!

I do not feed my *Clivia*, because I know that all the nutrition they need is in my planting mix.

Kind Regards

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