

Rhodies 101: How to take rhododendron cuttings

Harold W. Fearing - www.fearing.ca

I. Why cuttings:

- Cuttings provide a vegetative propagation of the plant, so you get a new plant with exactly the same DNA as the parent plant. This method can be used to propagate a particularly nice clone of a species, for example. It must be used to propagate hybrids as hybrids do not come true from seeds.

II. What are cuttings and when do you take them?

- A cutting is just a 10-20 cm snip off the end of a rhododendron branch. They should be taken from this year's shoots, ideally with a leaf bud at the tip rather than a flower bud. It seems to work best if you take them from younger, rapidly growing plants.
- The stem should still be green rather than brown. However it shouldn't be too soft. It should break with a snap, rather than just bending.
- I usually take cuttings of evergreen rhododendrons anytime from late September to late November. However others have told me that they have had success with particularly hard to propagate varieties by taking cuttings as late as January. Cuttings of deciduous azaleas need to be taken in early summer, just after the leaves come out. Apparently evergreen azalea cuttings work well also when taken in early summer, but I have never done this myself.

III. Preparing the cuttings:

- First remove all but the top 2-4 leaves. If the leaves are more than a few cm long you should cut off the tips. This is easily done by grasping the leaves as a bunch, folded up from the stem, and cutting off the end of the bunch either with a scissors or a razor knife. The purpose of this is in part to reduce the space taken up, so you can get more cuttings in a given area. More importantly it reduces the leaf surface that will transpire moisture, moisture which is hard for the cutting to replace as it doesn't have any roots.
- Next you need to wound the bottom of the stem to expose the layer below the outer bark as it is this layer which generates the new roots. To do this just cut a 2 cm sliver off the side of the stem at the bottom, maybe off of both sides. Alternatively you can put the cutting on a board and cut the stem end at a long diagonal.
- Finally dip the bottom end of the cutting in rooting compound. I use a powder – Stim Root #3 – but there are also liquid versions. If you use the powder tap the excess off.

IV. Planting media:

- I use peat (the ordinary Sunshine baled garden peat) and perlite in a 50-50 mix, sometimes maybe with a bit of extra perlite. It must be wetted thoroughly. Using hot water works best, but then you must let the mixture cool.
- Unlike for seeds, I do not sterilize the mixture. The cuttings aren't sterile. But you should use clean pots, a clean knife, etc. and keep things as clean as possible.

V. Planting:

- Smooth off the surface of the planting mixture
- Simply stick the cutting into the mixture and firm the soil around it.
- Spray with a mist of water, to keep the leaves wet.

VI. Aftercare:

- There are a variety of ways of taking care of the cuttings until they develop roots, and I am not sure what is best. The principle is that: a) You want the roots to be warm, so that they form and grow quickly; b) You want the top and leaves to be cool so that they don't rot; and c) You want the leaves kept moist so that they don't transpire moisture and dry out before the roots can form.
- I have a small unheated glass greenhouse and have built a heat bench there – simply a bench with an electric heating cable, covered with a few cm of soil. A thermostat keeps the soil temperature at about 70 degrees (21 degrees C). The heat from the bench is enough to keep the air temperature above freezing during the winter, but not by much. The pots are simply set on the bench and a misting system goes every hour or so to keep the leaves from drying out.

- On a smaller scale one should be able to close the pot with the cutting up in a plastic bag, or perhaps cover it with a plastic cover to keep the humidity high. If you do this you will have to open the bag periodically to provide fresh air and must watch carefully that rot or mold does not get started. You may need to use some sort of fungicide. Put the pot in a place with bright light, but not direct sunlight. One can buy small heating pads intended for starting seeds, and using one of those in a cool basement under lights should work. In the past when I have tried this approach in the house – but without a heating pad, and with the tops of the cuttings at room temperature - it has failed because the cuttings have rotted or molded, so I think keeping the top of the cuttings cool and watching carefully for mold and rot are crucial.

VII. Transplanting:

- By spring the cuttings should have rooted if they are going to. You can check this by tipping the root ball out of the pot and examining it, or by gently tugging on the cutting. One can fertilize with weak fertilizer, or with the special transplant fertilizer, at this time. Once the new growth starts, I transplant the rooted cuttings into one gallon pots which go into a greenhouse and eventually into larger pots and outside.
- Some rhodos also just don't start very well from cuttings and you have to graft them. I have had the best luck with cuttings of the medium sized lepidotes such as *augustinii* or *rigidum* and have had difficulties with varieties, mainly *elepidotes*, with large, heavy stems, like *fortunei*.

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