

RSBG's Secret: Crafting the Ultimate Potting Media

By RSBG Nursery Manager & Assistant Curator, Atsuko Gibson

Rhododendron Potting Media

The Rhododendron Species Botanical Garden is always on the lookout for the best potting media for species rhododendrons. After conducting numerous experiments with various soil types and ratios, we've settled on our current mix: 30% small lava rock and 70% fine bark. Visitors are often surprised by how coarse our media is, and the fact that we don't use "soil" (which includes mineral particles like sand, silt, or clay) when potting rhododendrons. Many rhododendron growers in California and Oregon use shredded bark, which provides a finer substance for roots to anchor into, but we face challenges sourcing it here in Washington.



30% lava rock | 70% fine bark



Lava rock & fine bark mix



Peat-based soil



***Vireya* potting mix**

The addition of lava rock helps maintain long-term porosity, as it doesn't break down as quickly as the organic material. This is crucial because many alpine and epiphytic species can be slow to establish a solid root system. Tiny one-inch seedlings are also planted in this bark/lava rock mix, and they thrive! Since rhododendrons are fibrous-rooted plants, they require excellent drainage—and our custom-made media provides just that.

I've also experimented with adding compost to the media, but this resulted in the mix retaining too much moisture. Store-bought "potting soil" is often peat-based, which can stay too wet when used alone. The problem with overly wet media is that plants don't need to "make an effort" to find water, so the roots won't grow deep into the container. In my experiment, plants in peat-based media only developed roots in the upper portion of the container.

For *Vireya* (tropical rhododendrons), we make the potting media even coarser by adding orchid bark. *Vireyas* are epiphytes in the wild, meaning they dislike being over-potted or in media that stays too wet. The orchid bark improves drainage and prevents compaction. A small handful of sphagnum moss can also help retain moisture, which is especially useful when planting newly rooted cuttings or small seedlings.

If you've had success with other types of potting media, please let us know! We're always looking for ways to improve.