

# Vireya Rhododendron Cultivation

In general, Vireya are tough plants that can thrive in a variety of places as long as a few simple things are done to ensure their needs. Drainage/watering, potting media, frost protection, light and fertilization are the important topics covered here. Details and images of planting a Vireya are shown on our web site.

## Natural environment

Vireya are found naturally in subtropical and tropical locations of Asia and the the western Pacific, such as Papua New Guinea, Java and Borneo, extending to Southeast Asia, the Philippines and Taiwan. Vireya can grow either as epiphytes or terrestrially. Elevations range from nearly sea level to several thousand feet. While nearly every species and hybrid can not tolerate a temperature below 32° F (0° C), a few promising hybrids have survived 25° F (-4° C). The terrestrial forms are often "edge of the forest" or understory plants but can frequently be found in the open, especially in the cloudy and misty higher elevations. Epiphytes grow high in trees or tucked into tree bark, the tops of fallen logs or even rocks having an organic top coat. Epiphytes usually enjoy a regular daily rain shower to moisten and sustain their relatively exposed roots. In both cases Vireya roots, like all rhododendrons, occupy the top surface of their planting medium forming wider mats as they grow older.

## Cultivation

### Watering and Drainage

This is probably the most critical cultivation tip. These are hardy plants, as long as you pay attention to their drainage and watering. Vireya love being watered - we receive 140 inches (3.6m) of rain per year! However, they do not like soggy, boggy conditions for their roots. Think orchids. Whether in the ground or in pots, ensure that there is excellent drainage.

### Medium

In containers we use a combination of 1/4 inch (0.6cm) coconut chips and #3 perlite in a 75/25 ratio. Other growers have great success with combinations of pine or fir bark, perlite and coarse peat moss. The medium should be coarse but retain some moisture without sogginess, allowing air to percolate among the bits of medium. If the medium, and thus the roots, get water-logged, they will not survive, typically due to phytophthora fungal infection. Nonetheless Vireya, being largely epiphytic in nature, are tolerant of dry conditions once established.

### Planting

In the ground Vireya, like all rhododendrons, have a flat, outward-spreading and very fibrous root system. The best advice for planting out is to plant on top of the ground rather than in the soil. After removing the sod around the planting location, place the plant in small depression on top of a layer of very well-draining medium, preferably that does not break down. We use small cinder here in Hawaii. In our wetter areas we create a platform of small rocks and spread small cinder over that. Support the plant by packing the roots with more of the well-draining medium. Finally cover the packed medium with an organic mulch, up to an inch (2cm) thick. This stabilizes moisture in the roots, particularly on drier days. Support with a stake may be necessary in windy areas. Locally we place heavy chunks of our plentiful lava rock on the mulch over the root ball for support. Composted wood chips from our land clearing for the Vireya display garden provide our mulch, but the commonly available fir bark and many other materials will work also. The mulch allows air to reach the roots and retains some moisture so that the well-draining material does not dry out too quickly.

Standard gardening recommendations apply here also. Use a mature (rotted) compost rather than fresh material. If it's too fine, soggy or broken down, do not use it. Keep a low proportion of any compost that has a high content of fertilizer salts such as chicken manure. Rhododendrons prefer somewhat acid soils, so amend as necessary. This is usually not a concern in the naturally rainy regions. If the water supply

contains minerals and salts (typically locales near low rainfall areas), they must be removed before applying to rhododendrons. Water when the medium gets just barely damp. While established plants can handle drought well, if plants get over-dry (good sign is a featherweight container) pay good attention to re-hydrating the medium. Pouring water on top may not wet dry medium toward the bottom of the container. Soaking the container in a bucket of water may be better. Here in eastern Hawaii we get showers most days, so little watering is needed outside. However, we are always aware of dry periods when potted or even landscape plants can get stressed by drying out too much.

Vireya usually grow naturally in humid tropical and semi-tropical areas, so if your area has low humidity, misting or a daily watering (into your well-drained planting medium!) can greatly improve the plant's ability to survive. However, if overwintering in a cool house reduce watering when the temperatures are relatively low and allow the top of the medium to dry.

## Light

Without adequate light, your Vireya will not achieve their optimum flowering and growth potential. In nature, they are used to nearly balanced amounts of light and darkness, and, as noted, tend to be "edge of the forest" plants. In that situation they get ample light early or late in the day, but have some protection from the more harsh and hottest portions of the midday. In our experience, people have often provided more shade than is optimum, and we see the plants reaching for the sun. In our frequently cloudy environment we find a number of Vireya varieties will happily tolerate full sun as long as they have the right mix of water and humidity. Befitting the genetic complexity of the rhododendron genus, there are, on the other hand, some varieties that are sensitive to too much sun. Even in these cases leaf burn from excess sun is often not terminal, but the plant doesn't appear as lovely as it might. Large-leaved varieties tend to be more susceptible to this. Dappled shade during the very hottest time of the day is close to an ideal environment.

## Containers

We grow our young Vireya in what are called azalea pots – slightly smaller (6x4.5", 15.5x11.5 cm) than the common American gallon nursery container (6x7", 15.5x18 cm). While some of our Vireya have been happy to use the entire depth of a standard gallon container, this is generally not so. Do not over pot -- they don't like to have too much open space around their roots. Do not plant too deep -- the top of the root ball should be at or above soil level, but can have a light airy mulch on top.

Generally, clay pots lose moisture faster than plastic and must be watched. Common black plastic pots can concentrate heat on the roots. A good way to use potted plants is to sink them into the ground in the summer to keep the roots cooler. Again, watch out for drainage in what you heap around them!

## Pinching and dead-heading

Pinching of new growing tips will help your Vireya branch out, promote a bushier habit. Since each new stem has the potential of a flower bud, more branches equal more flowers! More severe pruning can be done to mature plants, but if you pinch well, it should be needed rarely. Dead-heading (removal of the spent truss) is important because it lets the plant get a good rest after the stress of blooming. It can put its energy into new growth rather than seed production.

## Fertilization

Like all Rhododendrons, Vireya are sensitive to excessive fertilization. If your fertilizer package does not include specific directions for them, start with roughly 1/2 of the recommended amounts for woody shrubs. Best fertilizers are timed release -- either Osmocote (low rainfall areas) or Nutricote (high rainfall areas). We apply them at 2-3 month intervals in our rainy environment. Of course, the best practice is to examine your plants frequently, looking for leaves that are showing signs of nutrient stress as the key to when to re-apply fertilizer.