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Vascular Adaptation of *Rhododendron* Species to Safety and Its Implication to Root, Leaf and Reproductive Variation

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Message from the Guest Editors

Rhododendron is a monophyletic and diverse genus containing species that grow in arctic to tropical and sea level to alpine habitats. Growth forms vary from ground cover to canopy tree and epiphytes. Leaf size varies from less than 1 cm² to 2.5 m², some of which are deciduous and many of which are evergreen. Yet, vascular trait variation is constrained relativelv to small vessels. The characteristically small vessels suggest adaptation against freeze-induced damage and promotes safety over efficiency. Vascular safety is adaptive for temperate and alpine shrubs, but hydraulic flow is constrained, limiting growth and promoting drought. The goal of this Special Issue is to increase the understanding of the *Rhododendron* vascular system and the mechanisms by which important adaptive variation in root dynamics, leaf physiology, leaf form, growth form, and reproductive traits can occur when associated with an inflexible hydraulic system.









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Message from the Editor-in-Chief

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