

(404) Natural Habitat of *Rhododendron delavayi* Franch

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Rhododendron delavayi Franch is a well-known ornamental plant, which is distributed southwestern China and mainly grows at altitudes of 1450–1800 m with abundant moisture and mild winter. It is a dominant species for *Rhododendron* communities in Bailidujuan Forest Park of Guizhou. To better domesticate and effectively breed this species, its natural habitat should be well understood. In its pure stand, number of plants increased as the individual basal diameter decreased, which indicated a progressive succession to its climax. Soil pH ranged from 4.3–5.1. *Rhododendron delavayi* could be found at mix communities with pH range of 3.7 to 5.6, but disappeared if pH was below or above this range. Litter layers were 7–11 cm. The top 1 to 2 cm was new litter and the rest was semi-composted or decomposed litter. Water absorption velocity was significantly correlated to the soak time. Semi-composted litter had much better water holding capacity than new and decomposed litter. Under *Rhododendron delavayi* communities, semi-composted litter layer was 7–9 cm thick, which indicated this species grew at high moist conditions. In our landscape, *Rhododendron delavayi* should be cultivated at pH about 4.5 and heavily mulched for retaining moisture. Further breeding work should focus on improving its drought tolerance and pH adaptation range.

Note: Donglin Zhang is also a guest professor at Central South University of Forestry and Technology, Changsha, Hunan, China.