

(340) Natural Regeneration of *Rhododendron decorum* Franch.

Xuejuan Chen*

Beijing Forestry University, Beijing, China; janeta1018@163.com

Qixiang Zhang

Beijing Forestry University, Beijing, China; zqx@bjfu.edu.cn

Weijie Li

Guizhou Academy of Sciences, Guiyang, China; chenxunke1956@163.com

Xun Chen

Guizhou Academy of Sciences, Guiyang, China; chenxunke1956@163.com

Donglin Zhang

University of Maine, Orono, ME; donglin@maine.edu

In One Hundred Rhododendron Forest, the dabai rhodo (*Rhododendron decorum* Franch.) community is endangered because of human disturbance. To better maintain and re-establish its wild populations, four 20 × 20 m² surveying sites were investigated to determine the natural regeneration ability of dabai rhodo. The results indicate that natural regeneration was in much better progress in the last 3 years. Among 107 small trees and shrubs at all four sites, 99 (93%) were *R. decorum*. Seedlings with diameters at the ground level of 0.11–1.0 cm accounted for 67 plants or 68% of the total number of dabai rhodo. Eleven plants were fully established mother trees, with diameters of 10 cm or bigger, and the biggest one reached 25 cm in diameter at its ground level. However, for the diameter of 3–10 cm, only one plant (5.1 cm) was left. The canopy of the *R. decorum* community could be distinguished into two layers. Eleven old plants were more than 2 m high, while seedlings and small plants were about 1 m tall. Obviously, dabai community structures were not rational for its natural regeneration. Proper management, such as thinning of some seedlings and canopy areas, should improve the growth and establishment of the new generations. *Rhododendron decorum* is a popular landscape plant and collection of wild plants for commercial uses should be restricted.