Turkish Journal of Botany

Turkish Journal

The Effect of Seed Mass on Germination, Seedling Survival and Growth in Prunus jenkinsii Hook.f. & Thoms.

of

Krishna UPADHAYA¹, Harendra Nath PANDEY², Pynsakhiat S. LAW²

Botany

¹Department of Basic and Social Sciences School of Technology, North-Eastern Hill University, Shillong 793 022 - INDIA

²Department of Botany, School of Life Sciences North-Eastern Hill University, Shillong 793 022 - INDIA

Keywords Authors

Abstract: The effect of seed mass on germination, seedling survival and growth was investigated in Prunus jenkinsii Hook.f. & Thoms. (Rosaceae), an evergreen tree species. Seed mass varied from a minimum of 0.5 g to a maximum of 2.72 g. Seed mass had a significant effect on the percentage of seeds that germinated: 28%, 41% and 42%, respectively, of light- (1.5 g), intermediate- (> 1.5 to 2 g) and heavy-weight (> 2 g) seeds germinated. After 1 year of germination, the seedlings that arose from heavy-, intermediate- and light-weight seeds showed 80%, 63% and 42% survival, respectively. Seedling vigour, expressed in terms of shoot and root length, number of leaves, leaf area and dry matter yield, was significantly affected by seed mass. Seedlings that emerged from heavy seeds showed better growth and produced heavier seedlings as compared to intermediate- and light-weight seed categories.



Key Words: Seed mass, germination, seedling survival, seedling vigour

bot@tubitak.gov.tr

Page Turk I Pot 24 (2007) 24 26

Scientific Journals Home
Page

Turk. J. Bot., **31**, (2007), 31-36.

Full text: pdf

Other articles published in the same issue: Turk. J. Bot., vol.31, iss.1.