

THE EFFECTS OF SOIL COMPOSITION AND SHADING ON THE RATE OF SURVIVAL AND GROWTH OF SEEDLING (*Pygeum arboreum* Endl) SPECIES IN THE NURSERY

Nguyen Cong Hoan, Dang Kim Vui

Summary

The research was conducted in the nursery of Thai Nguyen University of Agriculture and Forestry, the research has evaluated the effect of soil composition and shading on the rate of survival and growth (D_{00} , H_{vn}) and leaves of *Pygeum arboreum* seedling. The experiment was designed by a method of randomized complete block with 3 replications for two separate factors: shading with 4 levels (control, 25%, 50% and 75%) and the 6 different compositions of container medium. The result showed that shading had significant effect on survival rate (%), the collar diameter (D_{00}), and top height (H_{vn}) of the seedlings and varied with the age of seedlings in nursery. The optimum shading level was at 75% in the period of 4 months, and at 50% in the period of 6 to 9 months. The factor composition of the container medium in this research had no significant influence on the survival rate of the seedlings, but significantly affected on the collar diameter and height of the seedling. The best medium composition was made of 95% of top soil and 5% of mixed humus and microorganism fertilizer in terms of container volume percentage.

Key words: *Pygeum arboreum* Endl species, nursery, seedling, shading, soil composition.