**Turkish Journal** 

of

**Agriculture and Forestry** 





agric@tubitak.gov.tr

Scientific Journals Home Page

## Turkish Journal of Agriculture and Forestry

Influence of Stem Height on Internal Morphological Properties of Oriental Spruce [Picea orientalis (L.) Link.] Wood

Hamiyet ŞAHİN, Nurgül AY Karadeniz Teknik Üniversitesi, Orman Fakültesi, Orman Endüstri Mühendisliği Bölümü, Trabzon-TÜRKİYE

Abstract: In this study, the influence of stem height on the internal morphological properties of the Oriental spruce [Picea orientalis (L.) Link.] were investigated. Sample trees of 36-44 cm in diameter and 18-20 m in length were supplied from the Maçka - Karahava region. The samples were removed from trees with stems 2,7 and 12 m above the ground. The dimensions and number of tracheids and rays per unit area, the diameter of resin canals, bordered pits, and pits on interfaces of the samples were measured. The results showed that the cell wall thickness increased and the diameter of bordered pits and number of ray cells per unit area decreased with increasing stem height. The length and diameter of the tracheids increased in samples with stems up to 7 m in height, then slighty decreased. On the other hand, the number of tracheids per unit area decreased in samples with stems up to 7 m in height, then slighty increased.

Turk. J. Agric. For., 23, (1999), 375-382.

Full text: pdf

Other articles published in the same issue: Turk. J. Agric. For., vol. 23, iss. EK2.