OP228 Chemical Characterization of Wild Cherry (*Cerasus avium* L.) of Wood and Bark

Hasan ÖZDEMİR¹, Cihangir DOĞAN²

¹Duzce University, Faculty of Forestry, Forest Industry Engineering

²Ministry of Forestry, Forest Industry Engineer
hozdemir@duzce.edu.tr

Aim of Study: In this study, chemical characterization of wood and bark of Wild Cherry (*Cerasus avium* L.) tree which is naturally distributed in Turkey, and the tannins obtained from their barks have been investigated in the leather industry.

Material and Methods: For this purpose basic chemical analyzes were applied to the wood and bark of the tree, In addition, tannin yield experiments were carried out in the barks.

Results: As a result of basic chemical analysis applied to wood and barks, ash content in heartwood % 0,41, in sapwood %0,49 and in bark %2,26. Determination of the amount of extractive substances and the amount of hot water solubility in heartwood 2.73. in sapwood 4,34 and in bark 16,19. Amount of %1 NaOH solubility in heartwood % 22,92, in sapwood % 22.44 and in bark % 48.24. When the solubility of alcohol cyclohexane-alcohol is examined in bark % 7,03 and in sapwood % 3,45. Solubility of alcohol content in bark %2,73 in sapwood % 0,51 and in heartwood %1,07. Amount of residual lignin in bark % 30,04, in sapwood % 19,96 and in heartwood % 20,37. Amount of soluble lignin in bark %1,22, in sapwood % 1,29 and in heartwood % 2,04. When the amount of monomer sugar is examined, glucose in heartwood % 39,11, in sapwood % 37,78 and in bark % 27,89; xylose in heartwood % 23,83, in sapwood % 23,56 and in bark % 11,17; galactose in heartwood % 0,08, in sapwood % 0,03 in bark %0,44; mannose+arabinose in heartwood % 4,61, in sapwood % 5,11 and in bark % 4,72. Tannins obtained from the bark with various extraction methods were applied to leather. The changes in the thickness and color of the tannins applied were investigated. The results of the chemical analysis obtained as a result of the study were found to be consistent with the values in the literature. As a result of application of the obtained tannin, the effect on the thickness and color was observed and the increase in thickness increased shoemaking, accessory and bag to which visual effects were requested. It is thought to be suitable for production.

Keywords: Cerasus avium L. ,Wood, Bark, Tannin, Leather.