Poster presentation

Assessment of bark debarking using axe

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Abstract: In Turkey, the work stages of timber production involve cutting and felling, delimbing, bucking, debarking, hauling, loading, transport and stacking. The felled trees are, initially, bucking and then debarking in cutting sites. Because the barked trees, which remain in stands, may face with the high risk of beetle damage. Debarking activities are generally performed by villagers using axe or chainsaw mounted debarking tool. In this study, we evaluate productivity of debarking works using the axe, considering Brutian Pine (*Pinus brutia* Ten.) and Lebanon cedar (*Cedrus libani* A. Rich.) timber. The study performed in Brutian Pine and Lebanon Cedar stands where locate in the border of Andırın and Çınarpınar Forest Enterprise Chief of Kahramanmaras Forest Enterprise Directorate in Kahramanmaras Regional Forestry Directorate. To investigate of productivity of axe using for debarking was carried out with time study methods using chronometer. Beside diameter, length and bark thickness of timber were measured. As a result of obtained measurements, mean diameter, length and bark thickness of timbers are figured out as; 18,53 cm, 3.04 m and 0.57 cm of Brutian Pine and 27.123 cm, 2.05 m and 2.62 cm of Lebanon Cedar. The mean volume and productivity are determined as 0.11 m^3 and 1.25 m^3/hour of Brutian Pine, and 0.08 m^3 and 0.86 m^3/hour of Lebanon Cedar, respectively. During the timber debarking, workers spend more time of cedar debarking than pine due to knots on cedar. Hence, which caused low mean productivity compare to pine debarking.

Keywords: Debarking activity, Chainsaw mounted debarking tool, Debarking productivity, Brutian Pine (*Pinus brutia* Ten.), Lebanon cedar (*Cedrus libani* A. Rich.)