Comparison of noise exposure levels on Chainsawers in motor-manual tree felling

(Case Study: Hyrcanian Forest)

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Abstract

One of the problems related to using forest machines is sound intensity. Chainsaw is an important machine for tree felling in our study area, the Hyrcanian forests of Iran. The aim of this study was to measure and compare the sound level and exposure time of the forest workers in this region. In this study, sound intensity of chainsaw is measured every 10 seconds in under cut and every 15 seconds in back cut stages. Results shows that the workers were faced to the sounds upper than 85dB and time duration of exposure with noise of chain saw in tree felling was upper than the allowable limitation and standard. Comparison of two workers, considering working time duration and the sound level, with allowable values in corresponding diameter, shown between workers are significant difference, which are related to the experience and working method.

Keyword: Chain saw, noise level, tree felling**,** under cut, back cut.