Damage to understory trees caused by thinning of overstoried trees in a multi-storied stand

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This study is to determine a more suitable type of multi-storied stand forest to reduce the number of understory trees damaged in multi-storied Karamatu-Hinoki stands. Overstoried trees were thinned in ordinary multi-storied stands, line multi-storied stands and alternate strip-clearcutting stands respectively. We found 39.3 and 27.8% of understoried trees were damaged in ordinary and line multi-storied stands respectively, as opposed to just 0.7% of understoried trees in alternate strip-clearcutting stand incurring damage. Thus the forest type of alternate strip-clear cutting stand resulted in the least damage to understoried trees during the thinning of overstoried trees.

Keywords: multi-storied stands, thinning of overstoried trees, damaged understory trees