

## Nitrogen Mineralization in Burned Corsican Pine Stands

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This study was carried out to determine the effects of fire on the nitrogen mineralization. The study was conducted in Vezirkopru Forest area of Samsun Province, Turkey. We made measurements of nitrogen mineralization in 80 to 100 years old Corsican pine (*P. nigra*) stands subjected to prescribed burning. Measurements were made between November, 2013 and October, 2014. There was no significant difference between burned and control areas in nitrogen mineralization except total N mineralization in 5-10 cm soil depth. The effect of sampling time on the amount of total N mineralization were found to be significant except NH<sub>4</sub> mineralization in 5-10 cm depth ( $P < 0.05$ ). The effect of the fire intensity on N mineralization was not significant ( $P < 0.05$ ). We found significant slope factor effect in burned sites in N mineralization ( $P < 0.05$ ), but this effect was not significant in the control sites. N mineralization in the sites with 20-30% slope were lower than N min. in the flat areas in the burned sites, but this was opposite in the control sites. The mean total N mineralization in flat sites were 33,3 kg/ha in burned sites and 32,4 kg/ha in control sites. In the areas with slope, mean total N mineralization were 24,9 kg/ha in burned and 41,1 kg/ha in control sites.

**Keywords:** N Mineralization, NH<sub>4</sub>, Fire Intensity, Prescribed Burning.