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PREDICTING CANOPY FUEL CHARACTERISTICS IN *PINUS BRUTIA* TEN., *PINUS NIGRA* ARNOLD AND *PINUS PINASTER* AIT. FORESTS FROM STAND VARIABLES IN NORTH-WESTERN TURKEY

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Abstract

Canopy fuel characteristics play an important role in crown fire behaviour in conifer forests. In this study, the canopy fuel characteristics of Calabrian pine, Anatolian Black pine and Maritime pine stands in Turkey are estimated using forest stand parameters. Sets of equations are fitted to the measured data revealing correlations between canopy fuel characteristics and stand parameters by performing a stepwise multiple regression analysis. At the stand level, the resulting models explain a high percentage of the observed variability. The developed equations can be used by forest and fire managers to estimate canopy fuel characteristics, predict crown-fire behaviour and design fuel treatment projects in Turkey.

Keywords: forest fires, fuel characteristics, regression models, stand variables

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