COMPARISON OF TOP HEIGHT AND DOMINANT HEIGHT WITH TREE VARIABLES AT THE EVEN AGED *Pinus caribaea* (MORELET) PLANTATION AT YAGIRALA

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Top height and dominant heights are confusedly interpret in many countries. The main aim of this study was find the similarity of above two terms and to build some models to predict them.

The study was carried out in Yagirala 25 year old even aged *Pinus caribaea* plantation. Top height and dominant heights were compared with other tree variables. Stratified random sampling without replacement was used to select the sampling unit. Circular plots of 0.05 hectare with slope correction and boundary adjustment were used to obtain the required tree measurements.

Diameter at breast height, total height, lower and upper crown height were measured and basal area and crown depth were calculated. Top height and dominant height were also estimated.

Results indicated that there is a significant difference between top and dominant heights. Also two separate equations to predict these two heights were developed. According to the results initially ten equations were selected. Five equations described the relationship between top and total height while the other five described the relationship between dominant height and total height. Finally the best two equations were selected using coefficient of variation values and the distributions of standard residuals.