

## ABSTRACT

This research focuses on dendroecological study of *Pinus wallichiana* A.B. Jacks of Bhurban reserve forest.

Forest was divided into seven strands and cores from sixty four trees were taken. From each strand ten cores were extracted. Cross dating of every sample was done manually by using a Velmex Measuring System. Some samples showed some signs like scars, wounds, cracks and thin-skinned rings, which can be due to a variety of past disturbance events like earthquakes, landslides, combustion etc. Raw and regular versions of tree ring chronologies of samples were developed. The maximum age of tree observed was 125. Slow radial development (narrow rings) and rapid radial development (wide rings) of samples were also recorded.

Most of the species were more than 50 years of age. Among the many tested species, the biggest age group was of 125 years present in second and fourth strand. Highest growth rate observed was 0.92 in sample PwBMM 8 in first strand of tree of 110 years of age while lowest 0.36 was observed in sample PwBMM 28 in third strand of tree of 58 years of age. While, highest dbh observed was 28.03 in sample PwBMM 50 in fifth strand of tree of 80 years of age and lowest was 11.46 observed in sample PwBMM 16 and 55 of second and sixth strand of tree of 64 and 99 years of age. Positive and negative correlation between dbh and age and dbh and growth rate was observed.