

GROWING STOCK ESTIMATION AND SOIL PHYSIO-CHEMICAL PROPERTIES UNDER TEAK AND SHISHAM PLANTATION OF DEHRADUN, UTTRAKHAND, INDIA

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Abstract: The soils under two Plantations i.e Teak (*Tectona grandis*) and Shisham (*Dalbergia sissoo*) were analysed for physio-chemical properties and growing stock. Soil samples were analyzed for texture, water holding capacity, pH, available potassium, available phosphorus, total nitrogen, organic carbon, electrical conductivity, calcium and magnesium. Average available potassium was maximum (102 ppm) in *Tectona grandis* plantation, whereas it was (32.00ppm) in shisham plantation. Similarly available phosphorus was highest in Teak (18.17ppm) whereas in shisham it was (2.75ppm). Organic carbon and total nitrogen were also maximum under teak plantation. The soil pH under eucalyptus was near neutral, whereas it was slightly acidic in shisham. The average available calcium and magnesium were also higher in teak plantation. The average electrical conductivity in both the plantations was 0.03dsm⁻¹. The maximum growing stock was recorded under Teak. A positive correlation was found between G.S and soil organic matter and organic carbon.

Keywords: Organic matter, Growing stock, Teak, Shisham

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