

# SOIL VEGETATION INTERRELATIONSHIP IN EUCALYPTUS AND SHISHAM PLANTATIONS OF DEHRADUN

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**Abstract:** The soils under two Plantations i.e Eucalyptus (*Eucalyptus globulus*) and Shisham (*Dalbergia sissoo*) were analysed for physio-chemical properties and vegetation analysis. 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 (73.00ppm) in *Eucalyptus globules* plantation, whereas it was (32.00ppm) in shisham plantation. Similarly available phosphorus was highest in Eucalyptus (18.17ppm) whereas in shisham it was (2.75ppm). Organic carbon and total nitrogen were also maximum under eucalyptus 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 eucalyptus plantation. The average electrical conductivity in both the plantations was  $0.03\text{dsm}^{-1}$ . The highest tree density was 733 trees  $\text{ha}^{-1}$  in shisham plantation, declining to 433 trees  $\text{ha}^{-1}$  in eucalyptus plantation.

**Keywords:** Eucalyptus, Nutrients status, Physico-chemical, Soil, Shisham, Vegetation

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