

642. Dadhwal, K.S., Pratap Narain and Meena, P.D. 1994. Nitrogen enrichment of soil by *subabul* in Doon alluvium. *Indian J. Soil Conserv.*, 22(3): 66-70.

Results of a study conducted during 1991-92 at Dehradun to evaluate the effect of age and season on the performance of above and below ground growth of *Leucaena leucocephala* and to have the quantitative nitrogen enrichment through foliage and senescing roots and nodules have been presented. Height, basal diameter and above ground biomass yield of *Leucaena* increased with age but the maximum increment was observed in rainy months. Among below ground parameters, specific root length (SRL), root biomass, soil binding factor (SBF), senescing root biomass and number of root nodules also increased with advancing age of *subabul*. Root biomass was found highly correlated with 'SBF', 'SRL' and shoot biomass. The N content varied from 2.5 to 3.3 per cent in foliage, 1.00 to 1.32 per cent in senescing roots and 2.4 to 5.12 per cent in root nodules from March to Dec., 1992. Nearly 75 per cent N-enrichment to soil was through foliage and the remaining through nodules and senescing roots. An enrichment of 25 kg N/ha through foliage, senescing roots and root nodules was recorded by 62 weeks.