

657. **Grewal, S.S., Juneja, M.L. and Singh, Kehar. 1989.** Growth performance of *Eucalyptus tereticornis* (Smith) on two alluvial soils of northern India. In. Werner D. and Muller, P. (Eds). International Conference on Fast growing and nitrogen fixing trees, Philipps University of Marberg, Federal Republic of Germany, Oct. 08-12, 1989: 118.

The soils in the foothill North India are either uniformly light throughout the profile or are underlain by heavy sub-surface layers. The growth performance of *Eucalyptus tereticornis* (Smith) was studied from 1984-88 in these two soils varying in moisture retention capacity. Following 634 and 582 mm of monsoon rainfall of 1984, the total soil water content in 0-300 cm profile of uniform (US) and two layered soil (TLS) was 495 and 869. *Eucalyptus* attained a mean height of 205, 365 and 570 cm in US and 550, 913 and 1196 cm TLS at 12, 24 and 36 months of age. The basal stem diameter was 2.30, 4.26 and 6.75 cm in US and 4.06, 7.32 and 8.74 cm in TLS at the respective age. The actual air dry leaf, branch and pole biomass at harvest made after 42 months of age was 4.8, 7.5 and 41.7 in US and 14.0, 21.3 and 166.4 t/ha in TLS. The plants in TLS exploited the stored moisture in lower retentive layers by extending deep root system than US. The study indicated much better economics of *Eucalyptus* when grown on TLS which may be identified by soil surveys and allocated to tree farming.