

822. **Srivastva, A.K. 1994.** Alternate land uses for sustained production in semi-arid Vertisols. In: Agroforestry Systems for Degraded Lands, Vol. I, (Eds) Panjab Singh, P.S.Pathak and M.M.Roy, Oxford & IBH, New Delhi: 128-133.

Discusses the results of some alternate land use studies carried out at CSWCRTI, Research Centre, Bellary (Karnataka). It is indicated that incorporation of perennial vegetation relevant to semi-arid Vertisols helped in increasing the biomass production on sustained basis. *Acacia nilotica* and *Leucaena leucocephala* were found promising for fuel and fodder production, being 2.7 t/ha/yr (over 8 years) and 15 t/ha/yr, respectively. The total production of biomass and grain crops converted in terms of sorghum grain equivalent was 1.3 to 3.0 t/ha/yr sge, compared to crop production of 0.6 and 1.67 t/ha/yr sge, respectively. Studies indicated site improvement by way of higher organic carbon content. *Acacia nilotica*, *Leucaena leucocephala*, *Azadirachta indica*, *Eucalyptus* hybrid and *Cenchrus ciliaris* were identified as promising tree and grass species for the region.