

525. **Srivastva, A.K., Verma, B. and Pratap Narain. 1983.** A case study for farm forestry in South Eastern Rajasthan. National Symp. on "Watershed management for increased productivity in red and black soils, CSWCRTI, Research Centre, Bellary, Feb. 06-09, 1983.

Studies on tree crop association under agroforestry were taken up at Kota. Effect of a) *Eucalyptus tereticornis* planted over bunds on greengram, blackgram and sorghum in *kharif* and safflower and *taramira* in *rabi* and b) intercropping in *Leucaena leucocephala* (K-8) with sorghum, pigeonpea + sorghum and pigeonpea + blackgram were studied. Results of two years indicated that under *Eucalyptus* (plantation over bunds) sorghum in *kharif* and *taramira* in *rabi* were suitable, recording only 41 and 88% yield reduction from 0-2 m over 20-30 m away from trees than blackgram, greengram and safflower recording 92, 79 and 99% reduction in yield from 0-2 m over 20-30 m away. Adverse effect of

*Eucalyptus* on production of field crops was upto 10 m distance in *kharif* (42% reduction) and upto 20 m in *rabi* (70% reduction) due to competition for moisture and light. Another study on intercropping of field crops with *Leucaena leucocephala* showed possibility of getting substantial fodder yield alongwith field crops in 1981, when it rained only 456 mm against average rains of 737 mm. Pigeonpea + blackgram and pigeonpea + sorghum were successful intercrops, producing 1074 and 869 kg/ha, respectively. Sorghum was not successful mainly because of severe drought conditions.