

economic gains are also discussed.

367. Prasad, Arjun. 1994. Shelterbelt of *Leucaena* and its effect on crop yield in rainfed agroforestry system. Proc. Internl. Conf. on "Sustainable Development of Degraded Lands through Agroforestry in Asia and Pacific", New Delhi, Nov. 25-30, 1994, Vol. I: 499-506.

Discusses the results of an experiment carried out during 1983-91 to study the compatibility of field crops with *Leucaena leucocephala* (Lam) de wit. The results indicated that *Leucaena* did not have any adverse effect on the yield of crops during initial two years. The yield reduction was more in the vicinity of tree line and got moderated upto 10 m. On an average, the reduction in yield upto 10 m was 35.4, 38.1, 39.3, 40.1 and 41.9% in castor (*Ricinus communis* L.), blackgram (*Phaseolus mungo* L.), greengram (*Phaseolus radiatus* L.), Sorghum (*Sorghum bicolor* L.) and Sorghum + pigeonpea (*Cajanus cajan* (L) millsp) respectively. Taramira (*Eruca sativa* mill) performed better than safflower (*Carthamus tinctorius* L.) during rabi. *Leucaena* attained average height of 11.81 m and dbh 15.08 cm. The reduction in grain yield could be compensated by standing biomass of trees. *Leucaena* increased soil fertility by