An experiment was initiated in kharif, 1983 at Research Centre, Kota with *subabul* (*Leucaena leucocephala*) planted on one side of the field bund in one row at one metre distance. The field crops were sown in 30 x 8 m strips perpendicular to tree line. The effect of trees on field crops was recorded in strips parallel to tree line at different distances viz. 0-2, 2-5, 5-10, 10-20 and 20-30 m. It was observed that in the initial stage (upto 2 years) the adverse effect of *subabul* tree line on the crop growth and yield was not marked but it increased with the growth of trees in subsequent years. In the third year (1985-86) the maximum yield reduction was 79.8% in greengram crop at 0-2 m distance in comparison to that at 20-30 m distance (normal plot) followed by blackgram (73.2%), pigeonpea+ sorghum (58.9%), sorghum (36.1%) and castor (28.1%), respectively at same distance.