

498. Singh, Pratap, Agnihotri, R.C., Mittal, S.P. and Agnihotri, Y. 1986. Studies on intercropping of legumes with maize in Shiwalik foothill region. *Indian J. Soil Conserv.*, 14(1&2): 26-30.

An experiment was conducted for three years (1983-85) to find out yield, total production and economic returns and residual effect of growing greengram, blackgram, soybean and guar as intercrops with maize at 90 cm spacing under rainfed condition. Maize yield increased by 32, 31 and 16% with greengram, blackgram and soybean, respectively as intercrops over

pure maize. Guar with two rows reduced maize yield. Maize yield was reduced when the number of rows of intercrops was increased from one to two. Amongst the intercrops, guar with two rows recorded mean maximum yield (864 kg/ha). Yield of all the intercrops increased with increase in number of rows from one to two. Highest mean maize equivalent (3482 kg/ha) and mean net returns (Rs. 3698/ha) were obtained with maize plus two rows of guar as intercrop. Sole crop of maize gave consistently lower net returns. Residual effect of intercrops was reflected in higher wheat yield ranging from 7 to 23%.