

503. Singh, P.N., Joshi, B.P. and Gurmel Singh. 1983. Water and fertilizer management in wheat. *Indian J. Soil Conserv.*, 11(2&3): 58-62.

A field study was conducted for three years at Dehradun to find out an optimum schedule of irrigation and nitrogen fertilization for wheat crop. The irrigation scheduling was done on the basis of different ratios of irrigation water and cumulative pan evaporation (IW/CPE). Cumulative pan evaporation was taken as the sum of daily evaporation from USWB Class I open pan evaporimeter after deducting the precipitation received after the previous irrigation. Each irrigation of 6 cm was applied on the basis of IW/CPE ratios of 0, 0.45, 0.60, 0.75 and 0.90. The crop was fertilized with nitrogen at the rate of 60 and 120 kg/ha. The yield of wheat was significantly affected by irrigation and nitrogen treatments. Irrigation applied at IW/CPE ratio of 0.75 for the entire crop season supplied with 120 kg N/ha gave highest yield (4931 kg/ha) as compared to control plots yield 3770 kg/ha.