

509. Singh, P.N. and Mohan, S.C. 1995. Wheat and barley intercropping in potato under different irrigation schedules. *Indian J. Soil Conserv.*, 23(2): 154-160.

The paper discusses the results of a field study conducted during 1983-84 at Dehradun to find out a suitable irrigation schedule for potato having intercrops of wheat and barley. The treatments comprised three levels of cropping systems viz. i) potato (sole crop), ii) potato + 2 rows of wheat, iii) potato + 2 rows of barley in main plots and three irrigation schedules viz. IW/CPE ratio of 0.7, 0.9 and 1.1 in subplots. Depth of water for potato, wheat and barley was 40 mm but after harvest of potato, the depth of water was kept at 60 mm to intercrops. The contribution of soil water depletion to consumptive use increased as the supply of water decreased. The water use increased with an increase in irrigation water but water use efficiency decreased with increasing irrigation application to the crops. The intercropping of wheat and barley had no significant adverse effect on the yield of potato tubers. The maximum yield of potato (210.7 q/ha), wheat (23.3 q/ha) and barley (35.8 q/ha) was recorded when irrigation was scheduled at IW/CPE ratio of 1.1, 0.9 and 0.7.