

556. **Tomar, H.P.S., Dadhwal, K.S. and Singh, H.P. 1995.** Effect of irrigation, nitrogen and phosphorus on NPK contents in seed and stalk and uptake by sunflower. *Indian J. Soil Conserv.*, 23(2):148-153.

The paper contains the results of a field study conducted during 1992-93 at Baraut (Meerut) to evaluate the influence of three levels each of irrigation (0.4, 0.6 and 0.8 IW/CPE ratio), nitrogen (40, 80 and 120 kg/ha) and phosphorus (0, 40 and 80 kg/ha) on NPK contents and their uptake by spring sunflower (*Helianthus annuus* L.) var. Mordan. The N and P contents of seed and stalk decreased significantly with irrigation levels but increased with increasing levels of N and P. On contrary, P did not influence the K content of seed and stalk. Uptake of NPK by seed and stalk was found significantly affected with irrigation, N and P levels. Nearly, 34 per cent higher seed yield was recorded with 0.8 IW/CPE ratio over 0.4 IW/CPE ratio. Application of 120 kg N/ha increased the seed yield by 21.17 and 5.59 per cent over 40 and 80 kg N/ha, whereas, 80 kg  $P_2O_5$ /ha produced 9.96 and 28.2 per cent higher seed yield than 40 and 0 kg  $P_2O_5$ /ha.