

159.

Bhatt, P.N., Gupta, O.P. and Tejwani, K.G. 1971. Influence of cropping pattern and land use on plant nutrient losses in Doon Valley. Proc. Intl. Symp. on Soil Fertility Evaluation, 1: 541-547.

Discusses the effect of three crop rotations and two different landuses namely one under grass and another cultivated fallow on losses of plant nutrients through erosion evaluated on Dhoolkot silty clay loam soil on 8% slope at Dehradun. Maize-wheat rotation resulted in heavy losses of soil (76.1 tonnes/ha) and plant nutrients (538.4, 79.2, 17.7, 28.1, 103.6 and 41.9 kg/ha of organic carbon, nitrogen, available P_2O_5 , available K_2O , exchangeable Ca and exchangeable Mg, respectively as compared to Sannhemp-wheat and *jowar* fodder-wheat rotations. No soil loss was observed under grass (*Cynodon plectostachyum*) cover. But losses in the case of cultivated fallow remained the highest (291.0 tonnes/ha of soil, 2167.7, 228.1, 70.5, 98.8 and 103.3 kg/ha of organic carbon, nitrogen, available P_2O_5 , available K_2O , exchangeable Ca and exchangeable Mg, respectively.