

117. **Pratap Narain, Verma, B. and Singhal, A.K. 1986.** Soil and water loss under different vegetative covers at 1% slope on Kota clay soils. In: Soil Conservation in India. Eds. R.K.Gupta & M.L.Khybri, IAS&WC, Dehradun: 91-96.

Runoff, soil and nutrient losses were studied from 1976 to 1979 in runoff plots 22.13 m length x 1.83 m (1/247 ha) at 1% slope on Kota clay soils. Two replications of four crop covers namely *urd*, soybean, cowpea and *jowar*, *arhar*, *arhar* and *Dichanthium annulatum* grass were grown maintaining two plots as cultivated fallow. Maximum runoff (26 to 28%) and soil loss (10 to 13.3 tonnes/ha/year) was recorded on cultivated fallow and minimum (4.5% runoff and 0.12 tonnes/ha/year soil loss) under the grass cover of *Dichanthium annulatum*. Amongst *kharif* legumes cowpea provided more effective soil protection as compared to blackgram and soybean. On an average, loss of available nutrients in runoff was 7 to 11 kg N/ha, 3 to 8 kg K/ha and < 1 kg P/ha/year. The loss of available nutrients from grass plot was negligible.