

273.

**Khybri, M.L., Bhardwaj, S.P., Prasad, S.N. and Sewa Ram. 1983.** Effect of minimum tillage and mulch on erosion losses in maize on 8% slope. Paper Summaries, Internl. Conf. "Soil Erosion and Conservation", Honolulu (Hawaii), USA, Jan. 16-22, 1983: 47.

A study was conducted in standard size runoff plots  $1/247^{\text{th}}$  ha area on 8% slope at Dehradun (India) to find out the effect of minimum tillage and mulch on maize in checking erosion. Based on rainfall amounts for 3 years (1978-80), an average of 1325.6 mm fell during the crop season. Under normal tillage, 49.4% of rainfall was lost as runoff which was reduced to 22.3% under mulch. Strip tillage did not reduce runoff. Soil loss under normal tillage was 36.5 tonnes/ha, 29.2 tonnes/ha under strip tillage and 6.2 tonnes/ha under mulch. Loss of total nutrients without mulch was 37 kg N, 60 kg  $P_2O_5$  and 949 kg  $K_2O$ /ha which were reduced under mulch treatment to 11 kg N, 13 kg  $P_2O_5$  and 161 kg  $K_2O$ /ha. Loss of available nutrients was 17 kg  $P_2O_5$  and 30 kg  $K_2O$ /ha without mulch and only 4 kg  $P_2O_5$  and 12 kg  $K_2O$ /ha with mulch.