

275. **Khybri, M.L. 1985.** Effect of various doses and duration of mulch on soil and water loss in maize. Abst. No. 49, National Seminar on "Soil Conservation and Watershed Management", New Delhi, Sept. 17-18, 1985: 32.

A study was undertaken at Dehradun on Dhulkot silty loam soil to find out the effect of various doses and duration of grass mulch applied to maize crop on soil and water losses and yield of crop. Maize was grown on 8% slope in standard size runoff plots. Two doses of mulch, namely 2 t/ha and 4 t/ha were tried for three years, 1982-84. Each dose was tried for two durations viz. (i) from sowing upto 15th August and (ii) whole crop period. It was found that mulch applied at 4 t/ha reduced runoff from 39.1 to 14.5% of rainfall and soil loss from 22.4 to 5.0 t/ha, whereas with lesser dose of mulch i.e. 2 t/ha, runoff was 17.3% of rainfall and soil loss 5 t/ha, which is close to mulch dose of 4 t/ha. The duration of mulch did not have any effect on these parameters. It is thus observed that lesser dose of mulch @ 2 t/ha is equally effective for conserving soil and water on sloping land without affecting crop yield. Erosion control practice factor "P" in USLE is 0.22 for mulch @ 4 t/ha and 0.31 for mulch @ 2 t/ha.