

419. **Rama Mohan Rao, M.S., Nalatwadmath, S.K., Raizada, A., Adhikari, R.N. and Patil, S.L. 1998.** Evaluation of specifications for graded bunds and suitable intra-terrace measures in the deep black soils of semi-arid regions of south India. *Agropedology*, 8: 25-31.

In order to make conservation programme cost effective in Vertisol semi-arid region of India, a study was initiated to determine optimum cross section and spacing of graded bunds and their impact on runoff, soil loss and grain yield of sorghum. Graded bund at 0.75 m vertical interval with 0.6 sq m cross section recorded highest grain and straw yield of sorghum (1271 and 2021 kg/ha, respectively), followed by the treatment consisting of 0.75 m vertical interval with 0.8 sq m cross section (1256 and 1953 kg/ha, respectively) as against control yield of 879 and 1485 kg/ha. Border strips and vertical mulch recorded 884 and 856 kg/ha of grain yield, respectively which was 46 and 42 per cent higher than

control. Agri-horti treatment recorded 5 per cent increase in sorghum yield in addition to fruit yield of 73, 6, 7 and 34 kg/plant of *ber*, drumstick, sapota and pomogranate, respectively. Considering the cost and maintenance of bunds, 0.6 sq m cross section was found ideally suited for the black soils.