322. **Nitant, H.C., Om Prakash and Gawande, A.P. 1987.** Effect of nitrogen on root density, grain yield and uptake of nutrient by rainfed mustard. Abst. No. 37, National Symp. on "Land and Water Management in Ravines". CSWCRTI, Research Centre, Agra, March 19-22, 1987: 33.

The effect of six levels of nitrogen (0, 20, 40, 80, 120 and 160 kg/ha) on root density, grain

yield and uptake of nitrogen were studied on calcareous sandy loam soils (ravines) at Agra. The result showed that application of 160 kg N/ha significantly increased the grain yield (10.7 q/ha) of rainfed mustard over control (1.7 q/ha) and all other levels of nitrogen (2.7, 4.7, 6.7 and 9.7 q/ha), respectively. The uptake of nitrogen was high (2.2%) at 160 kg N/ha but it was at par (2.02%) with the nitrogen dose of 120 kg N/ha. The root penetration was observed increasing with fertilizers reaching a depth of 42 cm at highest dose of nitrogen, and the root density was observed in increasing order with increased dose of nitrogen.