

330. **Nitant, H.C. and Tiwari, S.P. 1990.** Soil resource appraisals for landuse planning in Bundelkhand region. Abstracts, National Seminar on "Conservation of land and Water Resources for Food and Environmental Security", New Delhi, Jan. 18-20, 1990: 24.

Eight representative pedons from four soil series viz., Rakar and Parwa (red soils), Kabar and Mar (black soils) in the research farm area (190.92 ha) at Datia, developed over Vindhyan ranges of rocks, semi-arid climate representing typical features of Bundelkhand soils were investigated for their physico-chemical properties. The soils were nearly neutral to alkaline in nature with pH value ranging between 7.1 to 8.1. Calcium was the dominant cation on exchange complex. The textures were sandy and sandy loam in Rakar and Parwa while silty clay loam and clay loam texture were encountered in Kabar and Mar, respectively. As regards fertility status, the black soils were richer in organic carbon and available NPK than the red soils. Coarse grained (72% sand) red soils are shallow in depth, restrict the levelling work and also limit the feeding zone for roots of crops due to hard and impervious layer in sub-surface. Low organic matter and poor clay content lead to weak soil aggregates and collapse on exposure to rain drop impact. Suitability of soil types for different crops/grasses/ trees/shrubs has been proposed.