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Research Article

Physical properties of chilli growing soils of Khammam district

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Summary

Fifteen profiles from the chilli growing areas of the district were chosen for the study. Soil samples were collected horizon-wise and analysed for physical properties. The soil texture varied from sandy loam to clay loam in surface horizons and sandy clay loam to clay loam to clay in sub-surface horizons. Bulk density and particle density of soils varied from 1.37 to 1.66 and 2.44 to 2.60 Mg m⁻³, respectively, the per cent aggregates greater than 0.25 mm and per cent aggregate stability ranged from 61.50 to 76.90, 48.40 to 64.60, respectively, hydraulic conductivity of the soils ranged from 0.08 cm hr⁻¹ to 16.26 cm hr⁻¹, the infiltration was moderately rapid to moderately slow and slow, the water retention at 33 and 1500 K Pa was low, the available water content ranged from 4.21 per cent to 13.62 per cent and the available water storage capacity (cm m⁻¹) was low, medium to high.

Key words: Horizon-wise, Physical properties

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