

**Research Article**

# Characterization and classification of soils of water management project, MPKV, Rahuri Dist. Ahmednagar, Maharashtra

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**Summary**

The detailed soil survey of Water Management Project area, Mahatma Phule Krishi Vidyapeeth, Rahuri, Maharashtra was carried out during the year 2009. The studies on morphological characteristics physical and chemical properties of soils were undertaken through grid and profile sampling. Based on the data obtained the soils were categorized and classified upto soil series level and the soil fertility status was mapped. soils of water management project area in general were clayey to silt clay loam in texture. The colour of soil samples was hue 10 YR with value varied from 3 to 5 and chroma 2 to 6. The pH of the soil of Water Management Project area ranged between 7.52 to 8.30 with mean value of 7.91 and categorized as moderately alkaline in nature. The pH was below 8.0 in the light textured and well drained soil. The EC of surface soils ranged from 0.29 to 0.51 dSm<sup>-1</sup> with mean value of 0.41 dSm<sup>-1</sup>. The organic carbon content of soils ranged from 0.43 to 0.87 per cent with mean value of 0.73 per cent and categorized in medium to high range. The soils were categorized in low in available N content (137.98 to 276.32 kg ha<sup>-1</sup>), medium to high available P (9.60 to 27.77 kg ha<sup>-1</sup>) and available K was high (269 to 694 kg ha<sup>-1</sup>). Based on soil characteristics, the soils are classified as *Vertic Haplustept*, *Typic Haplustept*, *Fluventic Haplustept*, *Typic Haplustert*.

**Key words :** Water management project, pH, Organic carbon

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