

Study of Soil Characteristics Modified by Physiography in Hanumankoppa Micro-watershed Under Northern Transitional Zone of Karnataka

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ABSTRACT

Eight typical pedons representing uplands and lowlands selected in Hanumankoppa micro-watershed under northern transitional zone of Karnataka were studied for their morphological, physical, chemical and physico-chemical properties in relation to variation in physiography during 2007-08. The upland soils were moderate, fine and sub-angular blocky in structure, moderately deep (90-110 cm), reddish brown to red in colour (5 YR- 7.5 YR), sandy loam in texture, slightly acidic to neutral in reaction, low in CEC (6.9 to 18.9 cmol (p⁺) kg⁻¹) and medium base saturated. The low land soils were strong, fine and granular to sub- angular blocky in structure, deep to very deep (>145 cm) with yellowish brown to brownish grey in colour, clay loam to sandy clay in texture, neutral to slightly alkaline in reaction, medium in CEC (6.2 to 34.2 cmol (p⁺) kg⁻¹) and highly base saturated.

Key words : Base saturation, Cation Exchange Capacity, Micro-watershed, Physiography