

# **Assessment of soil physico-chemical properties in major cropping systems in Medikondur mandal of Guntur district**

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## **ABSTRACT**

Soil physico-chemical properties are fundamental determinants of soil quality, directly influencing plant growth, nutrient dynamics, and overall agricultural productivity. A study was conducted to examine the physico-chemical properties in major cropping systems in Medikondur mandal of Guntur district. Samples are collected by taking GPS locations in the study area. The major cropping systems in study area are rice-rice, rice-fallow, cotton-fallow and maize- blackgram. The soils were neutral to alkaline in reaction and non-saline in nature. The soils of maize-blackgram cropping system reported higher organic carbon and calcium carbonate is higher in cotton-fallow cropping systems. Among these maize-blackgram system has shown efficient results than other cropping systems.

**Keywords:** *Cropping system, Organic carbon and Calcium carbonate*