

Assessment of Soil Quality in Paddy-Sugarcane Cultivated Areas of West Godavari District, Andhra Pradesh

Ch Kirankumar and G V Lakshmi

Dept of Soil Science and Agricultural Chemistry, Dr.Y.S.R Horticultural University,
Krishi Vigyan Kendra, Pandirimamidi, A P

ABSTRACT

An investigation was carried to study the assessment of soil in paddy-sugarcane growing areas of West Godavari district. Representative soil samples (One hundred) were collected from sixteen mandals of paddy-sugarcane growing areas of West Godavari district by following the random sampling technique. The soil samples were analyzed for various physical, chemical and biological properties. The soils were found to be texturally they are clay and clay loams, medium bulk density, mildly alkaline, medium saline, high in organic carbon, medium in available nitrogen, phosphorus and high in available potassium. The soil were non-calcareous with high cation exchange capacity, Exchangeable calcium, magnesium, available sulphur, DTPA extractable copper, manganese were above critical limit, where as iron and zinc deficiency was observed. The most dominant exchangeable cation was calcium followed by magnesium, sodium, potassium and optimum dehydrogenase activity. Based on soil quality paddy growing soils were found to be moderate to very good soil quality, while sugarcane growing soils were of moderate soil quality. Management practices were suggested by keeping in view of the constraints and cropping systems of the area.

Key words : Minimum Dataset, Paddy-Sugarcane growing areas, Soil Quality Assessment.