

# **Soil-Site Suitability Evaluation of Sugarcane-growing Soils of Chittoor District in Andhra Pradesh**

**P A Visalakshi Devi and M V S Naidu**

Department of Soil Science and Agricultural Chemistry, S V Agricultural College, Tirupati  
517502

## **ABSTRACT**

Sugarcane-growing soils of Chittoor district in Andhra Pradesh were evaluated for their suitability for sugarcane crop. These soils belong to Alfisols, Entisols and Inceptisols. Texture and pH were major limitations in pedons 1, 2, 4, 8, 11, 14 and 16 while ESP was a major limitation in pedons 3, 4, 7, 10, 11, 12 and 17 and soil depth was a major limitation in pedons 3, 4 and 7. Texture, pH, organic carbon, sum of the basic cations and ESP were the general limitations in all the soils of the study area. The pedons 1, 5, 6 and 7 were moderately suitable (S2) while pedons 2, 3, 4, 8, 9, 10, 12, 13, 14, 15 and 16 were marginally suitable (S3) and Pedon 11 was temporarily not suitable (N1) for growing sugarcane crop. The suitability classes can be improved if the correctable limitations (soil fertility characteristics) were altered through soil amelioration measures.

**Key words :** Crop suitability, Land evaluation, Limitations, Potentials, Sugarcane crop.