Soil-site Suitability for Commonly Growning Crops in Srikalahasthi Mandal of Chittoor District, Andhra Pradesh

K S Manikhomba and M V S Naidu

Department of Soil Science and Agricultural Chemistry, S.V.Agricultural College, Acharya N.G.Ranga Agricultural University, Tirupati, Andhra Pradesh – 517 502

ABSTRACT

Survey was undertaken in Srikalahasthi mandal of Chittoor district to evaluate the suitability of soils for rice, groundnut, sugarcane, sorghum and chickpea crops. The soil belongs to Entisols, Inceptisols and Alfisols. The major limitations in pedons 1 (Typic Ustipsamments) were pH and organic carbon. Pedon 2 (Vertic Haplustepts) and pedon 4 (Typic Haplustepts) showed wetness, texture, pH (except for pedon 2) and organic carbon as limitations. Pedon 5 (Typic Haplustalfs), pedon 6 (Typic Ustifluvents) and pedon 7 (Typic Haplustepts) exhibited wetness, texture, pH and organic carbon as the limitations. Pedons 3 (Typic Ustorthents) had wetness, texture, CaCO₃, depth, pH and organic carbon as the major limitations. The limitation levels of the land characteristics varied from crop to 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.