Long-term Effects of Fertilizers and Manures on Physical Properties of Vertisol

P Joga Rao, P R K Prasad, A Lalitha Kumari, P Prasuna Rani and Ch Pulla Rao

Department of Soil Science and Agricultural Chemistry, Agricultural College, Bapatla 522 101

ABSTRACT

Field experiment was conducted during 2013-14 at Regional Agricultural Research Station, Lam, Guntur, Andhra Pradesh. The continuous addition of balanced fertilization did not show any deteriorating effect on physical properties of the soil rather it significantly increased the water holding capacity, porosity, volume expansion and reduced bulk density of the soil in the long-run. Significant improvement in the physical properties of the soil was observed under the combined application of organics and inorganics. The unmanured control resulted poor physical properties.

Key words: Fertilizers, Long-term effect, Manure, Physical properties.