

Influence of Crop Residue Management on Soil Physico-Chemical Properties and Available Nutrient Status of Maize Grown Saline Soils

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ABSTRACT

A green house experiment was conducted at Agricultural College, Bapatla during *kharif*, 2017 to study the effect of supplementation of 25 percent extra nitrogen through maize stover or its compost along with foliar spray of humic acid / proline / KNO_3 on properties of a maize grown saline soil. The experiment was conducted in CRD with thirteen treatments and three replications. The results revealed that soil pH and electrical conductivity were not influenced significantly by the imposed treatments at any stage of the crop growth. Integrated treatments recorded higher organic carbon content than only inorganics with the highest at all stages observed in the treatment supplied with maize stover. Addition of 25 per cent extra nitrogen either as maize stover or compost exhibited a significant influence on available nitrogen, phosphorus, potassium and sulphur at different stages of crop growth (knee high, tasseling and harvest) with the highest content observed in treatments supplied with compost. Foliar spray of humic acid / proline / KNO_3 did not show significant effect on soil properties at any stage of crop growth.

Key words: *Available nitrogen, KNO_3 , foliar spray, Maize compost, Proline*