

Effects of Organic Amendments on Primary Nutrients (N, P and K) in a Sandy Soil

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Abstract : The effect of six treatments of organic amendments were evaluated on a sandy soil in the region of Soukra in Tunisia. T1: cattle manure 55 t.ha-1, T2: commercial compost from Germany to 1 t.ha-1, T3: a mixture of 27.5 t.ha-1 of T1 with 0.5 t. ha-1 of T2, T4: commercial compost from France 2 t.ha-1, T5: a Tunisian commercial compost to 10 t.ha-1 and T0: control without treatment. The nitrogen in the soil increase to 0.029 g.kg-1 of soil treatment for the T1 and 0.021 g. kg-1 of soil treatment for the T3. The highest content of P2O5 has been registered by the T3 treatment that 0.44 g kg-1 soil with respect to the control (T0), which shows a content of 0.36 g.kg-1 soil. The soil was initially characterized by a potassium content of 0.8 g kg-1 soil, K2O exchangeable rate varied between 0.63 g.Kg-1 and 0.71 g.kg-1 soil respectively T2 and T1.

Keywords : compost, organic amendement, Ntot, P2O5, K2O

Conference Title : ICANRE 2015 : International Conference on Agricultural and Natural Resources Engineering

Conference Location : Jeddah, Saudi Arabia

Conference Dates : January 26-27, 2015