



Influence of long term fertilizer application on nutrient addition through root biomass in maize

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Abstract : An experiment was conducted in long-term fertilizer experiment field at the ZARS, GKVK, Bangalore during *Rabi* 2010-11 to find out the effect of continues applied fertilizers on maize root biomass and nutrient addition through root biomass. Long term fertilizer application showed significantly higher (12.94 q ha^{-1}) root biomass and root length (22.35 cm) in T_3 which received 150 % NPK followed T_8 and T_{10} which received FYM and lime along with inorganic fertilizers showed a better results (12.65 q ha^{-1} , 12.12 q ha^{-1} and 21.33cm, 19.73 cm, respectively). The higher major, secondary and micronutrients content in maize roots were recorded in the T_3 which received super optimal doses of NPK fertilizers (150 % NPK) and also in the plots which received 100 % NPK + FYM + lime, respectively over control. The higher uptake of nutrients by root biomass also showed similar results.

Key Words : Maize, Root biomass, Long term experiment, Root nutrient content

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