



RESEARCH ARTICLE :

Characterization of tank silts of Hassan taluk and their effect on soil and maize crop

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SUMMARY : Three tank silts were collected during the month of July 2009 from the tanks of Santhigrama, Karekere and Addihalli of Hassan district and analyzed for their physico-chemical property. Highest pH value was observed in Shanthigrama tank silts and lowest was found in Addihalli tank silt. The EC was lowest in Shanthigrama tank silt and high in Addihalli tank silt. The highest clay content was found in Shanthigrama tank silt (50%), sand content was in Karekere and addihalli tank silt. OM content was highest was found in Kareker tank silt and lowest in Addihalli tank silt. Available nitrogen content was low, phosphorus content was high and available potassium content was found to be low. Exchangeable calcium content was highest in Addihalli tank silt and lowest in Karekere tank silt and magnesium content was found higher in Karekere tank silt. A pot culture experiment was carried out at Agricultural Farm Section, College of Agriculture Hassan during *Kharif* 2009 in order to know the effect of application of different tank silt on soil fertility status as well as on crop growth. Addition of tank silts to soil influenced the physico-chemical properties. Available nutrients like N, P, K and exchangeable nutrients like Ca and Mg were increased with application of tank silt but texture of the soil was not altered. Addition or incorporating of tank silts with soil significantly increased the plant growth parameters and soil fertility. Texture of the soil was not affected and it may be affected with periods of time.

KEY WORDS:

Tank silt, Maize, Soil fertility

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