ABSTRACT

Field experiments were carried out to ascertain the impact of mineral fertilizer application on the Yield of groundnut and the soil available Phosphorus at Nyong Guma 2, Pishegu and Cheshegu. Mineral nutrients applied were Phosphorus(P), Potassium(K), Magnesium(Mg), Sulphur(S), Zinc(Zn) and Boron(B). The experiments were laid in a Randomized Complete Block Design(RCBD) with six treatments. Response parameters measured were shoot biomass at 50% flowering, grain yield, agronomic efficiency and value cost ratio. None of the mineral fertilizers applied significantly ($P<0.05$) increased in shoot biomass. The use of PK increased the biomass yield at 50% flowering by 62% over the control. The sole application of P yielded the highest agronomic efficiency. The use of PKMgS had the highest grain yield of 800 kg/ha which was however not a significant ($P<0.05$) increase over control in all the study sites. All the mineral fertilizer application options were not cost effective.