

## **Response of field beans to phosphorus on an andosol in Kenya**

Keter, J.K.A; Owino-Gerroh, C.; Mbuvi, J.P

Date: 1998

### **Abstract**

The agronomic effectiveness of minjingu rock phosphate (O, trtp) was compared with that of highly soluble phosphate triple superphosphate (TSp), in pot studies with field bean (*p. t, ulgaris* L.) in a greenhouse at the field station of Faculty of Agriculture, University of Nairobi, Kenya. MRp finely ground with 30 Grade Yo P and TSP with 99.6 Grade yo p fertilizer at rates 0, 30, 45 and 60mg P pot-r were applied on 2kg soil pot-r. The soil used in the study was an acid humic andosol from fields with moribund tea bushes, tea bushes planted in lg5g and, lgTgand newly cleared forest in Kaga4 Kenya' Shoot and root dry matter fields, dry seed field responses and their response estimates were determined and showed positive significance in most cases when TSp fert, izer was applied on the soils except that from moribund tea field. The relative agronomic effectiveness (efficiency) of MRP on biomass and also seed leld of beans was found to be significantly inferior to TSP in most of the soils except that from moribund tea field where both sources were found to be ineffective' This study confirms that inspite of its high reactivity, MRp is stilr agronomicary ineffective as nutrient source ofphosphorous for growingp. wrgarisin acid so,s. Key Words; Andosol(s), phosphorus, source, leld.