

Impact of chemical and organic fertilizer on the yield and nutritional composition of bambara groundnut (*vigna subterranea* l. Verde.)

ABSTRACT

A pot experiment was conducted to find out the effects of chemical and organic fertilizer on the yield and nutritional composition of bambara groundnut (*Vigna subterranea*). The size of the pot was 65.94 cm². Different rates of compost, biofertilizer, gypsum was used along with the combination of different doses of nitrogen and phosphorus fertilizer. N and P fertilizers were found to play dominating role to increase yield and nutritional composition of the plant. Number of pod (41.75), 100-seed weight (34.25 g), protein (22.15%), Ca (803.25 mg/ka) increased with the application of N and P 30 and 60 kg/ha, respectively which was better than all other treatments. The application of N30 + P60 kg/ha increased yield and nutritional composition of bambara groundnut.

Keyword: Chemical fertilizer; Compost; Yield; Bambara groundnut; Seed quality