Abstract

Three pot experiments were carried out in KKU glasshouse to study the effect of fertilizer formulae and rates on yield of soybean grown on 3 different soils i.e. Rachabuti, Roi Et (1) and Roi Et (2) series. The experimental design was Randomized Complete Block with 3 replications. The treatments were control (no fertilizer application) and the combination of three fertilizers (13-13-13, 15-15-15 and 12-24-12) and 3 levels of fertilizers (4.5, 9.0 and 18.0 kg P_2O_5/rai).

The results demonstrated that the Rachaburi soil was quite fertile as compared to Roi Et (1) and Roi Et (2). The seed yield of soybean grown on Ratchaburi soil was highest at 4.5 kg P_2O_5/rai of 15-15-15 fertilizer (or 30 kg/rai of 15-15-15). Soybean grown on Roi Et (1) and Roi Et (2) gave highest seed yields at 9.0 kg P_2O_5/rai of 15-15-15 fertilizer (or 60 kg/rai of 15-15-15) and 4.5 kg P_2O_5/rai of 13-13-21 fertilizer (or 35 kg/rai of 13-13-21) respectively.

Data of all seed yields, dry matter yield and seed weight of the three experiments were also presented.