

ABSTRACT

EFFECT OF THE COMBINED DOSE OF NPK FERTILIZER AND THE PORATION OF GOAT MANURE ON THE GROWTH AND YIELD OF PEANUT (*Arachis hypogaea* L.)

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Peanut is a food plant from the leguminosae family which is important after soybeans. Proper fertilization is one of the efforts to increase peanut production. Fertilization is done by giving organic and inorganic fertilizers. This experiment aims to determine the combination of NPK fertilizer doses and goat manure proportions that have a good effect on the growth and yield of peanuts. The experiment used a randomized block design (RBD) with 9 treatments and was repeated 4 times. The dose combination tested were A = NPK 200 kg/ha + poration of goat manure 5 t/ha, B = NPK 200 kg/ha + poration of goat manure 10 t/ha, C = NPK 200 kg/ha + poration of goat manure 15 t/ha, D = NPK 250 kg/ha + poration of goat manure 5 t/ha, E = NPK 250 kg/ha + poration of goat manure 10 t/ha, F = NPK 250 kg/ha + poration of goat manure 15 t/ha, G = NPK 300 kg/ha + poration of goat manure 5 t/ha, H = NPK 300 kg/ha + poration of goat manure 10 t/ha, and I = NPK 300 kg/ha + poration of goat manure 15 t/ha. Data were analyzed using variance with the F test and continued with Duncan's Double Range Test with a significance level of 5%. The experimental results showed that the application of a combination dose of NPK 300 kg/ha + pration of goat manure 5 t/ha had an effect on stem diameter, wet pod yield per plot, and dry seed yield per plot.

Keywords: Peanut, Goat, M-Bio, NPK, Poration