

ABSTRAK

Okra is a plant that belongs to the Malvaceae family, also known as the cotton-gum family. This plant originates from tropical and sub-tropical regions and is known for its long and cylindrical fruit. The purpose of this study was conducted to determine the dose of manure and NPK fertiliser on the growth and yield of okra plants and to determine the effect of manure to reduce the use of NPK fertiliser. The research was conducted in the experimental garden of the Faculty of Agriculture, Malikussaleh University, North Aceh Regency. The research will be conducted in June-August 2024. Using a Randomized Block Design (RBD) experiment with two factors and three replications. The first factor is Cow Manure (S) with 3 levels namely S0 (0 ton/ha), S1 (10 ton/ha) and S3 (15 ton/ha). The second factor is NPK Fertiliser (P) with 4 levels namely P0 (0 kg/ha), P1 (200 kg/ha), P2 (300 kg/ha) and P3 (400 kg/ha). Parameters observed were plant height, number of leaves, stem diameter, flowering age, number of fruits, fruit weight per plant, fruit length, fruit weight per plot and fruit diameter. Cow manure treatment significantly affected the number of leaves at the age of 10 DAP, but did not significantly affect other variables. NPK fertiliser treatment affects plant height at 20, 30 and 40 DAP, stem diameter at 10, 20, 30 and 40 DAP, flowering age, number of fruits per plant, fruit length, fruit diameter, fruit weight per plant and fruit weight per plot. The best treatment was obtained at a dose of 200 kg/ha. There was no interaction between the use of cow manure and NPK fertiliser all variables observed.

Keywords: Fertiliser dosage, Manure, NPK and Okra