

ABSTRACT

THE EFFECT DOSES OF FERMENTED GOAT MANURE ON GROWTH AND YIELD OF PEANUT (*Arachis hypogaea* L.)

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Peanut plants require sufficient nutrients in order to grow and produce optimally. Utilization of fermented goat manure with the help of a bacteritivor contained in M-bio can break down organic matter quickly and make it a fertilizer that is available and can be absorbed directly by plants. This experiment aims to determine the doses of goat manure that has the best effect on growth and yield of peanut (*Arachis hypogaea* L.). This experiment used RBD (Randomized block design) with 5 treatments, consisting of control, 5 t/ha of goat manure, 10 t/ha of goat manure, 15 t/ha of goat manure and 20 t/ha of goat manure with 5 repetitions. Data were analyzed using variance and followed by Duncan's multiple range test with a 5% significance level. The results showed that the doses of fermented goat manure had a significant effect on the quantity of pods/plant, weight of pods/plant, weight of dried seeds/plant and weight of dried seeds/plot., but had insignificant effect on plant height, quantity of leaves, weight of stover, weight of pods/plot and weight of 100 dried seeds. 10 t/ha fermented goat manure gave the best effect compared to other doses.

Keyword : Fermented Goat Manure, Peanut, M-Bio.