GROWTH RESPONSE AND PRODUCTION OF PEANUTS (Arachis hypogea L.) REGARDING THE PROVISION OF PINEAPPLE SKIN LIQUID ORGANIC FERTILIZER AND NPK FERTILIZER

Supervised by Ilham Muhklisin, S.S.T., M.Sc

Khusnul Adianur Janna

Study Program of Food Crop Production Technology Majoring of Agricultural Production

ABSTRACT

Intensive use of chemical fertilizers results in soil degradation and a decrease in the population of microorganisms. This condition can be reduced by applying organic fertilizers to subsidize plant nutrient needs. This research aims to examine the application of Pinneaple Peel Liquid Organic Fertilizers to the growth and yield of peanut plants compared to NPK fertilizers. This field research was carried out from October 2023 to January 2024 in Antirogo village, Sumbersari, Jember district. The research design used a Randomized Block Design (RBD) which consisted of two factors and three replications. The first factor was the concentration of pineapple peel liquid organizer (105ml/l, 70ml/l, and 35ml/l). The second factor was the NPK dose, namely 150kg/ha, 125kg/ha, and 100kg/ha. The liquid organic fertilizer with a concentration of 70ml/l showed the best result in the number of pods (15.06 pods), and the weight of the fresh pods per sample (41.77 g). Moreover, 150 kg/ha showed better results compared to other lower doses on plant height (34.66 cm) and number of branches (4.92 stalks). It is suspected that N, P, and K in the liquid organic fertilizer application to the leaves were abundantly absorbed by the leaves so nutrients. Even at low levels, foliar application of pineapple peel liquid organic fertilizer makes nutrient availability relatively faster to support NPK fertilizer.

Keywords: fertilizer dosage, , Liquid organic fertilizer concentration, Nutriens