APPLICATION OF EGG SHELL LIQUID ORGANIC FERTILIZER CHICKEN ON PEANUT PLANT

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ABSTRACT

Chicken eggs shell waste has a hight nutrient content of calcium (97%) and quite hight phosphorus (3%), so it has the potential to be used as liquid organic fertilizer (LOF). The fertilizer is useful as an additional nutrient in the process of plant growth and development, one of wich is peanuts. Increased productivity of peanuts needs to be done to meet the needs of the community. One of the reasons for the low productivity of peanuts is due to interverence with filling the pods so that the pods do not contain (cipo pods). This study aimed to examine the concentration of LOF in chicken egg shells which gave the best effect on the growth and yield of peanuts. This research was conducted at the Ketindan Agricultural Training Center, Lawang District, Malang Regency, (altitude 600 mdpl, temperature 22°-32°C, and rainfall 349 mm every year). This study used a non-factorial randomized block design consisting of 4 treatments with 6 replications. LOF concentration were 0%, 1,36%, 2,70%, and 4%. The observation variables used were the number of branches, the number of pithy pods, the number of cipo pods, the weight of fresh pods, the weight of dry pods, the weight of dry seeds, and the weight of biomass. Data analysis using ANOVA and if the data shows a very significant difference, then further test will be carried out using BNJ level 1%. The results showed that the best concentration of chicken egg shell LOF on the number of pithy pods (20,85 pieces), number of cipo pods (0,60 pieces), weight of fresh pods (40,48 g), weight of dry pods (22,77 g), and weight dry beans (19,90 g).

Keywords: Peanuts, Chicken Egg Shell POC, Concentration, Cipo Pods.