

GROWTH AND YIELD RESPONSE OF CAULIFLOWER PLANTS (*Brassica oleracea* L. var. *botrytis*) TO RABBIT URINE LIQUID ORGANIC FERTILIZER AND GUANO FERTILIZER DOSES

Research by: Adam Nugraha Dhestarandy

Mentored by: Oktavia Sarhesti Padmini

ABSTRACT

Cauliflower production has been decreasing from year to year due to the use of chemical fertilizers. The purpose of this study was to examine the interaction between the use of rabbit urine LOF and guano fertilizer and to determine the appropriate concentration of rabbit urine LOF and guano fertilizer. The research method used a Complete Randomized Block Design (RCBD) arranged in a factorial manner (3x3) + 1 control. The first factor was rabbit urine POC concentrations of 5%, 10%, and 15%. The second factor was guano fertilizer doses of 20g, 40g, and 60g/plant. Data were analyzed using ANOVA at a 5% level and continued with DMRT at a 5% level. Comparing the treatments with the controls, an orthogonal contrast test was carried out. The results showed that there was an interaction between the treatment of rabbit urine LOF concentrations of 10%; 15% and guano fertilizer doses of 40g; 60g on the harvest age parameters. The concentration of rabbit urine LOF gave results on the parameters of plant height (15%), number of leaves (10%;15%), leaf area (15%), flowering time (5%;10%), flower diameter (10%), fresh flower weight (10%;15%), and harvest index (5%;10%;15%). The guano fertilizer dose gave results on the parameters of plant height (20g), number of leaves (40g;60g), leaf area (20g;40g), flowering time (20g;40g;60g), flower diameter (20g;40g), fresh flower weight (60g), and harvest index (20g;40g;60g). The combination of rabbit urine LOF concentration and guano fertilizer dose significantly affected the control treatment on the parameters of plant height, number of leaves, leaf area, flowering time, harvest time, and flower diameter.

Keywords: *flower cabbage, guano fertilizer, rabbit urine organic fertilizer*