COMPARISON COMPOSITION OF NPK + CHICKEN MANURE FERTILIZER AND APPLICATION PACLOBUTRAZOL ON GROWTH AND QUALITY OF CHRYSANTHEMUM FLOWER (Dendranthema grandiflora Tzvelev)

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ABSTRACT

To reduce chemical fertilizers in chrysanthemum cultivation is addition organic materials. The research was conducted from April to July 2024 at P4S Mitra Veteran Mandiri. The aim was to determine effect of chicken manure + NPK composition and paclobutrazol on growth and quality of chrysanthemums. Experimental method used a factorial randomized block design $(3 \times 3) + 1$. First factor is fertilizer composition ratio, which is 25% chicken manure + 75% NPK, 50% chicken manure + 50% NPK, and 75% chicken manure + 25% NPK. Second factor is concentration of paclobutrazol (100, 200, 300 ppm). Data analysis used analysis of variance (ANOVA) at the 5% significance level, followed by DMRT at the 5% level. To compare treatments with control used orthogonal contrast test. The results showed an interaction between the chicken manure + NPK fertilizer on parameters of flowering age, number of flowers per plant, and flower freshness duration. Composition of 50% chicken manure + 50% NPK and 75% chicken manure + 25% NPK gave best results for the parameters of leaf count at 14 and 21 DAP (days after planting), root volume, number of spray stems, and diameter flower. Paclobutrazol concentration of 200 and 300 ppm gave best results for parameters of root volume, number of spray stems, flower diameter and flower color.

Keywords: Chicken manure, NPK, paclobutrazol, chrysanthemum.