EFFECT OF PLANTING MEDIA COMPOSITION AND PACLOBUTRAZOL CONCENTRATIONS ON THE GROWTH OF MARIGOLD (Tagetas erecta L.)

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ABSTRACT

Marigold plants *(Tagetas erecta L.)* require a growing medium that suitable growth by improving soil properties, such as the addition of manure and husk charcoal. Flowering can be pursued by giving Paclobutrazol by suppressing the vegetative mechanism of plants. The purpose of this study was to determine the composition of the planting medium and the concentration of Paclobutrazol on the growth of Marigold plants. This research was conducted in the experimental garden of the Faculty of Agriculture, UPN "Veteran" Yogyakarta, Wedomartani, Ngemplak, Sleman, DIY. The study used the Split Plot experimental method, the main plot, namely the concentration of Paclobutrazol which consisted of 3 levels of K0 = 0 ppm (Control); K1= 500 ppm; K2 = 1000 ppm. The sub-plot is the composition of the planting medium consisted of 3 levels M0 = Soil (Control); M1= Soil : Manure : Burnt Husk= 1:2:3; M2= Soil : Manure : Burnt Husk = 3:2:1. There were 9 treatment combinations with 3 replications. Parameters observed were plant height, stem diameter, number of leaves, age of flowering, number of flowers, flower diameter and flower weight. Data analyzed observational by using Analysis of Variance and to fine out the real difference berween treatments by using Multiple Distance Test at 5% level. The results showed that there was no interaction between the composition of the growing media and the concentration of Paclobutrazol. The best treatment on the composition of the growing media Soil: Manure: Burnt husk = 1:2:3 and the concentration of Paclobutrazol 1000 ppm.

Keywords: *Marigold, Planting Media, Paclobutrazol*