GROWTH AND FLOWERING OF MARIGOLD PLANTS WITH VARIOUS DOSAGES OF NPK AND GA₃ CONCENTRATION (Tagetes erecta)

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ABSTRACT

Marigold (Tagetes erecta) also known as kenikir flower is not an ornamental plant native to Indonesia, but originates from Central America, specially from Mexico. This study aims to examine the interaction between the effect of NPK fertilizer and GA₃ concentration on the growth and flowering of marigold plants. The research was conducted at the Erista Garden from November 2021 to December 2021. The field method used a Completely Randomized Design (CRD). The first factor was the dose of NPK which consisted of 3 levels, namely 4 g/plant; 8 g/plant; and 12 g/plant. The second factor was the concentration of GA₃ which consisted of 4 levels, 0 ppm; 100 ppm; 200 ppm; and 300 ppm. Each treatment combination was repeated 3 times. The research results did not show any interaction between NPK dose and GA₃ concentration. The NPK dose of 12 g/plant gave the best results on the parameters of plant height, number of leaves, stem diameter, number of internodes, length, number of flowers, flower diameter, root length and root volume. GA₃ concentration of 300 ppm gave the best results for the parameters of plant height, number of leaves, stem diameter, number of internodes, internodes length, internodes length, first flower appearance, number of flowers, and flower diameter.

Keyword : Marigold, NPK, giberelin