

Respon Pertumbuhan Stek Tanaman Marigold (*Tagetes erecta* L.) Pada Berbagai Konsentrasi Rootone-F dan Komposisi Media Tanam

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ABSTRAK

Marigold merupakan tanaman herba hias yang potensial di Indonesia. Perbanyak stek dapat menghasilkan tanaman bersifat sama dengan induknya. Rootone-F dapat meningkatkan daya tumbuh stek dan komposisi media tanam yang tepat dapat mendukung lingkungan yang menunjang pertumbuhan awal tanaman. Penelitian ini bertujuan untuk mengetahui dan mendapatkan konsentrasi Rootone-F dan komposisi media tanam yang paling baik bagi pertumbuhan stek marigold. Penelitian dilaksanakan pada November-Desember 2025 di Desa Ngestiharjo. Metode penelitian disusun secara faktorial dengan Rancangan Acak Lengkap (RAL) dengan dua faktor. Faktor I yaitu konsentrasi Rootone-F taraf 100, 200, 300 ppm. Faktor II yaitu komposisi media tanam tanah, arang sekam, dan pupuk kotoran kambing perbandingan 1:2:1, 1:1:2, dan 2:1:1. Data hasil penelitian dianalisis menggunakan Sidik Ragam pada taraf 5%. Hasil penelitian menunjukkan tidak terdapat interaksi antara konsentrasi Rootone-F dan komposisi media tanam. Perlakuan konsentrasi Rootone-F 200 dan 300 ppm memberikan hasil baik pada parameter umur muncul tunas dan volume akar. Konsentrasi 100 dan 200 ppm memberikan hasil baik pada parameter tinggi tunas umur 7 dan 14 HST. Perlakuan komposisi media tanam 2:1:1 memberikan hasil paling baik pada persentase hidup stek. Komposisi 1:1:2 dan 2:1:1 memberikan hasil baik pada umur muncul tunas, jumlah daun umur 7 HST, dan jumlah akar stek marigold.

Kata Kunci: Marigold, Rootone-F, komposisi media tanam.

Growth Response of Marigold Plant Cuttings (*Tagetes erecta* L.) to Various Rootone-F Concentrations and Planting Media Compositions

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ABSTRACT

Marigold is a potential ornamental herbaceous plant in Indonesia. Propagation by cuttings can produce plants with the same characteristics as the parent plant. Rootone-F can increase the growth rate of cuttings, and the right planting medium composition can support an environment that supports the initial growth of plants. This study aims to determine and obtain the best concentration of Rootone-F and planting medium composition for the growth of marigold cuttings. The study was conducted in November-December 2025 in Ngestiharjo Village. The research method was arranged factorially with a Completely Randomized Design (CRD) with two factors. Factor I was the concentration of Rootone-F at 100, 200, and 300 ppm. Factor II was the composition of the planting medium: soil, rice husk charcoal, and goat manure at a ratio of 1:2:1, 1:1:2, and 2:1:1. The research data were analyzed using Sidik Ragam at the 5% level. The results showed no interaction between the concentration of Rootone-F and the composition of the planting medium. Treatment of Rootone-F concentrations of 200 and 300 ppm gave good results in the parameters of shoot emergence age and root volume. Concentrations of 100 and 200 ppm gave good results in the parameters of shoot height at 7 and 14 days after planting. Treatment of the planting medium composition of 2:1:1 gave the best results in the percentage of cutting survival. Compositions of 1:1:2 and 2:1:1 gave good results in the age of shoot emergence, number of leaves at 7 days after planting, and number of roots of marigold cuttings.

Keywords: *Marigold, Rootone-F, planting media composition.*