

**EFEKTIVITAS KONSENTRSI GIBERELIN (GA₃) DAN MACAM
KOMPOSISI MEDIA TANAM TERHADAP PERTUMBUHAN BIBIT**

KOPI ROBUSTA (*Coffea canophora*)

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ABSTRAK

Kopi robusta memiliki tipe dormansi karena kulit bijinya keras, sehingga perlu dilakukan skarifikasi dan perendaman dengan giberelin (GA₃) untuk mematahkan dormansi. Selain itu, media tanam juga berperan penting dalam mendukung pertumbuhan bibit. Penelitian ini bertujuan untuk mengetahui pengaruh perendaman benih dengan GA₃ dan komposisi media tanam terhadap pertumbuhan bibit kopi robusta. Penelitian dilakukan menggunakan Rancangan Acak Lengkap (RAL) dengan dua faktor, yaitu konsentrasi GA₃ (100 ppm, 200 ppm, 300 ppm) dan komposisi media tanam (tanah + pupuk kandang sapi (1:1), tanah + arang sekam + pupuk kandang sapi (1:1:1), dan tanah + arang sekam + pupuk kandang sapi (1:1:2)). Perlakuan dibandingkan dengan kontrol (perendaman aquades dan media tanah). Masing-masing perlakuan diulang tiga kali. Data dianalisis menggunakan ANOVA, uji Kontras Orthogonal, dan DMRT pada taraf 5%. Hasil penelitian menunjukkan adanya interaksi nyata antara konsentrasi GA₃ dan komposisi media tanam pada daya berkecambah, tinggi tanaman, dan volume akar terhadap pertumbuhan bibit. Kombinasi perlakuan memiliki beda nyata terhadap pertumbuhan tanaman kontrol. GA₃ 300 ppm terbukti paling efektif mempercepat pertumbuhan, dan media tanam terbaik adalah campuran tanah + arang sekam + pupuk kandang sapi (1:1:2).

Kata Kunci: Bibit Kopi Robusta, Giberelin, Media Tanam

**EFFECTIVENESS OF GIBBERELIN (GA₃) CONCENTRATION AND
PLANTING MEDIA COMPOSITION ON THE GROWTH OF ROBUSTA
COFFEE
(*Coffea canophora*) BITCHES**

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ABSTRACT

Robusta coffee has a dormant type because its seed coat is hard, so scarification and soaking with gibberellin (GA₃) are needed to break dormancy. In addition, the planting medium also plays an important role in supporting seedling growth. This study aims to determine the effect of seed soaking with GA₃ and growing medium composition on the growth of Robusta coffee seedlings. The study was conducted using a Completely Randomized Design (CRD) with two factors: GA₃ concentration (100 ppm, 200 ppm, 300 ppm) and growing medium composition (soil + cow manure (1:1), soil + charcoal + cow manure (1:1:1), and soil + charcoal + cow manure (1:1:2)). Treatments were compared with the control (soaking in distilled water and soil medium). Each treatment was repeated three times. Data were analyzed using ANOVA, Orthogonal Contrast Test, and DMRT at the 5% level. The results showed a significant interaction between GA₃ concentration and growing medium composition on germination power, plant height and root volume on seedling growth. The treatment combinations had a significant difference in plant growth compared to the control. GA₃ at 300 ppm was found to be the most effective in accelerating growth, and the best growing medium was the mixture of soil + rice husk charcoal + cow manure (1:1:2).

Keywords: Robusta Coffee Seeds, Gibberellin, Planting Media