

TEKNIK SKARIFIKASI DAN APLIKASI
ZAT PENGATUR TUMBUH (ZPT) PADA PERKECAMBAHAN
BENIH KOPI ROBUSTA (*Coffea canephora*)

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INTISARI

Kopi robusta (*Coffea canephora*) merupakan salah satu jenis kopi dengan potensi ekonomi tinggi, namun daya kecambah benihnya rendah akibat dormansi kuat. Penelitian ini bertujuan mengetahui pengaruh teknik skarifikasi dan aplikasi zat pengatur tumbuh (ZPT) terhadap viabilitas dan vigor benih kopi robusta. Penelitian menggunakan rancangan acak lengkap (RAL) dengan sembilan perlakuan dan 100 ulangan: K, S1, S2, H1, H2, S1H1, S1H2, S2H1, dan S2H2. Parameter yang diamati meliputi daya kecambah, indeks kecepatan berkecambah (GI), dan rata-rata hari berkecambah (MGT) dan Rata-rata tinggi. Hasil penelitian menunjukkan perlakuan skarifikasi berpengaruh nyata terhadap daya kecambah, GI, dan MGT, namun tidak terhadap tinggi kecambah. Perlakuan S1H1 (H_2SO_4 + Atonik) memberikan hasil terbaik dengan daya kecambah 94%, GI 2,000, dan MGT tercepat 25,6 hari, sedangkan perlakuan S2, S2H1, dan S2H2 menghasilkan daya kecambah sangat rendah (0–5%). Kombinasi skarifikasi H_2SO_4 dengan ZPT (S1H1 dan S1H2) merupakan perlakuan paling efektif dalam meningkatkan perkecambahan benih kopi robusta.

Kata kunci : Kopi Robusta, skarifikasi, zat pengatur tumbuh, perkecambahan.

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SCARIFICATION TECHNIQUES AND THE APPLICATION OF PLANT GROWTH REGULATORS (PGR) ON THE GERMINATION OF ROBUSTA COFFEE (*COFFEA CANEPHORA*) SEEDS

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ABSTRACT

Robusta coffee (*Coffea canephora*) is one of the coffee species with high economic potential; however, its seed germination rate is low due to strong dormancy. This study aimed to determine the effect of scarification techniques and the application of plant growth regulators (PGR) on the viability and vigor of robusta coffee seeds. The experiment used a completely randomized design (CRD) with nine treatments and three replications: K, S1, S2, H1, H2, S1H1, S1H2, S2H1, and S2H2. The parameters observed included germination percentage, germination index (GI), and mean germination time (MGT). The results showed that scarification treatments had a significant effect on germination percentage, GI, and MGT, but no significant effect on seedling height. The S1H1 (H_2SO_4 + Atonik) treatment produced the best results with a germination rate of 94%, GI 2.000, and the fastest MGT of 25.6 days, while treatments S2, S2H1, and S2H2 resulted in very low germination rates (0–5%). The combination of H_2SO_4 scarification and ZPT (S1H1 and S1H2) was the most effective treatment in enhancing the germination performance of robusta coffee seeds.

Kata kunci : Robusta coffee, scarification, plant growth regulator, germination.

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