PEMATAHAN DORMANSI BENIH DENGAN PERLAKUAN SKARIFIKASI MEKANIS PENUSUKAN DAN ZPT ALAMI AIR KELAPA TERHADAP PERKECAMBAHAN DAN PERTUMBUHAN BIBIT KOPI ARABIKA (*Coffea arabica* L.) VARIETAS KOMASTI

Oleh: Desvita Tamba
Dibimbing oleh: Endah Wahyurini dan Ami Suryawati

ABSTRAK

Kopi tanaman unggulan Indonesia, namun ketersediaan benih terbatas karena adanya masa dormansi. Tujuan penelitian mendapatkan skarifikasi mekanis penusukan dan konsentrasi air kelapa yang tepat pada pematahan dormansi benih terhadap perkecambahan dan pertumbuhan bibit Kopi Arabika Komasti. Metode menggunakan faktorial yang disusun dalam Rancangan Acak Lengkap (RAL). Faktor I skarifikasi mekanis yaitu tanpa penusukan dan dengan penusukan. Faktor II yaitu konsentrasi ZPT alami air kelapa yakni 5, 10, 15 dan 20 ml/L dengan 3 ulangan. Hasil percobaan dianalisis dengan *Analisis of Varance* (ANOVA) taraf 5% dan dilanjutkan uji *Duncan's Multiple Range Test* (DMRT). Hasil penelitian menunjukkan terdapat interaksi antara perlakuan skarifikasi mekanis dengan penusukan dan konsentrasi ZPT air kelapa 20 ml/L dapat meningkatkan luas daun dan bobot kering bibit Kopi Arabika Komasti. Perlakuan skarifikasi mekanis dengan penusukan dapat mematahkan dormansi, meningkatkan perkecambahan dan pertumbuhan bibit kopi Arabika Komasti. Zat Pengatur Tumbuh alami air kelapa konsentrasi 20 ml/L dapat mematahkan dormansi, meningkatkan perkecambahan dan pertumbuhan bibit kopi Arabika Komasti.

Kata kunci: Benih Kopi, Dormansi, Skarifikasi, Air kelapa

BREAKING SEED DORMANCY BY MECHANICAL SCARIFICATION PRICKING AND NATURAL PGR TREATMENT OF COCONUT WATER ON GERMINATION AND GROWTH OF SEEDLINGS ARABIC COFFEE (*Coffea arabica* L.) VARIETY KOMASTI

By: Desvita Tamba

Supervised by: Endah Wahyurini and Ami Suryawati

ABSTRACT

Coffee is Indonesia's flagship plant, but the availability of seeds is limited due to dormancy. The purpose of the study was to obtain the results of mechanical scarification puncturing and the right concentration of coconut water to break the dormancy of Komasti Arabica Coffee seeds. The method used factorial arranged in a completely randomized design (CRD). Factor I mechanical scarification is without puncturing and with puncturing. Factor II is the concentration of coconut water PGR, namely 5, 10, 15, and 20 ml / L with 3 replications. Experimental results were analyzed by Analysis of Variance (ANOVA) at a 5% level and continued by Duncan's Multiple Range Test (DMRT). The results showed that there was an interaction of mechanical scarification treatment with pricking and coconut water PGR concentration of 20 ml/L can increase the leaf area and dry weight of Komasti Arabica Coffee seedlings. Mechanical scarification treatment with pricking can break dormancy, and increase germination and growth of Arabica Komasti coffee seedlings. Coconut water growth regulator at a concentration of 20 ml/L can break dormancy, and increase germination and growth of Arabica Komasti coffee seedlings.

Keywords: Coffee Seeds, Dormancy, Scarification, Coconut water