

**PERKECAMBAHAN BENIH DAN PERTUMBUHAN AWAL
BIBIT KOPI ARABIKA (*Coffea arabica* L.) VARIETAS
SIGARAR UTANG DENGAN PERENDAMAN DALAM
LARUTAN RIZOBAKTERI INDIGENUS**

SKRIPSI



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PERKECAMBAHAN BENIH DAN PERTUMBUHAN AWAL BIBIT KOPI ARABIKA (*Coffea arabica* L.) VARIETAS SIGARAR UTANG DENGAN PERENDAMAN DALAM LARUTAN RIZOBAKTERI INDIGENUS

Abstrak

Tanaman kopi merupakan salah satu tanaman perkebunan yang banyak dimanfaatkan masyarakat sebagai minuman penyegar. Lambatnya perkecambahan kopi dapat ditanggulangi dengan pemberian PGPR. Penelitian bertujuan untuk mengetahui pengaruh perendaman benih kopi dengan isolat rizobakteri indigenus dan mengetahui jenis isolat rizobakteri terbaik terhadap perkecambahan benih dan pertumbuhan awal bibit kopi. Penelitian telah dilaksanakan pada bulan September 2022 sampai Maret 2023 di Laboratorium Mikrobiologi Fakultas Teknologi Pertanian, Laboratorium Fisiologi Tanaman Fakultas Pertanian dan Lahan Pembibitan Kebun Percobaan Lahan Atas, Fakultas Pertanian, Universitas Andalas, Padang. Rancangan Percobaan yang dilakukan adalah Rancangan Acak Lengkap (RAL) dengan berbagai isolat rizobakteri indigenus yang berbeda. Data dianalisis dengan uji F dengan taraf 5% dan kemudian dilakukan uji lanjut DNMRT dengan taraf 5% jika uji F yang dilakukan berbeda nyata. Hasil penelitian menunjukkan bahwa adanya pengaruh dari berbagai jenis isolat rizobakteri pada perkecambahan benih kopi arabika. Perlakuan jenis isolat rizobakteri indigenus L1 S4.1 dan L3 S5.2 mampu mempercepat perkecambahan benih dan mempercepat munculnya kotiledon. Namun berbagai perlakuan isolat rizobakteri indigenus tidak mampu meningkatkan parameter pertumbuhan awal bibit kopi.

Kata kunci : perkecambahan, kopi arabika, rizobakteri, pertumbuhan awal.

SEED GERMINATION AND EARLY GROWTH OF ARABICA COFFEE SEEDLING (*Coffea arabica* L.) VARIETY OF SIGARAR UTANG BY SOAKING IN INDIGENOUS RHIZOBACTERIA SOLUTION

Abstract

Coffee is one of the plantation crops that is widely used by the community as a refreshing drink. The slow germination of coffee can be overcome by giving PGPR. The study aimed to determine the effect of soaking coffee seeds with indigenous rhizobacterial isolates and to determine the best type of rhizobacterial isolate on seed germination and early growth of coffee seedlings. The research was conducted from September 2022 to March 2023 at the Microbiology Laboratory of the Faculty of Agricultural Technology, Plant Physiology Laboratory of the Faculty of Agriculture and the Upper Field Experimental Garden Nursery, Faculty of Agriculture, Andalas University, Padang. The experimental design conducted was a completely randomized design (CRD) with a variety of different indigenous rhizobacterial isolates. Data were analyzed by F test with 5% level and then continued with DNMRT further test at 5% level if the F test was significantly different. The results showed that there was an effect of various types of rhizobacterial isolates on the germination of Arabica coffee seeds. The treatment of indigenous rhizobacterial isolate type L1 S4.1, and L3 S5.2 were able to accelerate the germination and to accelerate the growth of cotyledon. However, various treatments of indigenous rhizobacterial isolates were not able to increase the early growth parameters of coffee seedlings.

Keywords: germination, arabica coffee, rhizobacteria, early growth seedling

