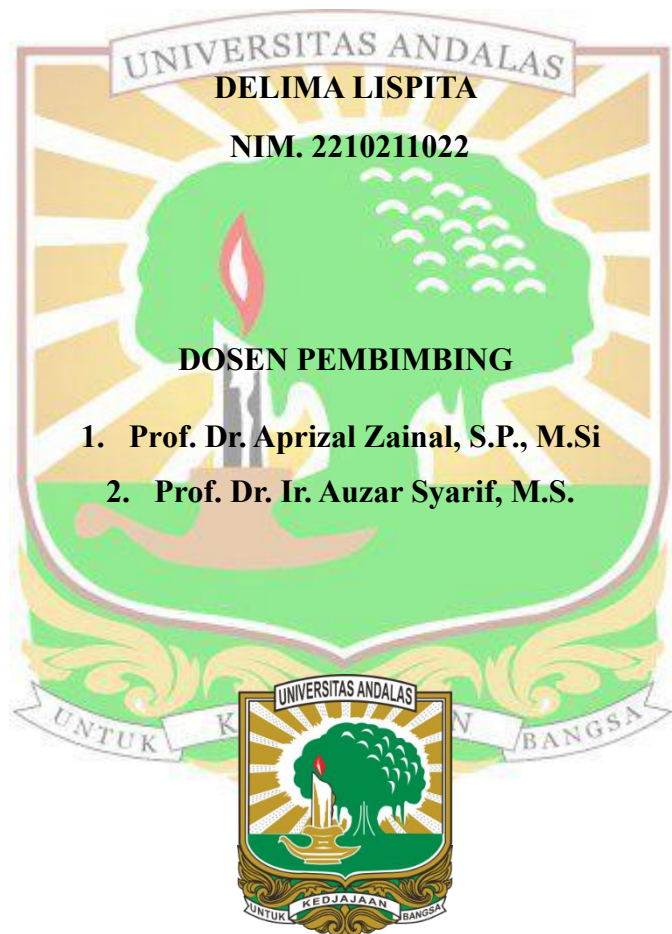


**PENGARUH PEMBERIAN *BIOCHAR* KULIT KOPI
TERHADAP PERTUMBUHAN BIBIT GAMBIR
(*Uncaria gambir* Roxb.) DI ULTISOL**

SKRIPSI

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ABSTRAK

Gambir (*Uncaria gambir* Roxb.) merupakan salah satu komoditas perkebunan unggulan di Indonesia yang memiliki nilai ekonomi dan farmasi tinggi, terutama di Sumatra Barat. Peningkatan produktivitas gambir perlu dimulai dari tahap pembibitan yang optimal. Pembibitan gambir pada media Ultisol, yang secara umum tergolong masam dan miskin hara, memerlukan upaya perbaikan media tanam agar pertumbuhan bibit dapat berlangsung optimal. Penelitian ini bertujuan untuk mengetahui pengaruh pemberian *biochar* kulit kopi terhadap pertumbuhan bibit gambir pada media Ultisol. Penelitian dilaksanakan pada bulan Januari hingga April 2026 di Rumah Kawat Fakultas Pertanian Universitas Andalas, menggunakan Rancangan Acak Lengkap (RAL) dengan lima taraf dosis *biochar* kulit kopi (0, 10, 20, 30, dan 40 g/polybag) dan empat ulangan. Data dianalisis menggunakan uji F pada taraf nyata 5%. Hasil analisis menunjukkan bahwa pemberian *biochar* kulit kopi pada berbagai dosis tidak berpengaruh nyata terhadap seluruh parameter pertumbuhan bibit gambir varietas Cubadak pada Ultisol hingga umur 12 MST, meliputi tinggi bibit, jumlah daun, luas daun, panjang akar, volume akar, bobot segar akar, bobot kering akar, bobot segar tajuk, bobot kering tajuk, dan rasio tajuk dan akar. Tidak adanya pengaruh nyata pemberian *biochar* pada penelitian ini diduga berkaitan dengan sifat pelepasan hara *biochar* yang relatif lambat dan masa inkubasi yang relatif singkat, sehingga respons pertumbuhan bibit gambir terhadap pemberian *biochar* belum terlihat hingga umur 12 MST.

Kata Kunci: *Biochar*, Gambir, Kulit Kopi, Pertumbuhan, Ultisol



THE EFFECT OF COFFEE HUSK *BIOCHAR* APPLICATION ON THE GROWTH OF GAMBIR (*Uncaria gambir* Roxb.) SEEDLINGS IN ULTISOL

ABSTRACT

Gambir (*Uncaria gambir* Roxb.) is one of the leading plantation commodities in Indonesia with high economic and pharmaceutical value, particularly in West Sumatra. Increasing gambir productivity needs to begin with optimal seedling production. Gambir seedlings grown on Ultisol, which is generally acidic and low in nutrients, requires improvement of the growing medium to support optimal seedling growth. This study aimed to determine the effect of coffee husk *biochar* application as a soil amendment on the early growth of gambir seedlings on Ultisol. The research was conducted from January to April 2026 at the Screen House, Faculty of Agriculture, Universitas Andalas, using a Completely Randomized Design (CRD) with five levels of coffee husk *biochar* doses (0, 10, 20, 30 and 40 g/polybag) and four replications. The data were analyzed using the F-test at a 5% significance level. The analysis indicated that the application of coffee husk *biochar* at several doses had no significant effect on all growth parameters of Cubadak gambir seedlings on Ultisol up to 12 weeks after transplanting (WAT), including seedling height, number of leaves, leaf area, root length, root volume, root fresh weight, root dry weight, shoot fresh weight, shoot dry weight, and shoot-to-root ratio. The absence of a significant effect of *biochar* application in this study was presumed to be related to the relatively slow nutrient release characteristic of *biochar* and the relatively short incubation period, so that the growth response of gambir seedlings to *biochar* application was not yet observable up to 12 WAT.

Keywords: *Biochar*, Coffee Husk, Gambir, Growth, Ultisol