PENGARUH PEMBERIAN *BIOCHAR* TANDAN KOSONG KELAPA SAWIT TERHADAP PERTUMBUHAN BIBIT TANAMAN KOPI ROBUSTA *(Coffea canephora var. robusta)*

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Abstrak

Kebutuhan kopi di dunia setiap tahunnya terus meningkat, karena kopi merupakan komoditi penting dalam perdagangan internasional sejak abad ke-19. Selain kualitas bibit dan pemupukan, media tanam juga memiliki peranan penting untuk mendapatkan bibit kopi robusta yang baik. Salah satu upaya yang dapat dilakukan seperti dengan pemberian *biochar* sebagai bahan pembenah tanah. Penelitian ini bertujuan untuk mengetahui bagaimana pengaruh *biochar* tandan kosong kelapa sawit terhadap pertumbuhan bibit kopi robusta dan juga untuk mendapatkan dosis terbaik *biochar* tersebut. Penelitian ini dilakukan di kebun percobaan Jurusan Budidaya Perkebunan Universitas Andalas Kampus III Dharmasraya pada bulan November 2019 sampai Februari 2020. Percobaan ini menggunakan Rancangan Acak Lengkap (RAL) dengan 5 dosis perlakuan *biochar* tandan kosong kelapa sawit yaitu = 0, 100, 150, 200, 250 g/polybag dan 5 ulangan. Masing- masing satuan percobaan terdapat 2 tanaman sehingga keseluruhan diperoleh 50 tanaman sampel. Data pengamatan dianalisis dengan uji F pada taraf 5 %, jika berbeda nyata maka dilanjutkan dengan uji lanjut *Duncan's New Multiple Range Test* (DNMRT). Hasil penelitian menunjukkan bahwa pemberian *biochar* tandan kosong kelapa sawit sementara belum berbeda nyata pada variabel tinggi bibit, panjang daun dan lebar daun bibit kopi robusta. Namun pemberian *biochar* dengan dosis 100 g/polybag mampu mendorong pertumbuhan diameter batang, jumlah daun, dan panjang akar bibit tanaman kopi robusta.

Kata kunci : amelioran, biochar, tandan kosong kelapa sawit, kopi robusta, pertumbuhan

THE EFFECT OF BIOCHAR FROM OIL PALM EMPTY FRUIT BUNCHES ON THE GROWTH OF ROBUSTA COFFEE SEEDLINGS (*Coffea canephora var. robusta*)

Abstract

The necessity of coffee in the world continues to increase every year, because coffee has been an important commodity in international trade since the 19th century. Beside of the seeds quality and fertilization, the planting medium also has an important role to obtain the best robusta coffee seedlings. One such effort is the provision of biochar as a soil amendment. The objectives of this study were to determine the effect of biochar from oil palm empty fruit bunches on the growth of robusta coffee seedlings and also to obtain the best dose of its biochar. This research was conducted in the experimental field of the Department of Estate Crops Cultivation, Andalas University 3rd Campus Dharmasraya from November 2019 until February 2020. The experiment method was a completely randomized design (CRD) with 5 treatment doses of biochar from oil palm empty fruit bunches, there-were = 0, 100, 150, 200, 250 g / polybag and it was repeated 5 times. Each experimental unit consisted of 2 plants so that the total of 50 sample plants. The observation data were analyzed by F- test at the 5% level significantly, if significantly different, then continued by Duncan's New Multiple Range Test (DNMRT). The results showed that the effect of biochar from oil palm empty fruit bunches was not significantly different on the variables of seedling height, leaf length and leaf width of robusta coffee seedlings. However, application of its biochar at a dose of 100 g / polybag was able to encourage the growth of stem diameter, number of leaves, and root length of robusta coffee seedlings.

Keywords: *ameliorant, biochar, oil palm empty fruit bunches, robusta coffee, growth*