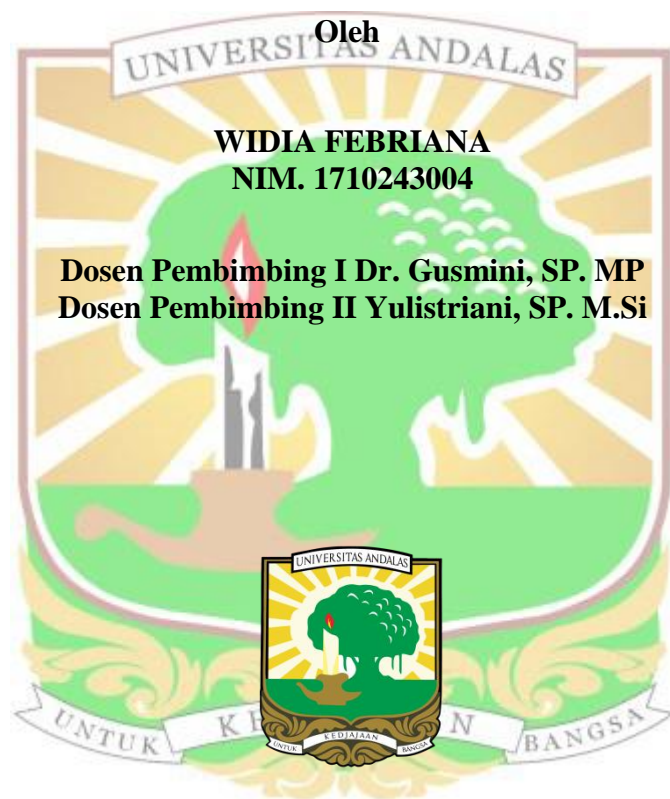


**PERBAIKAN TANAH BEKAS TAMBANG EMAS MELALUI  
APLIKASI KOMPOS SERASAH KARET DAN *BIOCHAR*  
TANDAN KOSONG KELAPA SAWIT TERHADAP  
PERTUMBUHAN BIBIT KARET  
(*Hevea brasiliensis* Muell. Arg.) KLON PB-260**

**SKRIPSI**



**FAKULTAS PERTANIAN  
UNIVERSITAS ANDALAS  
DHARMASRAYA  
2022**

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**ABSTRAK**

Kerusakan lahan yang ditimbulkan oleh aktivitas pertambangan emas yang utamanya adalah terjadinya pencemaran tanah oleh Merkuri (Hg). Lahan bekas tambang emas merupakan tanah yang memiliki sifat kimia, biologi, dan fisika yang buruk sehingga mengakibatkan tingkat kesuburan tanah menjadi sangat rendah. Tujuan dilakukan penelitian ini adalah untuk mengetahui pengaruh pemberian kompos serasah karet dan *biochar* tandan kosong kelapa sawit sehingga mendapatkan rekomendasi dosis yang terbaik dalam memperbaiki tanah bekas tambang emas terhadap pertumbuhan bibit karet (*Hevea brasiliensis* Muell. Arg.). Penelitian ini menggunakan metode rancangan acak lengkap dengan 7 perlakuan dan 3 ulangan. Perlakuan terdiri dari kompos serasah karet dosis 10 ton/ha dan 20 ton/ha, *biochar* tandan kosong kelapa sawit masing-masing dengan dosis 10 ton/ha dan 20 ton/ha, kombinasi kompos serasah karet dan *biochar* tandan kosong kelapa sawit dosis 10 ton/ha dan 20 ton/ha. Hasil penelitian menunjukkan bahwa perlakuan kombinasi kompos serasah karet dan *biochar* tandan kosong kelapa sawit dosis 20 ton/ha menghasilkan nilai pH tanah 4,85, Al-dd 0,42 cmol/kg, C-organik 0,92%, N-total 0,053%, C/N 11,25, P-tersedia 122,69 ppm, K-dd 0,40 cmol/kg, dan mereduksi merkuri pada tanah sebesar 0,01 ppm. Pertumbuhan tinggi tunas dan jumlah daun bibit karet diperoleh dari pengaplikasian *biochar* tandan kosong kelapa sawit dengan dosis terbaik yaitu 20 ton/ha. Di samping itu, pemberian perlakuan kompos serasah karet dosis 20 ton/ha mampu menambah lebar daun bibit karet (*H. brasiliensis* Muell. Arg.).

Kata kunci : Bibit karet, klon PB-260, tanah bekas tambang emas, biochar, kimia tanah

**IMPROVEMENT OF EX-GOLD MINING SOIL THROUGH THE  
APPLICATION OF RUBBER LITTER COMPOST AND  
BIOCHAR EMPTY OIL PALM FRUITS ON THE GROWTH OF  
RUBBER SEEDS (*Hevea brasiliensis* Muell. Arg.)  
CLON PB-260**

**ABSTRACT**

Land damage caused by gold mining activities is mainly due to soil contamination by Mercury (Hg). Ex-gold mines are soils that have poor chemical, biological, and physical properties, resulting in a very low level of soil fertility. The objective of this study was to determine the effect of rubber leaf litter compost and *biochar* of oil palm empty fruit bunches to obtain the best dose recommendation in improving the ex-gold mining soil on the growth of rubber seedlings (*Hevea brasiliensis* Muell. Arg.). This study was designed by a completely randomized design consisted of 7 treatments and repeated 3 times. The treatments were rubber leaf litter compost at a dose of 10 tons/ha and 20 tons/ha, *biochar* of oil palm empty fruit bunches at a dose of 10 tons/ha and 20 tons/ha, combination of rubber leaf litter compost and *biochar* of oil palm empty fruit bunches at a dose of 10 tons/ha and 20 tons/ha, respectively. The results showed that the combination treatment of rubber leaf litter compost and *biochar* of oil palm empty fruit bunches at a dose of 20 tons/ha resulted in a soil pH value of 4,85, Al-dd 0,42 cmol/kg, C-organic 0,92%, N-total 0,053%, C/N 11,25, P-available 122,69 ppm, K-dd 0,40 cmol/kg, and reducing soil mercury by 0,01 ppm. The growth of shoot height and leaves number of rubber seedlings was obtained by the application of *biochar* of oil palm empty fruit bunches at a best dose of 20 tons/ha. In addition, the treatment of rubber leaf litter compost at a dose of 20 tons/ha was able to increase the leaf width of rubber seedlings (*h. brasiliensis* Muell. Arg.).

Keywords : Rubber seedlings, PB-260 clone, ex-gold mine soil, *biochar*, soil chemical