

**THE EFFECT OF MIXED SHEEP MANURE AND COCONUT SHELL
BIOCHAR BRICKETS ON THE AVAILABILITY OF P AND K IN
ENTISOL SOIL**

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ABSTRACT

Samas Beach Entisol soil is a type of soil that is dominated by the sand fraction so that the nutrient content of P and K is low. Improving Entisol soil which has poor soil properties can be done by adding soil ameliorant. The addition of carbon in the form of coconut shell biochar and sheep manure is one way to increase soil nutrients, especially P and K nutrients. Providing soil ameliorant packaged in the form of briquettes is expected to keep soil nutrients longer in their availability. The research design used a completely randomized design (CRD) with two treatments, namely the first treatment of sheep dung and coconut shell biochar. B1: Treatment of 108.9 g (1,6 ton/ha) of sheep dung plus 10.89 g (0,16 ton/ha) of coconut shell biochar, B2: Treatment of 217.8 g (3,2 ton/ha) of sheep dung plus shell biochar. coconut 21.78 g (0,32 ton/ha), B3: Sheep manure treatment 326.7 g (4,8 ton/ha) plus coconut shell biochar 32.67 g (0,48 ton/ha). Second factor is an application times are M1: 1st week of application, M2: 8th week of application, M3: 1st week of application and 8th week of application. To determine the effect of treatment on research parameters, the data were analyzed using ANOVA (Analysis of variance) test. The real difference is 5% and to find out the comparison between treatments using the DMRT (Duncan's Multiple Range Test) multiple test at 5% level with. The results of the study showed that the dose of briquettes had a significant effect on the availability of P and K elements. The treatment of 326.7 g of sheep manure plus 32.67 g of coconut shell biochar and application in the 1st week and 8th week was able to increase the available P levels from 15.08 ppm to 60.71 ppm K-available from 0.21 me% to 0.77 me%.

Keywords: Ameliorant, Biochar, Entisol, Sheep Manure,.