

**THE EFFECT OF GIVING BRICKETS A MIXTURE OF SHEEP  
MANURE AND SHELL BIOCHAR AND THE TIME OF COCONUT  
APPLICATION ON THE N AND P ABSORPTION OF RICE PLANT IN  
ENTISOL SOIL**

By : Salsa Apriliana Arsanti

Guided by : Susila Herlambang

**ABSTRACT**

Samas Beach Entisol soil is soil that is dominated by sand fractions, as a result, the soil is easily leached so that nutrient levels are low. Sheep manure and coconut shell biochar can function as a source of soil nutrients that can increase nutrients to be absorbed by plants. The aim of this research is to determine the effect and relationship between dose, application time and the combination of both. The research design used a completely randomized design (CRD) with two factors. The first factor is the dose of the amount of sheep manure briquettes and coconut shell biochar consisting of A1= 1 briquette equivalent to 0.07 ton/ha P plus 0.007 ton/ha coconut shell biochar, A2= 2 briquettes equivalent to 0.14 ton/ha P plus 0.014 tonnes/ha of coconut shell biochar and A3= 3 briquettes equivalent to 0.28 tonnes/ha of P plus 0.028 tonnes/ha of coconut shell biochar. The second factor is the time of application of the briquettes consisting of B1= first week (one week before planting), B2= application 60 days after planting rice (maximum vegetative phase), and B3= combination of first week and application 60 days after planting rice. The research parameters were N and P nutrient uptake from the top and bottom of the rice plant. The research results were analyzed using ANOVA followed by DMRT at 5% level. The results of the research, the amount of giving 3 briquettes had a significant effect on increasing the upper N nutrient uptake from 5.58 gr/plant to 6.47 gr/plant, the lower N nutrient uptake from 0.58 gr/plant to 2.69 gr/plant, uptake upper P nutrient from 0.94 gr/plant to 1.20 gr/plant and lower P nutrient uptake from 0.34 gr/plant to 0.92 gr/plant. Application time in the first week and 60 days after planting had a significant effect on increasing upper N nutrient uptake from 5.60 gr/plant to 6.52 gr/plant, lower N nutrient uptake from 0.80 gr/plant to 2.01 gr/plant. plants, upper P nutrient uptake from 0.98 gr/plant to 1.61 gr/plant and lower P nutrient uptake from 0.42 gr/plant to 0.78 gr/plant. There was an interaction between the control and treatment combinations, namely lower N nutrient uptake and lower P nutrient uptake. The treatment combination with the highest value was the provision of 3 briquettes with application time in the first week and 60 days after planting (A3B3) with a N nutrient uptake value of 22.51 gr/plant for the upper part and then for the lower part 12.65 gr/plant. The results of P nutrient uptake were 4.19 gr/plant for the upper part and 3.81 gr/plant for the lower part.

**Keywords :** Ameliorant, Biochar, Briquettes, Rice Plants, Sheep Manure.