

**Response Of Growth And Yield of Two Peanut (*Arachis Hypogaea* L.)  
Varieties To The Application Of Coconut Shell Biochar**  
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**ABSTRACT**

Peanut production in Jember Regency has experienced a significant decline. One of the contributing factors is the excessive use of inorganic fertilizers. Therefore, it is necessary to apply cultivation practices that can restore soil fertility, such as biochar application. This study aimed to analyze the growth and yield responses of two peanut varieties to the application of coconut shell biochar. The research was conducted from June to November 2025 in Patemon Village, Pakusari District, Jember Regency, East Java, Indonesia. The experimental design used was a randomized block design (RBD) with two factors. The first factor was peanut variety, consisting of: Katana 2 and Tala 1. The second factor was the dose of coconut shell biochar, consisting of five levels: 5, 10, 15, 20, and 25 tons/ha. The observed variables included plant height, number of leaf stalks, number of branches, pod weight per plot, number of filled pods, weight of fresh filled pods, weight of dry filled pods, and 100-seed weight per plot. The data were analyzed using (ANOVA), when significant differences were detected, further analysis was performed using the Least Significant Difference (LSD) test. The results showed that a biochar dose of 20 tons/ha produced the highest number of filled pods in the Tala 1, while a dose of 15 tons/ha resulted in the highest fresh filled pod weight in the Tala 1.

***Key words:*** coconut shell, legumes, soil amendment