

**Response Growth and Yield of Peanut (*Arachis hypogaea* L.) to the
Application of Mycorrhizal Fertilizer and Bamboo Shoot Extract**

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ABSTRACT

Peanut cultivation in paddy fields with rice-rice-crops cropping pattern and the use of inorganic fertilizers can reduce soil fertility. Application of Mycorrhizal fertilizer and bamboo shoot extract can support plant growth. This study aims to determine the best dose of Mycorrhizal fertilizer and concentration of bamboo shoot extract for the growth and yield of peanut plants. The research used a factorial design prepared using a Complete Randomized Block Design (RCBD) with two factors and one control. Factor I was the dose of Mycorrhizal fertilizer at a level of 2.5 g/plant, 5 g/plant, and 7.5 g/plant. Factor II was the concentration of bamboo shoot extract at a level of 10 ml/liter, 20 ml/liter, and 30 ml/liter. The control treatment was without the provision of Mycorrhizal biofertilizer and bamboo shoot extract. The research data were analyzed using ANOVA at 5% level and the orthogonal contrast test, then continued with the DMRT test at 5% level. The results showed that there was no interaction between mycorrhizal fertilizer and bamboo shoot extract on all parameters. Mycorrhizal fertilizer dose 5 grams/plant gives the best results on plant height parameters 14, 21, 28, and 35 DAP, number of branches 21 DAP, number of pods per plant, number of pods per plot, fresh pod weight per plant, weight of 100 seeds, and pod weight per plot. The concentration of bamboo shoot extract of 20 ml/liter gave the best results to the parameters of plant height 28 and 35 DAP, number of branches 28 DAP, and dry weight of 100 seeds.

Keywords: *Peanuts, Mycorrhizal fertilizer, bamboo shoot extract.*