

**APPLICATION OF LIQUID ORGANIC FERTILIZER AND BAMBOO
SHOOT MOL ON GROWTH AND YIELD OF LONG
BEANS PLANTS (*Vigna sinensis* L.)**

By : Ananda Intan Alfani

Supervised by : Ellen Rosyelina Sasmita and Ari Wijayani

ABSTRACT

Production of long beans in Indonesia has not been able to meet consumer needs, which requires efforts to increase its production. The research aimed to determine the interaction between liquid organic fertilizer and MOL bamboo shoots, the difference between control treatment and treatment combination, and determine best concentration of liquid organic fertilizer and MOL bamboo shoots for growth and yield of long bean plants. This research method was carried out April-June 2023 in Pelem Hamlet. The research used a factorial Complete Group Randomized Design (3x3)+1. The first factor is liquid organic fertilizer concentration with 3 levels, namely 3 ml/l, 6 ml/l, and 9 ml/l. The second factor is the concentration of bamboo shoot MOL which consists of 3 levels, namely 150 ml/l, 200 ml/l, and 250 ml/l. Control using NPK fertilizer. The results showed an interaction between liquid organic fertilizer and MOL bamboo shoot treatments on the parameters of vine length 35 DAP, weight of podst per plot, and weight of pods per hectare. The combination of POC and MOL bamboo shoot treatment with the control treatment showed no difference in all parameters. POC treatment of 9 ml/l was the best concentration in the parameters of vine length 35 DAP, number of leaves 35 DAP, flowering age, number of pods per plant, pod weight per plant, and dry seed weight per plant, while MOL bamboo shoots 200 ml/l was the best concentration in the parameters of vine length 35 DAP and number of pods per plant.

Keywords : long bean, liquid organic fertilizer, MOL bamboo shoots