

GROWTH RESPONSE AND YIELD OF CUCUMBER PLANTS (*Cucumis sativus* L.) AGAINST VARIOUS CONCENTRATIONS OF LIQUID ORGANIC FERTILIZERS AND THE TIME OF PRUNING SHOOTS

By : Ferdina Mutiara Ramadhan
Supervised by : Alif Waluyo

ABSTRACT

Cucumber production can be increased by using liquid organic fertilizers and pruning shoots. This study aims to determine the response of cucumber plant growth and yield to the concentration of liquid organic fertilizer and the time of pruning shoots. The research method uses a Complete Group Random Design (RAKL) factorially with two factors. The first factor is the concentration of Liquid Organic Fertilizer consisting of 3 levels, namely 1 ml/L, 2 ml/L, and 3 ml/L. The second factor is that the shoot pruning time consists of 3 levels, namely without shoot pruning, 21 HST, and 28 HST. The data from the study was analyzed using *Analysis of Variance* (ANOVA) at the level of 5% and further tested with DMRT at the level of 5%. The results showed that there was an interaction between the treatment of 2 ml/l liquid organic fertilizer and the time of pruning shoots of 21 HST on the parameters of plant height of 16 HST, number of leaves 16, 23, and 30 HST, stem diameter of 16, 23, and 30 HST, number of branches 23 and 30 HST, fruit length, fruit diameter, fruit weight per plant, fresh weight of plant cutting, harvest index, and fruit weight per hectare. The concentration of liquid organic fertilizer of 2 ml/l gave the best results on the parameters of the number of branches of 16 HST and the number of fruits per plant. The pruning time of 21 HST shoots gives the best results on the parameter of the number of branches at the age of 16 HST.

Keywords : Cucumber, Liquid Organic Fertilizer, Shoot Pruning