

# **APPLICATION OF BIOSAKA INNOVATION TECHNOLOGY FROM WEED EXTRACT ON GROWTH AND YIELD OF JAPANESE CUCUMBER**

By: Willy Maulana Al Hibban  
Supervised by: Siwi Hardiastuti Endang Kawuryan

## **ABSTRACT**

This study aims to determine the type of weed extract as biosaka and the best concentration to increase the growth and yield of Japanese cucumber. The study used a one-factor RCBD experimental method with nine treatments with three replications. The treatments included 3 ml/l concentration of reed extract + field teki + bermuda grass; 6 ml/l concentration of reed extract + field teki + bermuda grass; 3 ml/l concentration of spinach thorn extract + purslane + bandotan; 6 ml/l concentration of spinach thorn extract + purslane + bandotan; 3 ml/l concentration of bermuda grass extract + field weed + purslane + spinach thorn; 6 ml/l concentration of bermuda grass extract + field weed + purslane + spinach thorn; 3 ml/l concentration of bermuda grass extract + field weed + spinach thorn + purslane + bandotan; 6 ml/l concentration of bermuda grass extract + field weed + spinach thorn + purslane + bandotan; and control (without biosaka). The parameters are plant height, number of leaves, flowering time, number of fruits per plant, fruit weight per fruit, total fruit weight per plant, fruit length, and fruit diameter. Observation data were analyzed by ANOVA at the 5% level and then continued with Duncan's Multiple Range Test (DMRT) at the 5% level. The results showed that the extracts of bermuda grass + field teki + purslane + spinach thorn at a concentration of 6 ml / l had an effect on the growth and yield of Japanese cucumber.

**Keyword:** Japanese Cucumber, Biosaka, Weed Extract, Concentration