ABSTRACT

INDRA ADITYA WINARKO, this research is entitled "**The Effect of Liquid Organic Fertilizer Concentration on the Growth and Yield of Pakcoy** (**Brassica rapa L.**) Varieties **Green** "Advisor I. Nanik Lutfiyah, S.Si., M.Si. II. Agus Fahmi., S.P., M.Si.

Pakcoy (Brassica rapa L.), also known as spoon mustard, is a popular leafy vegetable in Indonesia due to its high nutritional content, such as vitamins A, E, and K, as well as phenolic compounds that act as antioxidants and anti-inflammatory agents. This study aimed to investigate the effect of liquid organic fertilizer (LOF) concentration on the growth and yield of pakcoy variety Green. The research was conducted from December 2021 to January 2022 in Sumberdadi Village, Ngampungan, Bareng, Jombang Regency, using a Completely Randomized Block Design (CRBD) with four fertilizer concentrations and three replications. The LOF treatments included Ferinsa and Bio Conversion fertilizers at various concentrations. The results showed that the interaction between Ferinsa and Bio Conversion LOF concentrations significantly affected growth parameters such as leaf number, leaf area, plant height, root length, and fresh biomass weight. The best results were obtained with a combination of 50 ml/L Ferinsa and 100 ml/L Bio Conversion, which produced the highest fresh biomass weight (53.67 grams). This study concluded that fertilization with a 50% Ferinsa and 50% Bio Conversion combination yielded the best results in improving pakcoy production.

Keywords: Pakcoy, liquid organic fertilizer, Ferinsa, Bio Conversion, plant growth.

