

## **ABSTRAK**

### **PENGARUH KOMBINASI PUPUK ORGANIK CAIR DAN JARAK TANAM TERHADAP PERTUMBUHAN DAN HASIL KAILAN (*Brassica oleracea* var. *Alboglabra*)**

Oleh

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Permintaan kailan yang cenderung meningkat sedangkan produksinya berfluktuatif, sehingga perlu dilakukan peningkatan produksi kailan melalui perbaikan teknologi budidaya yang tepat guna, salah satunya ialah dengan pemupukan dan pengaturan jarak tanam. Umumnya petani masih menggunakan pupuk organik cair komersil seperti POC NASA. Pemanfaatan potensi lokal seperti bonggol pisang dapat dijadikan sebagai bahan untuk pembuatan pupuk organik cair dan dapat dijadikan sebagai alternatif pengganti penggunaan pupuk organik cair komersil. Bonggol pisang mengandung senyawa organik serta unsur hara makro dan mikro yang diperlukan dalam meningkatkan pertumbuhan tanaman dan mempertahankan kesuburan tanah. Penelitian ini bertujuan untuk mengetahui pengaruh kombinasi POC dan jarak tanam terhadap pertumbuhan dan hasil kailan. Penelitian menggunakan RAK dengan 12 kombinasi perlakuan dan diulang sebanyak 3 kali yaitu A (Tanpa POC + jarak tanam 20 cm x 15 cm), B (Tanpa POC + jarak tanam 20 cm x 20 cm), C (Tanpa POC + jarak tanam 20 cm x 25 cm), D (POC NASA 0,2% + jarak tanam 20 cm x 15 cm), E (POC NASA 0,2% + jarak tanam 20 cm x 20 cm), F (POC NASA 0,2% + jarak tanam 20 cm x 25 cm), G (POC bonggol pisang 25% + jarak tanam 20 cm x 15 cm), H (POC bonggol pisang 25% + jarak tanam 20 cm x 20 cm), I (POC bonggol pisang 25% + jarak tanam 20 cm x 25 cm), J (POC bonggol pisang 50% + jarak tanam 20 cm x 15 cm), K (POC bonggol pisang 50% + jarak tanam 20 cm x 20 cm), L (POC bonggol pisang 50% + jarak tanam 20 cm x 25 cm). Hasil penelitian menunjukkan bahwa kombinasi POC dan jarak tanam berpengaruh terhadap tinggi tanaman, luas daun, bobot segar per tanaman dan hasil tanaman kailan per petak. Kombinasi POC bonggol pisang 50% dan jarak tanam 20 cm x 25 cm menghasilkan tinggi tanaman, luas daun, bobot segar per tanaman dan hasil tanaman kailan paling baik.

Kata Kunci : Bonggol pisang, jarak tanam, kailan, POC NASA, pupuk organik cair.

## **ABSTRACT**

### **EFFECT OF COMBINATION LIQUID ORGANIC FERTILIZER AND PLANTING DISTANCE ON GROWTH AND PRODUCTION OF KAILAN (*Brassica oleracea* var. *Alboglabra*)**

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The demand for kailan tends to increase while production fluctuates, so it is necessary to increase kailan production through improvements in appropriate cultivation technology, one of which is fertilization and spacing arrangements. Generally, farmers still use commercial liquid organic fertilizers such as NASA's LOF. The use local potential such as banana weevils can be used as material for the manufacture of liquid organic fertilizer and can be used as an alternative to the use of commercial liquid organic fertilizer. Banana weevil contains organic compounds and macro- and micronutrients necessary to promote plant growth and maintain soil fertility. This study aims to determine the effect of the combination of LOF and spacing on the growth and yield of kailan. The study used RAK with 12 treatment combinations and repeated 3 times, namely A (Without LOF + spacing 20 cm x 15 cm), B (Without LOF + spacing 20 cm x 20 cm), C (Without LOF + spacing 20 cm x 20 cm). 25 cm), D (LOF NASA 0,2% + spacing 20 cm x 15 cm), E (LOF NASA 0,2% + spacing 20 cm x 20 cm), F (LOF NASA 0,2% + spacing 20 cm x 25 cm), G (LOF banana weevil 25% + spacing 20 cm x 15 cm), H (LOF banana weevil 25% + spacing 20 cm x 20 cm), I (LOF banana weevil 25% + spacing 20 cm x 25 cm), J (LOF banana weevil 50% + spacing 20 cm x 15 cm), K (LOF banana weevil 50% + spacing 20 cm x 20 cm), L (LOF banana weevil 50% + spacing 20 cm x 25 cm). The results showed that the combination of LOF and spacing affected plant height, leaf area, fresh weight per plant, and crop yield per plot. The combination of LOF banana weevil 50% and planting distance of 20 cm x 25 cm results in plant height, leaf area, fresh weight per plant, and the best yield of kailan.

**Keywords:** Banana weevil, plant spacing, kailan, LOF NASA, liquid organic fertilizer.