

## **ABSTRAK**

### **PENGARUH KOMBINASI DOSIS PUPUK ORGANIK KASGOT DAN KONSENTRASI *PLANT GROWTH PROMOTING RHIZOBACTERIA* TERHADAP PERTUMBUHAN DAN HASIL TANAMAN KAILAN (*Brassica oleracea var Alboglabra*)**

**Oleh :**  
**Wafa Fauziyyah**  
**195001054**

**Dosen Pembimbing :**  
**Undang**  
**Elya Hartini**

Produktivitas kailan di Indonesia masih berfluktuatif sehingga perlu peningkatan produksi kailan melalui teknik budidaya yang tepat, salah satunya dengan pemupukan. Penelitian ini bertujuan untuk mengetahui pengaruh kombinasi dosis pupuk organik kasgot dan konsentrasi PGPR terhadap pertumbuhan dan hasil kailan. Penelitian ini dilaksanakan di Desa Pagersari, Kabupaten Bandung, Jawa Barat pada bulan September sampai November 2023. Penelitian menggunakan Rancangan Acak Kelompok (RAK) non faktorial yang terdiri dari tujuh perlakuan dan diulang sebanyak empat kali, yaitu A : tanpa kombinasi dosis pupuk organik kasgot dan konsentrasi PGPR, B : kombinasi dosis pupuk organik kasgot 15 t/ha dan konsentrasi PGPR 5 mL/L, C : kombinasi dosis pupuk organik kasgot 15 t/ha dan konsentrasi PGPR 12,5 mL/L, D : kombinasi dosis pupuk organik kasgot 20 t/ha dan konsentrasi PGPR 5 mL/L, E : kombinasi dosis pupuk organik kasgot 20 t/ha dan konsentrasi PGPR 12,5 mL/L, F : kombinasi dosis pupuk organik kasgot 25 t/ha dan konsentrasi PGPR 5 mL/L, G : kombinasi dosis pupuk organik kasgot 25 t/ha dan konsentrasi 12,5 mL/L. Hasil penelitian menunjukkan bahwa kombinasi dosis pupuk organik kasgot dan konsentrasi PGPR berpengaruh terhadap tinggi tanaman dan jumlah daun pada 28 hari setelah tanam (HST), luas daun, bobot brangkas per tanaman bobot bersih per tanaman. Kombinasi dosis pupuk organik kasgot 25 t/ha dan konsentrasi PGPR 5 mL/L memberikan pengaruh baik terhadap pertumbuhan dan hasil tanaman kailan.

Kata kunci : Kailan, pupuk organik kasgot, dan PGPR

## **ABSTRACT**

### **THE EFFECT OF COMBINATION OF KASGOT FERTILIZER DOSE AND CONCENTRATION OF PLANT GROWTH PROMOTING RHIZOBACTERIA ON THE GROWTH AND YIELD OF KAILAN PLANTS (*Brassica oleracea* var *Alboglabra*.)**

**By :**  
**Wafa Fauziyyah**  
**195001054**

**Supervisor :**  
**Undang**  
**Elya Hartini**

Kailan productivity in Indonesia is still fluctuating, so it is necessary to increase kailan production through appropriate cultivation techniques, one of which is fertilization. This study aimed to determine the effect of combination the dose of kasgot fertilizer and concentration of PGPR on the growth and yield of kailan plants. This research has been carried on the land of Pagersari Village, Bandung District, West Java which will be carried out from September to November 2023. This study used a non-factorial Randomized Block Design (RBD) consisting of seven treatment levels was repeated four times, namely A : without combination the dose of *kasgot* fertilizer and concentration PGPR, B : combination the doses of *kasgot* fertilizer 15 tons/ha and concentration PGPR 5 mL/L, C : combination the dose of *kasgot* fertilizer 15 tons/ha and concentration PGPR 12,5 mL/L, D : combination the doses of *kasgot* fertilizer 20 tons/ha and concentration PGPR 5 mL/L, E : combination the dose of *kasgot* fertilizer 20 tons/ha and concentration of PGPR 12,5 mL/L, F : combination the dose of *kasgot* fertilizer 25 tons/ha and concentration of PGPR 5 mL/L, G : combination the dose of *kasgot* fertilizer 25 tons/ha and concentration of PGPR 12,5 mL/L. the result showed that combination the dose of *kasgot* fertilizer and concentration of PGPR had a significant effect on the height of plants and number of leaves 28 days after planting (DAP), leaf area, stover weight per plant, net weight per plant. Combination the dose of *kasgot* fertilizer 25 tons/ha and concentration of PGPR 5 mL/L has a good influence on the growth and yield of kailan plants.

**Keywords :** Kailan, *Kasgot* fertilizer and PGPR