

## EXECUTIVE SUMMARY

**Wibie Efendri, 2021.** “Penggunaan Pupuk Organik Cair (Poc) dari Limbah Sayur Kol Terhadap Percepatan Persemaian dan Pertumbuhan Tanaman Kangkung, Cabe, dan Terung”. Skripsi. Program Studi Pendidikan Biologi. Fakultas Keguruan dan Ilmu Pendidikan, Universitas Bung Hatta.

**Oleh** : **Wibie Efendri**

**Pembimbing** : **Dr. Azrita, S.Pi., M.Si**

Penelitian ini bertujuan menganalisis kadar NPK pupuk organik cair yang dihasilkan dari limbah sayur kol dan menganalisis pengaruh penggunaan pupuk organik cair (POC) dari limbah sayur kol terhadap percepatan persemaian dan pertumbuhan tanaman kangkung, cabe dan terung. Penelitian ini menggunakan metode eksperimen. Rancangan yang digunakan dalam penelitian ini adalah RAL (Rancangan Acak Lengkap) 3 Perlakuan dan 5 ulangan. Penggunaan POC pada dosis 5 ml dan 500 ml air setiap hari diberikan pada perlakuan kangkung, cabe dan terung selama 40 hari pengamatan. Data yang diperoleh diolah menggunakan analisis of varians (ANOVA) dan uji *Duncan's Multiple Range Test* (DMRT). Menganalisis data pada penelitian ini menggunakan SPSS 16.0 taraf kepercayaan 95%. Pada penelitian peubah yang diamati adalah percepatan persemaian, tinggi tanaman dan jumlah helai daun. kangkung merupakan tumbuhan yang paling tercepat tumbuh dibandingkan dengan tanaman cabe dan terung. Tinggi tanaman yang terbesar terletak pada tanaman kangkung baik di awal pengukuran maupun di akhir pengukuran yaitu sebesar berturut-turut  $9,28 \pm 0,29$  cm dan  $50,38 \pm 6,57$  cm. Jumlah daun relatif sama pada setiap perlakuan. Hasil penelitian menunjukkan bahwa parameter percepatan persemaian dan jumlah daun tidak berbeda nyata terhadap setiap perlakuan pada awal pengamatan, dimana  $P > 0,05$  dan  $F_{hitung} < F_{tabel}$ . Sedangkan tinggi tanaman berbeda nyata terhadap setiap perlakuan pada awal pengamatan, dimana  $P < 0,05$  dan  $F_{hitung} > F_{tabel}$ . Tinggi tanaman dan jumlah daun pada akhir pengamatan, penggunaan POC berpengaruh nyata terhadap semua perlakuan ( $P < 0,05$ ) dan  $F_{hitung} > F_{tabel}$ .

---

**Kata kunci:** pupuk organik cair, percepatan persemaian, tinggi tanaman, jumlah helai daun

## EXECUTIVE SUMMARY

**Wibie Efendri, 2021 .** " The use of Liquid Organic Fertilizer (Poc) from Vegetable Waste Cauliflower On the Acceleration of the Nursery and Plant Growth Kale, Chili peppers, and Eggplant". Research. Study Program Of Biology Education. Faculty of Teacher training and Education, Universitas Bung Hatta.

**By** : **Wibie Efendri**

**Advisor** : **Dr. Azrita, S.Pi., M.Si**

This study aims to analyze the levels of NPK fertilizer organic liquid that is produced from waste vegetable cabbage and analyze the influence of the use of liquid organic fertilizer (POC) from vegetable waste cauliflower on the acceleration of the nursery and plant growth kale, peppers and eggplant. This research uses experimental method. The design used in this research is the CRD (completely Randomized Design) With 3 Treatments and 5 replications. The use of POC at a dose of 5 ml, and 500 ml of water each day is given on the treatment of kale, chilli and eggplant for 40 days of observation. The Data obtained were processed using analysis of variance (ANOVA) and test Duncan's Multiple Range Test (DMRT). Analyze the data in this study using SPSS 16.0 95% confidence level. On the research of the observed variables is the acceleration of the nursery, plant height and number of leaves. kale is a plant which is the fastest grow compared to plants of chili and eggplant. Plant height the largest of which is located on the plant kale better in the beginning of the measurement and the final measurement that is equal consecutive  $9,28 \pm 0,29$  cm and  $50,38 \pm 6,57$  cm. The number of leaves is relatively the same in each treatment. The results showed that the parameters of the acceleration of the nursery and the number of leaves did not differ significantly to each treatment at the beginning of the observations, where  $P > 0.05$  and  $F_{count} < F_{table}$ . While the height of the different plants of each treatment at the beginning of the observations, where  $P < 0.05$  and  $F_{count} > F_{table}$ . Plant height and number of leaves at the end of the observation, the use of POC significant effect on all treatments ( $P < 0.05$ ) and  $F_{count} > F_{table}$ .

---

**Keywords:** liquid organic fertilizer, the acceleration of the seedbed, plant height, number of leaves