

**PEMBERIAN DOSIS PUPUK GUANO DAN KONSENTRASI PUPUK
ORGANIK CAIR AIR CUCIAN BERAS TERHADAP PERTUMBUHAN
DAN HASIL TANAMAN KAILAN (*Brassica oleracea* L.)**

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ABSTRAK

Kailan merupakan sayuran bernutrisi yang bermanfaat untuk kesehatan namun produksinya berfluktuasi. Penelitian ini bertujuan untuk mengetahui dosis pupuk guano dan konsentrasi POC air cucian beras yang tepat terhadap pertumbuhan dan hasil tanaman kailan. Metode yang digunakan adalah percobaan *screen house* yang disusun dalam Rancangan Acak Lengkap (RAL) 2 faktor + 1 kontrol. Faktor pertama yaitu dosis pupuk guano (30, 40, 50 g/polibag). Faktor kedua yaitu konsentrasi POC air cucian beras (200, 300, 400 ml/L). Data hasil pengamatan dianalisis menggunakan sidik ragam taraf 5%, kemudian uji kontras ortogonal untuk mengetahui beda nyata antara kontrol dengan perlakuan, dilanjut uji DMRT pada taraf 5% untuk mengetahui beda nyata antar perlakuan. Hasil penelitian menunjukkan bahwa terdapat interaksi antara pupuk guano dan POC air cucian beras terhadap tinggi tanaman 14, 21, dan 28 HST, diameter batang 14 dan 28 HST, jumlah daun 14, 21, dan 28 HST, bobot segar tanaman, bobot segar per petak, bobot segar ekonomis tanaman, panjang akar, dan volume akar. Dosis pupuk guano 50 g/polibag memberikan hasil terbaik pada diameter batang 14 HST. Konsentrasi POC air cucian beras 300 ml/L memberikan hasil terbaik pada diameter batang 14 HST.

Kata kunci: kailan, pupuk guano, POC air cucian beras

**GROWTH AND YIELD OF KAILAN (*Brassica oleracea* L.)
PLANTS WITH THE APPLICATION OF GUANO FERTILIZER
DOSAGE AND CONCENTRATION OF LIQUID ORGANIC
FERTILIZER FROM RICE WASHING WATER**

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ABSTRACT

Kailan is a nutritious vegetable that is beneficial for health but its production fluctuates. This study aims to determine the appropriate dose of guano fertilizer and concentration of rice washing water on the growth and yield of kailan plants. The method used was a screen house experiment arranged in a Completely Randomized Design (CRD) with 2 factors + 1 control. The first factor is the dose of guano fertilizer (30, 40, 50 g/polybag). The second factor is the concentration of liquid organic fertilizer from rice washing water (200, 300, 400 ml/L). The observational data were analyzed using analysis of variance (ANOVA) at a 5% significance level, followed by orthogonal contrast tests to determine significant differences between the control and treatments, and then DMRT (Duncan's Multiple Range Test) at a 5% significance level to identify significant differences among treatments. The results of the study indicate that there is an interaction between guano fertilizer and rice washing water on plant height at 14, 21, and 28 HST, stem diameter at 14 and 28 HST, number of leaves at 14, 21, and 28 HST, fresh plant weight, fresh weight per plot, economic fresh plant weight, root length, and root volume. A guano fertilizer dose of 50 g/polybag yielded the best results for stem diameter at 14 HST. Concentration of rice washing water at 300 ml/L yielded the best results at a stem diameter of 14 HST.

Keywords: kailan, guano fertilizer, liquid organic fertilizer from rice washing water