

ABSTRAK

RESPON PERTUMBUHAN DAN HASIL TANAMAN SAWI HIJAU (*Brassica rapa* Var. Shinta) TERHADAP APLIKASI PUPUK *BIO-SLURRY* PADAT DAN KOMPOS TANDAN KOSONG KELAPA SAWIT DENGAN DUA PERIODE TANAM

Oleh

NI PUTU AYUNI GABRELIAWATI

Pupuk organik seperti *bio-slurry* padat dan kompos tandan kosong kelapa sawit (tkks) digunakan sebagai penambah unsur hara di dalam tanah pada 2 periode tanam. Penelitian ini bertujuan untuk mengetahui respon pertumbuhan dan hasil tanaman sawi hijau terhadap aplikasi *bio-slurry* padat dan tandan kosong kelapa sawit dengan dua periode tanam. Penelitian ini dilaksanakan di Kedaton, Bandar Lampung pada Maret-Mei 2025. Rancangan yang digunakan adalah Rancangan Acak Kelompok (RAK) faktorial (4x3) dengan 3 kelompok. Homogenitas ragam diuji dengan uji *Bartlett*, aditifitas diuji dengan uji *Tukey*, dan uji lanjut BNT 5%. Perbandingan antara periode 1 dengan periode 2 menggunakan uji T. Hasil penelitian menunjukkan bahwa pada periode pertama terdapat interaksi antara *bio-slurry* padat dengan dosis 10-30 ton/ha dan kompos tandan kosong kelapa sawit dengan dosis 6-12 ton/ha terhadap variabel tinggi tanaman dan jumlah daun. Pada masing-masing perlakuan *bio-slurry* padat maupun tkks tidak berpengaruh nyata. Berdasarkan hasil pengamatan periode kedua menunjukkan bahwa *bio-slurry* padat dengan dosis 10 ton/ha menghasilkan bobot segar tajuk sebesar 16,76 g/tanaman, sedangkan kontrol hanya sebesar 14,45 g/tanaman. Pemberian kompos tandan kosong kelapa sawit dengan dosis 6 ton/ha berpengaruh pada variabel jumlah daun. Tidak terdapat interaksi yang berpengaruh antara *bio-slurry* padat dan kompos tandan kosong kelapa sawit pada tanaman sawi hijau. Hasil uji T menunjukkan bahwa periode tanam kedua memberikan pertumbuhan dan hasil tanaman sawi hijau lebih baik daripada periode tanam pertama.

Kata Kunci: Sawi Hijau, *Bio-Slurry* Padat, Kompos Tandan Kosong Kelapa Sawit

ABSTRACT

GROWTH AND YIELD RESPONSE OF GREEN MUSTARD (*Brassica rapa* Var. *Shinta*) TO THE APPLICATION OF SOLID BIO-SLURRY AND OIL PALM EMPTY FRUIT BUNCH COMPOST UNDER TWO PLANTING PERIODS

By

NI PUTU AYUNI GABRELIAWATI

Organic fertilizers such as solid bio-slurry and empty oil palm fruit bunches (EOPFB) are used as nutrient supplements in the soil during two planting periods. This study aims to determine the growth response and yield of green mustard plants to the application of solid bio-slurry and empty oil palm fruit bunches with two planting periods. The study was conducted in Kedaton, Bandar Lampung, from March to May 2025. A randomized block design (RBD) factorial (4x3) with three groups was used. Homogeneity of variance was tested using Bartlett's test, additivity was tested using Tukey's test, and a post-hoc BNT 5% test was conducted. Comparisons between period 1 and period 2 were made using the t-test. The results showed that in the first period, there was an interaction between solid bio-slurry at a dose of 10–30 tons/ha and empty oil palm fruit bunch compost at a dose of 6–12 tons/ha on the variables of plant height and number of leaves. Neither the solid bio-slurry treatments nor the empty fruit bunch treatments had a significant effect. Based on the observations in the second period, solid bio-slurry at a dose of 10 tons/ha produced a fresh shoot weight of 16.76 g/plant, while the control group only produced 14.45 g/plant. The application of empty oil palm fruit bunch compost at a dose of 6 tons/ha had an effect on the number of leaves. There was no significant interaction between solid bio-slurry and empty oil palm fruit bunch compost on green mustard plants. The T-test results showed that the second planting period yielded better growth and yield of green cabbage plants than the first planting period.

Keywords: Green Mustard, Solid Bio-Slurry, Oil Palm Empty Fruit Bunch Compost