

INTISARI

Penelitian yang berjudul “Pengaruh Imbangan Dosis Limbah Cair Budidaya Lele Dan Pupuk Nitrogen Terhadap Pertumbuhan Dan Hasil Sawi (*Brassica juncea* L)” telah dilaksanakan di *Green House* Fakultas Pertanian Universitas Muhammadiyah Yogyakarta, dan di Laboratorium Penelitian Fakultas Pertanian Universitas Muhammadiyah Yogyakarta (UMY) pada bulan April 2017 sampai Juni 2017. Penelitian ini bertujuan untuk mengetahui pengaruh penggunaan limbah cair budidaya lele terhadap pertumbuhan dan hasil sawi dan menentukan imbangan dosis limbah cair budidaya lele yang efektif dan efisien sebagai substitusi pupuk organik cair, pada pertumbuhan, dan hasil sawi (*Brassica juncea* L).

Penelitian ini dilaksanakan dengan metode percobaan yang disusun dalam percobaan rancangan acak lengkap (RAL) dengan 4 unit perlakuan. Perlakuan yang diujikan adalah 75% N (urea) + 25% N-limbah cair budidaya lele, 50% N (urea) + 50% N-limbah cair budidaya lele, 25% N (urea) + 75% N-limbah cair budidaya lele, dan 100% N-limbah cair budidaya lele. Masing-masing perlakuan diulang 3 kali setiap satu ulangan terdapat 5 ulangan percobaan sehingga terdapat 60 unit percobaan tanaman sawi (*Brassica juncea* L). Tiga perlakuan A, B, dan C masih diberikan pupuk Urea 254 kg/hektar, SP-36 317 kg/hektar dan KCl 156 kg/hektar dan perlakuan D tidak diberikan pupuk kimia.

Hasil penelitian ini menunjukkan bahwa pemberian berbagai imbangan dosis limbah cair budidaya lele dan pupuk nitrogen (urea) mampu menyukupi kebutuhan nutrisi tanaman sawi (*Brassica juncea* L). Pemanfaatan limbah cair budidaya lele pada pertanaman sawi dapat memperbaiki pertumbuhan dan hasil tanaman.

Kata kunci : Limbah cair budidaya lele, pupuk nitrogen (urea), pertumbuhan dan hasil sawi

ABSTRACT

The research entitled is the influence of liquid waste catfish cultivation on growth and produce (Brassica juncea L)" was conduct at Green House Faculty of Agriculture University of Muhammadiyah Yogyakarta, and in Research Laboratory of Faculty of Agriculture University of Muhammadiyah Yogyakarta (UMY) April 2017 to June 2017. This research for how to know effect of liquid cultivation catfish againts the growth and yield of mustard and to determine the effective and efficient dosage of liquid cultivation of catfish culture as the substitution of liquid organic fertilizer, on growth and yield of mustar (Brassica juncea L).

This research was conduct by experimental method compiled in complete randomized design (RAL) experiment with 4 treatment units. The treated treatments was 75% N (urea) + 25% N-wastewater catfish cultivation, 50% N (urea) + 50% N-wastewater catfish cultivation, 25% N (urea) + 75% N-wastewater liquid cultivation catfish, and 100% N-waste liquid catfish farming. Each treatment was repeated 3 times replication. every one replication there are 5 replications of the experiment so that there were 60 units of experimental mustard plant (Brassica juncea L). Three treatments A, B, and C are still given Urea fertilizer 254 kg / hectare, SP-36 317 kg / hectare and KCl 156 kg / hectare and treatment D is not given chemical fertilizer.

The results of this study indicate that the provision of various dosages of liquid waste of catfish and nitrogen fertilizer is able to meet the nutrition needs of mustard plants (Brassica juncea L). Using of liquid cultivation of catfish on the planting of mustard can improve the growth and yield.

Key words: Liquid waste catfishs aquaculture, nitrogen fertilizer (urea), growth and yield of mustard green.