

## ABSTRAK

**Rio Al-fajar. 2023. Pemanfaatan Pupuk Kandang Ayam Dan Pupuk Hayati Terhadap Pertumbuhan Serta Hasil Tanaman Mentimun (*Cucumis Sativus L. Var. Suzana F1*) Dibawah bimbingan Adjat Sudrajat dan Yati Setiati Rachmawati.**

Penggunaan pupuk anorganik secara bertahap berdampak buruk pada kondisi tanah yang menyebabkan menurunnya kualitas tanah. Perpaduan antara kotoran ayam dan pupuk hayati akan menimbulkan interaksi dimana bakteri BSF akan mendapatkan sumber makanannya dari bahan organik pada kotoran ayam. Dari interaksi tersebut akan didapatkan hasil berupa tanaman yang mudah menyerap unsur hara, baik makro maupun mikro. Penelitian dilaksanakan bulan Maret-Mei 2023 dilahan Kampus II UIN Sunan Gunung Djati Bandung dengan ketinggian tepat yaitu 681 mdpl. Penelitian ini juga dilakukan di Laboratorium Fakultas Sains dan Teknologi, UIN Sunan Gunung Djati Bandung. Faktor pertama dosis pupuk kandang ayam p1 ( $10 \text{ tha}^{-1}$ ) dan p2 ( $20 \text{ tha}^{-1}$ ) sebanyak 3 taraf perlakuan serta faktor kedua dosis pupuk hayati h1 ( $16 \text{ L ha}^{-1}$ ) sebanyak 2 taraf perlakuan diulang sebanyak 4 kali ulangan, sehingga terdapat 6 kombinasi perlakuan yang dilakukan pengulangan sebanyak 4 kali sehingga diperoleh 24 satuan percobaan. Kombinasi pemberian pupuk kandang ayam dan pupuk hayati tidak memberikan interaksi namun memberikan pengaruh mandiri terhadap parameter pengamatan tinggi tanaman, luas daun, bobot buah segar pertanaman dan indeks panen. Sedangkan terjadi interaksi pada kombinasi pupuk kandang ayam p1 ( $10 \text{ tha}^{-1}$ ) dan pupuk hayati h1 ( $16 \text{ L ha}^{-1}$ ) pada parameter pengamatan nisbah pupus akar tanaman mentimun varietas suzana F1.

Kata Kunci : Pupuk Kandang Ayam, Pupuk Hayati, Tanaman Mentimun

## ABSTRACT

**Rio Al-fajar. 2023. Utilization of Chicken Manure and Bio Fertilizers on the Growth and Yield of Cucumber (*Cucumis Sativus* L. Var. Suzana F1) Under the Guidance Adjat sudrajat and Yati Setiati Rachmawati.**

The use of inorganic fertilizers gradually has a negative impact on soil conditions which causes a decrease in soil quality. The combination of chicken manure and biological fertilizers will lead to an interaction where the BSF bacteria will get their food source from the organic matter in the chicken manure. From this interaction results will be obtained in the form of plants that easily absorb nutrients, both macro and micro. The research was carried out from March to May 2023 on the grounds of Campus II UIN Sunan Gunung Djati Bandung at an exact altitude of 681 meters above sea level. This research was also carried out at the Laboratory of the Faculty of Science and Technology, UIN Sunan Gunung Djati Bandung. The first factor is the dose of chicken manure p1 (10  $\text{tha}^{-1}$ ) and p2 (20  $\text{tha}^{-1}$ ) as much as 3 treatment levels and the second factor is the dose of biological fertilizer h1 (16 L  $\text{ha}^{-1}$ ) as much as 2 treatment levels repeated 4 times, so There were 6 treatment combinations which were repeated 4 times to obtain 24 experimental units. The combination of chicken manure and biological fertilizers gave no interaction but had an independent effect on the parameters of plant height, leaf area, fresh fruit weight per plant and harvest index. While there was an interaction between the combination of chicken manure p1 (10  $\text{tha}^{-1}$ ) and biofertilizer h1 (16 L  $\text{ha}^{-1}$ ) on the observed parameters of the root decay ratio of cucumber plant variety Suzana F1.

Keywords: Chicken Manure, Biological Fertilizer, Cucumber Plant

