

ABSTRAK

**PENGARUH VOLUME PUPUK ORGANIK CAIR BERBAHAN DASAR SABUT
KELAPA (*Cocos nucifera*) TERHADAP PERTUMBUHAN DAN HASIL PANEN
TANAMAN SAWI HIJAU (*Brassica juncea L.*)**

Salma Yunita Sari

Universitas Sanata Dharma

Penelitian ini bertujuan untuk mengetahui pengaruh pupuk organik berbahan dasar sabut kelapa terhadap pertumbuhan dan hasil panen tanaman sawi hijau (*Brassica juncea L.*). Sabut kelapa memiliki kandungan unsur-unsur hara dari alam yang sangat dibutuhkan tanaman yaitu berupa Kalium (K), Kalsium (Ca), Magnesium (Mg), Natrium (Na) dan Fosfor (P). Kalium ini merupakan salah satu unsur yang diperlukan bagi tanaman, karena salah satu sifat positif dari kalium adalah menghambat klorosis pada daun.

Penelitian ini dilaksanakan di desa Podosoko, Kecamatan Sawangan, Kabupaten Magelang dengan kondisi tanah latosol (rendah unsur hara). Penelitian ini menggunakan metode Rancangan Acak Lengkap non faktorial, dengan 3 pemberian perlakuan dan kontrol. Perlakuan dibedakan dengan pemberian pupuk organik cair sabut kelapa dengan volume yang berbeda yaitu 100 ml/l, 200 ml/l, dan 300 ml/l. Parameter yang diamati adalah tinggi batang (cm), jumlah daun (helai), berat basah (gram), dan berat kering (gram).

Hasil penelitian menunjukkan bahwa pemberian pupuk cair sabut kelapa memberikan pengaruh positif. Perlakuan paling baik ditunjukkan pada perlakuan 1 dengan volume 100 ml/l yang memberikan pengaruh positif baik pada pertambahan tinggi batang, jumlah daun, berat basah, dan berat kering. Sedangkan pengaruh terendah pada kontrol karena tanpa tambahan nutrisi, yang terjadi pada pertambahan tinggi batang dan berat basah, berat kering tangkai daun. Sedangkan untuk jumlah daun, berat basah, dan berat kering daun terendah pada perlakuan 3 karena terserang hama dan penyakit.

Kata kunci : *Brassica juncea L.*, *Latosol*, *Sabut kelapa*, *Volume*.

ABSTRACT

THE IMPACTS OF VOLUME OF LIQUID ORGANIC FERTILIZER MADE FROM COCONUT FIBER (*Cocos nucifera*) ON THE GROWTH AND THE CROP OF MUSTARD GREENS (*Brassica juncea L.*)

Salma Yunita Sari

Sanata Dharma University

This research is aimed to know the impact of using liquid organic fertilizer made from coconut fiber on the growth and the crop of mustard greens (*Brassica juncea L.*). Coconut fibers contain natural nutrients which are important for plants, namely Kalium (K), Calsium (Ca), Magnesium (Mg), Natrium (Na), dan Phosphor (P). Kalium is one of the nutrients which is needed by plants because of its positive characteristic is to block the chlorosis on leaves.

This research was hold in Podosoko village, Sawangan District, Magelang regency, under latosol ground condition (less of nutrients). This research uses Completely Randomized Design (CRD) non-factorial using 3 treatments and controls on plants. These treatments are differed by the use of different volume of liquid organic fertilizer made from coconut fiber: 100 ml/l, 200 ml/l, and 300 ml/l. The parameters used in this research are the plants height (cm), the numbers of leaves (sheets), the total weight of plants before placed in an oven (gram), and the total weight of plants after placed in an oven (gram).

The result shows that the use of liquid organic fertilizer of coconut fiber gives positive impacts on plants. The most positive result is showed by treatment 1 under the volume of 100 ml/l which increase the growth of plants, the number of leaves, and the total weight of plants before and after they are placed in the oven. On one hand, the lowest result of treatment is showed by plants which are less of nutrient addition which impacts on the growth of stem and the total weight of stalk before and after placed in the oven. On the other hand, the number and the total weight of leaves before and after they are placed in the oven are in the lowest result under treatment 3 because of having pests and diseases.

Keywords: *Brassica juncea L., Latosol, Coconut fibers, Volume.*