## PENGARUH PEMBERIAN PUPUK ORGANIK CAIR LIMBAH KULIT PISANG RAJA TERHADAP PERTUMBUHAN DAN HASIL TANAMAN CABAI MERAH KERITING

(Capsicum annuum L.)

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## **ABSTRAK**

Penelitian ini bertujuan untuk mengetahui kadar unsur hara Nitrogen, P<sub>2</sub>O<sub>5</sub>, C-Organik dan Rasio C/N pada pupuk organic cair limbah kulit pisang raja, mengetahui pengaruh pemberian pupuk organic cair limbah kulit pisang raja terhadap pertumbuhan dan hasil tanaman cabai merah keriting (Capsicum annuum L.) dan mengetahui dosis optimal pupuk organik cair limbah kulit pisang raja terhadap pertumbuhan dan hasil tanaman cabai merah keriting (Capsicum annuum L.). Penelitian dilaksanakan di Rumah Kaca, Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Negeri Medan pada bulan Maret 2018 hingga September 2018. Parameter yang digunakan adalah tinggi batang, jumlah cabang, jumlah daun, umur munculnya bunga, jumlah bunga, jumlah buah dan berat buah. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan 4 perlakuan dan 6 ulangan. Adapun perlakuan yang digunakan adalah perlakuan A (0 ml/L), perlakuan B (300 ml/L), perlakuan C (400 ml/L) dan perlakuan D (500 ml/L). Uji statistic dilakukan dengan menggunakan SPSS 21. Hasil yang didapatkan dalam penelitian ini yaitu pupuk organic cair limbah kulit pisang raja memiliki kadar unsur hara Nitrogen sebesar 0,10 %, P<sub>2</sub>O<sub>5</sub> sebesar 0,12 %, C-Organik sebesar 0,73 % dan Rasio C/N sebesar 7,30, pemberian pupuk organik cair limbah kulit pisang raja dengan dosis yang paling rendah (300 ml/L) tidak berbeda nyata terhadap kontrol sedangkan pada dosis 400 ml/L dan 500 ml/L menurunkan hasil tanaman cabai merah keriting ( Capsicum annuum L.) dan tidak ada dosis yang optimal dari pemberian pupuk organik cair limbah kulit pisang raja terhadap tinggi batang, jumlah cabang, jumlah daun, umur munculnya bunga, jumlah bunga, jumlah buah dan berat buah tanaman cabai merah keriting (Capsicum annuum L).

Kata kunci: Tanaman cabai merah keriting (*Capsicum annuum* L.), pupuk organic cair, limbah kulit pisang raja.

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## The Effect Of Giving Liquid Organic Fertilizer From Waste Banana Var. Raja Peel To Growth And Results Plant Of Curly Red Chili (Capsicum annuum L.)

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## **ABSTRACT**

Waste banana var. Raja peel has nutrients that are useful for plants so that it can be used as a base for liquid organic fertilizer. This research aims to determine the levels of Nitrogen, P<sub>2</sub>O<sub>5</sub>, C-Organic and Ratio C / N on organic fertilizer liquid waste banana var.Raja peel, found out the effect and the optimal dose of liquid organic fertilizer on waste banana var. Raja peel on growth and results of curly red chili (Capsicum annuum L.). The research was carried out in the Greenhouse, Faculty of Mathematics and Natural Sciences, State University of Medan in March 2018 to September 2018. The parameters used in this study were the height of the stem, number of branches, number of leaves, age of appearance of flowers, number of flower, number of fruits and fruit weight. This study used a completely randomized design (CRD) with 4 treatments and 6 replications. The treatment used was treatment A (0 ml/L), treatment B (300 ml/L), treatment C (400 ml/L) and treatment D (500 ml/L). Statistical tests were carried out using SPSS 21. The results in this research were liquid organic fertilizer of waste banana var.Raja peel having Nitrogen nutrient content of 0.10%, P<sub>2</sub>O<sub>5</sub> of 0.12%, C-Organic of 0.73 % and the C / N ratio of 7.30, the lowest dose of organic fertilizer from waste banana var.Raja peel (300 ml/L) was not significantly different from the control while at a dose of 400 ml/L and 500 ml/L decreased yield of curly red chili (Capsicum annuum L.) and there is no optimal dose of organic fertilizer liquid from waste banana var.Raja peel for stem height, number of branches, number of leaves, the age of the rise of flowers, flower number, fruit number and fruit weight of curly red chili (Capsicum annuum L.).

Keywords: Curly red chili plant (*Capsicum annuum* L.), liquid organic fertilizer, waste banana var Raja peel

