

## ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh dari campuran pupuk kotoran ayam dengan kotoran sapi yang difermentasi menjadi kompos terhadap pertumbuhan dan hasil produksi tanaman kentang. Penelitian ini dilakukan di Desa Ujung Kecamatan Simpang Empat, Kabupaten Karo, Sumatera Utara, dengan ketinggian tempat  $\pm 1250 - 1500$  meter dari permukaan laut. Penelitian ini akan dilaksanakan pada bulan Desember 2018 – April 2019. Penelitian ini menggunakan metode Rancangan Acak Kelompok (RAK) Nonfaktorial, dengan simbol A yang terdiri dari 6 taraf yaitu:  $A_0$  (tanpa perlakuan),  $A_1$  (100 % PKA),  $A_2$  (75 % PKA + 25 % PKS),  $A_3$  (50 % PKA + 50 % PKS),  $A_4$  (25 % PKA + 75 % PKS),  $A_5$  (100 % PKS), perlakuan masing-masing diulang 4 kali. Data hasil pengamatan kemudian dilakukan analisis ragam dengan uji taraf 5%. Apabila ada beda nyata ( $p < 0,05$ ), maka pengujian dilanjutkan dengan uji DUNCAN.

Hasil penelitian menunjukkan bahwa perlakuan campuran pupuk kotoran ayam dengan kotoran sapi berpengaruh nyata ( $p < 0,05$ ) terhadap variabel pertumbuhan tinggi tanaman, pertambahan jumlah cabang, jumlah umbi per sampel, jumlah umbi per plot, bobot umbi per sampel dan bobot per plot.

***Kata kunci : pupuk kotoran ayam, kotoran sapi, kentang***

## ABSTRACT

The aim of this study was to determine the effect of the comparison of chicken manure with cow manure which was fermented into compost on the growth and yield of potato crops. This study was carried out in Ujung Village, Simpang Empat Subdistrict, Karo District, North Sumatra, with  $\pm$  1250-1500 meters above sea level. This research will be conducted in December 2018 - April 2019. This study uses a Nonfactorial Randomized Block Design (RBD) method, with symbol A consisting of 6 levels, namely: A0 (without treatment), A1 (100% PKA) , A2 (75% PKA + 25% PKS), A3 (50% PKA + 50% PKS), A4 (25% PKA + 75% PKS), A5 (100% PKS), each treatment repeated 4 times. The results of the observational data were then analyzed for variance with a 5% test. If there is a significant difference ( $p < 0.05$ ), then the test is continued with the DUNCAN test.

The results showed that the treatment of the ratio of chicken manure with cow manure had a significant effect ( $p < 0.05$ ) on variables of plant height growth, number of branches, number of tubers each sample, number of tubers each slope, tuber weight each sample and weight each slope .

***Keywords: chicken manure, cow manure, potatoes***