

## **ABSTRAK**

**Asrina Simanjuntak, NIM 4193220019 (2019), PENGARUH PEMBERIAN PUPUK ORGANIK CAIR DAUN TANAMAN KIPAHIT (*Tithonia diversifolia*) TERHADAP PERTUMBUHAN DAN HASIL TANAMAN KACANG MERAH (*Phaseolus vulgaris L.*)**

Penelitian ini bertujuan untuk mengetahui pengaruh pemberian pupuk organik cair kipahit terhadap pertumbuhan dan hasil tanaman kacang merah (*Phaseolus vulgaris L.*) dan menentukan dosis optimal pupuk organik cair kipahit yang memberikan hasil terbaik bagi pertumbuhan dan hasil tanaman kacang merah. Penelitian ini dilaksanakan pada 10 April sampai 26 Juli 2023 di Desa Sabungan Nihuta III, Kecamatan Sipahutar, Kabupaten Tapanuli Utara. Penelitian ini menggunakan desain penelitian rancangan acak kelompok (RAK) non faktorial dengan empat perlakuan yaitu P0 (tanpa pemberian pupuk organik cair kipahit), P1 (200 ml/L), P2 (250 ml/L), dan P3 (300 ml/L), serta enam kali pengulangan. Data hasil penelitian dianalisis menggunakan SPSS25 dengan menggunakan analisis varians (Anava) satu jalur. Hasil penelitian menunjukkan bahwa perlakuan pupuk organik cair kipahit memberikan pengaruh nyata terhadap pertumbuhan dan hasil tanaman kacang merah. Dosis pupuk organik cair kipahit sebanyak 300 ml/L (P3) memberikan pengaruh optimal pada parameter tinggi tanaman, jumlah daun, jumlah polong, bobot polong kering, jumlah biji dan produksi biji pertanaman.

**Kata kunci:** Pupuk organik cair, kipahit, kacang merah



## ABSTRACT

### **Asrina Simanjuntak, NIM 4193220019 (2019), THE EFFECT OF PROVIDING LIQUID ORGANIC FERTILIZER FROM THE LEAVES OF KIPAHIT (*Tithonia diversifolia*) ON THE GROWTH AND YIELD OF RED BEANS (*Phaseolus vulgaris* L.)**

This research aims to determine the effect of applying kipahit liquid organic fertilizer on the growth and yield of red bean plants (*Phaseolus vulgaris* L.) and determine the optimal dose of kipahit liquid organic fertilizer that provides the best results for the growth and yield of red bean plants. This research was carried out from April 10 to July 26 2023 in Sabungan Nihuta III Village, Sipahutar District, North Tapanuli Regency. This research used a non-factorial randomized block design (RAK) research design with four treatments, namely P0 (without giving kipahit liquid organic fertilizer), P1 (200 ml/L), P2 (250 ml/L), and P3 (300 ml/L ), and six repetitions. The research data were analyzed using SPSS25 using one-way analysis of variance (Anava). The results of the research showed that the Kipahit liquid organic fertilizer treatment had a real influence on the growth and yield of red bean plants. Kipahit liquid organic fertilizer dosage of 300 ml/L (P3) provides optimal influence on the parameters of plant height, number of leaves, number of pods, dry pod weight, number of seeds and seed production per crop.

**Key words:** Liquid organic fertilizer, kipahit, red beans

