

**Respon Pertumbuhan dan Produksi Tanaman Kacang Tanah(*Arachis hypogaea* L.) Akibat Penambahan Bakteri Pelarut Fosfat(*Pseudomonad pendarflour*) pada Tiga Jenis Tanah Yang Berbeda**

**ABSTRAK**

Penelitian ini bertujuan untuk mengetahui respon pertumbuhan tanaman kacang tanah akibat penambahan bakteri pelarut fosfat (*Pseudomonad pendarflour*) pada 3 jenis tanah yang berbeda. Penelitian ini dilaksanakan di kebun percobaan Agroekoteknologi Fakultas Pertanian, Universitas Trunojoyo Madura di Desa Telang Kecamatan Kamal, Kabupaten Bangkalan, Madura, yang dimulai pada bulan April sampai Juni 2015. Rancangan yang digunakanyaitu Rancangan Acak Lengkap (RAL) non faktorial dengan enam perlakuan diulang sebanyak empat kali. Perlakuan terdiri dari tiga jenis tanah yaitu regosol, grumosol dan mediteran serta dengan penambahan bakteri PF.

Hasil penelitian menunjukkan bahwa terdapat perbedaan pertumbuhan dan produksi tanaman kacang tanah (*Arachis hypogaea* L) akibat penambahan bakteri PF pada berbagai jenis tanah. Perlakuan tanpa bakteri PF dengan penambahan bakteri PF pada berbagai jenis tanah menunjukkan pengaruh yang sangat nyata pada variabel tinggi tanaman, jumlah daun kecuali umur 14 HST yang memberikan pengaruh nyata, jumlah polong, berat kering polong, berat biji, biomasa diatas tanah, berat kering akar dan kandungan P tanaman. Perlakuan penambahan bakteri PF pada berbagai jenis tanah yang berbeda menunjukkan tidak terdapat pengaruh pada variabel ratio tajuk akar dan populasi PF.

**Kata Kunci :** Kacang tanah, *Pseudomonad pendarflour*, Jenis Tanah, Pertumbuhan, Produksi.

# **Response Growth and Production of Peanut (*Arachis hypogae* L.) Due to the addition of Solvent Bacteria Phosphate (*Flourescent pseudomonads*) on Three Different Types of Soil**

## **ABSTRACT**

This study aims to investigate the response of the peanut plant growth due to the addition of phosphate solvent bacteria (pseudomonads fluorescence) at three different soil types. This research was conducted at the experimental garden Agroecotechnology Faculty of Agriculture, University Trunojoyo of Madura in the village Telang Kamal sub district, Bangkalan, Madura, which began in April - June 2015. The design used is Complete Random Design (RAL) non factorial with six treatment was repeated four times. The treatment consists of three types of soil regosol, grumosol and mediterranean and with the addition of bacteria PF.

The results showed that there are differences in the growth and yield of groundnut (*Arachishypagaea* L) due to the addition of PF bacteria on various types of soil. Treatment without bacteria PF with the addition of bacteria PF on sharing the type of soil showed a significant influence on the variables plant height, leaf number than age 14 HST that give real effect, pods, dry weight of pods, seed weight, biomass above ground, root dry weight and P content of plants. Extra treatment of bacterial PF on sharing different types of soil showed no effect on root and canopy ratio variable PF population.

Keywords: Peanut, Fluorescent pseudomonads, Soil Type, Growth, Production.