ABSTRACT

Ilham Taupik Muhammad Zenda, 2010. Root infection, Growth and Result Of Tomato Fruit (*Lycopersicum esculentum mill*) of Marta F1 Variety inocolated by biofertilizer (FMA dan BPF) with fertilizing P organic (Guano and Rock Phosphate), Supervised by Cecep Hidayat and Liberty Chaidir.

Research to determine the effect of biofertilizer (Arbuscular Mycorrhizal Fungi and Phosphate Solubizing Bacteria) with fertilizing P organic (Guano and Rock Phosphate) on root ifection degree, height of crops, dry weight, and result of tomato fruit (Lycopersicum Esculentum Mill) of Marta FI variety was conducted at green house and agrotechnology laboratory, faculty of secience and technology of Sunan Gunung Djati state islamic university, from May 2010 to October 2010.

The method used was Randomized Block Design (RBD) factorial pattern with two factors. The first factor was biofertilizer consisting of: (1) without biofertilizer (2) FMA (3) BPF (4) BPF + FMA. The second factor was fertilizing P organic consisting of: (1) without organic (2) Guano (3) Rock Phosphate.

Results of this experiment showed that there was no interaction effect between biofertilizer (BPF and FMA) with fertilizing P organic (Guano and Rock Phosphate) on root infection degree, height of crops, dry weight, and result of tomato fruit. The main effect of inoculation of biofertilizer (BPF +FMA) gave the significant effect on root infection degree, height of crops, dry weight, and result of tomato fruit. And the organic (Guano and Rock Phosphate) gave the significant effect on the height of crops, dry weight, and result of tomato fruit.

Keywords: FMA, BPF, rock phosphate and guano, tomato