Pengaruh Penambahan Pupuk Hayati Mikoriza dan Dosis Pupuk Dasar SP-36 Terhadap Produksi dan Mutu Benih Mentimun (Cucumis sativus L.) (The Effect of Addition of Mycorrhizal Biological Fertilizer and Dosage of SP-36 Basic Fertilizer on Cucumber Seed Production and Quality (Cucumis sativus L.)) Supervised by: Dr.Ir.Nantil Bambang Eko S.,M.Si

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ABSTRACT

Cucumber is one of vegetable that has a great demand in Indonesia. Cucumber production values continued to increase during 2017-2020 but it was unable to meet national needs with its productivity only on 9-11 ton/ha. The efforts to increase the productivity of cucumber in field are the use of P fertilizer and optimizing the absorption of organic nutrients by using mycorrhiza. This study aims to determine the effect of interaction of mycorrhiza biofertilizer and the use of P fertilizer on the growth and production of cucumber seeds. The research was conducted in randomized block design with two factors, the addition of mycorrhiza biofertilizer and the use of P fertilizer. The factor of addition of mycorrhiza biofertilizer consist of 3 levels, 0 g/plant (M0), 10 g/plant (M1) and 20 g/plant (M2). The factor of the use of P fertilizer consist of 3 levels, 250 kg/ha (P1), 350 kg/ha (P2), and 450 kg/ha (P3). The result showed that interaction of the addition of mycorrhiza biofertilizer and the use of P fertilizer did not have a significant effect to growth and production of cucumber seeds. The factor of addition of mycorrhiza biofertilizer had a significant effect to growth and production of cucumber seeds with M2 as the best treatmet. The factor of the use of P fertilizer had a significant effect to 1000 seed weight of cucumber and germination of seed cucumber with P3 at dose of 450 kg/ha as the best treatment.

Key words: mycorrhiza, cucumber seed, phosphor, nutrient