Aplikasi Bionutrisi dan Dosis Pupuk NPK TerhadapPertumbuhandan Mutu Benih MentimunHibrida (*Cucumis sativus* L.).*Application of Bionutrient and NPK Fertilizer on Grow and Quality of Hybrib Cucumber Seed (Cucumis sativus* L.). *Supervised by* :Dr. Ir. Nurul Sjamsijah, M.P. and Ir. Subandi

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ABSTRACT

The needs of cucumber in Indonesia are increase in line with population accrue, so it is necessary to increase its production. This research aims to determine the effect dose of bionutrient and NPK fertilizer dose on production and quality of hybrid cucumber seed. This research was conducted in September to November 2018 at PT. Wira Agro Nusantara Sejahtera Kediri. This Research was using factorial Randomized Complete Block Design with 2 factors. The first factor was Bionutrient dose 2 levels, there were 50 ml/plant (B1), and 60 ml/plant (B2). The second factor was dose of NPK fertilizer consisted 3 levels there were 9 grams/plant (P1),12 grams/plant (P2), and 15 grams/plant (P3). The result of this research shows that the dose of bionutrient is significant on flowering age and height of plant 35 days after plant, however it is non signifiant effect on height of plant 21 days after plant, 28 days after plant, widht of leaf, length of leaf, weight of fruit, length of fruit weight of 100 seed, viability, growth simultaneously and growth speed. The best dose is 60ml/L (B2). The dose of NPK fertilizer is significant effect on weight of fruit, lenght of fruit, and growth simultaneously. however it is non signifiant effect on height of plant, widht of leaf, length of leaf, flowering age, viability and growth speed. The best dose of NPK fertilizer is 15grams/plant (P3). There is no interaction between dose of bionutrient and NPK fertilizer dose.

Key words : *Bionutrient, Cucumber, Dose of Fertilizer, Seed Quality*