**Optimasi produksi dan mutu benih Mentimun hibrida** (*cucumis sativus* L.) **Melalui aplikasi ZPT Giberelin** (GA<sub>3</sub>) **dan variasi Dosis pupuk KNO**<sub>3</sub>. (*Optimization of production and seed quality of hybrid cucumber (cucumis sativus* L.) through the application of ZPT Gibberellin (GA<sub>3</sub>) and variations in KNO<sub>3</sub> fertilizer dosage). Supervisor by Putri Santika, S.ST, M.Sc.

**Choirullah Budi Ardiansyah** 

Study Program of Seed Production Technique Department of Agriculture Production Program Studi Teknik Produksi Benih Jurusan Produksi Pertanian

## **ABSTRACT**

To meet the demand for cucumber whose production is decreasing, efforts can be made to increase cucumber production by improving cultivation techniques, improving cucumber quality, using quality and certified seeds. Optimization of cucumber plants can be through gibberellin hormone and KNO3 fertilizer. The purpose of this study was to determine the effect of the interaction between the application of Gibberellin growth regulator and KNO3 dose variation on the production and quality of cucumber seeds. This research was conducted in the farmland of kalibaru manis village, kalibaru sub-district, Banyuwangi district with a factorial randomized complete block design (RAK). The first factor is the concentration of Gibberellin (G) with 3 levels, namely the concentration of 0 ppm (G0), 100 ppm (G1), and 20 ppm (G2). While the second factor is the variation of KN03 dosage (K) with 3 levels, namely 0 g/plant (K0), 5 g/plant (K1), and 10 g/plant (K2). Data were analyzed by Duncan's test at the 5% level, the results showed that the concentration of Gibberellin 200 ppm (G2) had a significant effect on the parameter of the number of female flowers per plant at 68.44 flowers. The treatment of various doses of KNO3 with a dose of 5 g/plant (K1) gave a significant effect on the parameter of the number of female flowers per plant of 68.33 flowers. The treatment of variation of KNO3 dose with a dose of 5 g/plant (K1) gave a very significant effect on the treatment of the number of fruits per plant of 2.94 fruits. While the interaction of the two treatments had results that were not significantly different in all parameters tested.

*Key Words* : *Hybrid Cucumber Seeds, Gibberellin hormone, KNO*<sub>3</sub> *dosage*