

Pengaruh Lama Fermentasi dan Konsentrasi Natrium (NaOCl) Hipoklorit terhadap Mutu Benih Mentimun (*Cucumis sativus* L.). *The Effect of Fermentation Time and Sodium Hypochlorite (NaOCl) Concentration to the Quality of Cucumber Seeds (*Cucumis sativus* L.)*

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ABSTRACT

Cucumber as the one of high economic value crops is got by good seed processing technic. One of seed processing that is resulted cucumber seed is extracting. Therefore, proper extracting technic is needed for getting the best quality of seeds. The purpose of this study was to determine the effect of fermentation time and Sodium Hypochlorite concentration to cucumber seed quality. It was conducted on February to March 2019 at seed production technic green house, State Polytechnic of Jember, Jember Regency, East java. It was used factorial completely randomized design with 3 replications. The first factor was fermentation time for L₁ (12 hours), L₂ (24 hours) and L₃ (36 hours). The second factor was Sodium Hypochlorite that is consisted of K₁ (5%), K₂ (10%) and K₃ (15%). The data was analyzed by using Analysis of Variance (ANOVA) stage 1% and 5% and it is continued by using Duncan Multiple Range Test (DMRT). The result showed the fermentation time gives no significant effect to the germination, growth speed (KCT), and simultaneous growth (KST) of cucumber seeds. The concentration of Sodium Hypochlorite gives very significant effect to the germination, growth speed and simultaneous growth (KST) of cucumber seeds. The interaction between fermentation time and the concentration of Sodium Hypochlorite gives different significant effect to cucumber seed's germination with germination average value is 93,33% on L₂K₂ treatment, growth speed with average value is 28% in L₂K₂ treatment, and simultaneous growth (KST) with average value 89% in L₂K₂ treatment.

Key words : Time fermentation, concentration of NaOCl, cucumber seed quality