Pengaruh Biopriming Trichoderma Terhadap Viabilitas dan Pertumbuhan Mentimun (Cucumis sativus L.) Kedaluwarsa (The Effect of Trichoderma Biopriming on the Viability and Growth of Expired Cucumber (Cucumis sativus L.)) Supervised by : Dr. Ir. Rahmat Ali Syaban, M.Si.

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ABSTRACT

One of the efforts in increasing the production of expired seeds can be done by determining the length of soaking and Trichoderma biopriming. This study aims to determine the length of soaking and giving Trichoderma to the viability and growth of expired cucumber. This research was conducted at the Seed Production Engineering Lab, Plant Protection Lab and Agricultural Land of Jember State Polytechnic from July to October 2022. The experimental design used in this research has two stages of research, stage 1 with Factorial Complete Randomized Design (CRD) and stage 2 with Factorial Randomized Group Design (RGD) with Repeated 4 Times The first factor is Trichoderma with levels of Trichoderma asperellum, harzianum and harzianum & asperellum. The second factor is the length of soaking at the level of 24 hours, 48 hours and 72 hours. The results of the data obtained were analyzed using the F test or ANOVA then further tests were carried out using the DMRT test. The results showed that Trichoderma and the length of soaking had a significant effect on several observation parameters. Trichoderma (T) gives a very real influence on the parameters of growth speed (17.29%), uniformity of growth (52.89%), in the treatment of Soaking Time (L) gives a very real influence on the parameters of germination power (65.83%), growth speed (16.70%), vigor index (32.00%), uniformity of growth (48.11%), and plant height (78.48 cm).

Key words : Cucumber, Soaking Time, Trichoderma, Biopriming