Pengaruh Perendaman Benih dengan Air Panas terhadap Masa Dormansi dan Fase Vegetatif Benih Padi (*Oryza sativa* L.) Varietas Inpari 32. *Effect of Soaking Seeds in Hot Water on The Dormancy Period and Vegetative Phase of Rice Seeds (Oryza sativa L.) Inpari 32*. Supervisor Dr. Ir. Nurul Sjamsijah, MP.

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ABSTRACT

Rice seeds have dormancy characterictics called after ripening. The aim of this study was to determine the effect of soaking seeds in hot water on the dormancy period and the vegetative phase of rice seed (Oryza sativa L.) Inpari 32. This research was conducted for 3 months, from September to November 2022, at the Seed Technology Laboratory and Seed Technology Green House, Jember State Polytechnic. The experimental design used was factorial complete randomized design and factorial randomized block design. The first factor is the temperature of the solution used, which consists of 3 levels namely, L0 (control), L1 (solution temperature 50°C), L2 (solution temperature 75°C). the second factor is the soaking time, there are 3 levels namely, P1 (6 hours), P2 (12 hours), P3 (24 hours). the data were analyzed using the F anova test, and if it gave a significantly different effect, it would be further tested using a low significant difference with an error of 5%. The results showed that the solution temperature treatment had a very significant effect on the parameters Germination, growth simultaneity, maximum growth potential, dormancy intensity, plant height at 8 weeks after planting, and number of tillers 8 weeks after planting. the long immersion treatment had a very significant effect on all parameters. The interaction between the two treatments was found in the parameter of dormancy intensity and maximum growth potential with the best treatment combination, namely L2P3 (solution temperature of 75 degrees Celsius with 24 hours of soaking time).

Key word : *Breaking Dormancy, Rice Seed, Soaking Time, Inpari 32*