STUDY OF DORMANCY BREAKING TREATMENT USING VARIOUS GROWTH REGULATORS IN RICE SEEDS SEGRENG HANDAYANI VARIETY

By

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Abstrak

The Special Region of Yogyakarta Province has local varieties of brown rice, one of which is Segreng Handayani (from Gunung Kidul), a brown rice that is very beneficial for health. In general, rice seeds experience after-ripening, which is a case of dormancy in seeds that requires dry storage for a certain period to break the dormancy. This research aims to studied the dormancy character information of Segreng Handayanii variety and effective dormancy breaking methods. Located in the Seed Technology Laboratory of Polytechnic of Agricultural Development of Yogyakarta-Magelang with the experimental design used a one-factor Completely Randomized Design (CRD), namely the using of ZPT with 4 replications. Seeds of red rice variety Segreng Handayani obtained from CV. Tani Rejo Seed. The ZPT used were auxin, KNO_3, GA_3, touge extract and coconut water with the observed variables being germination, maximum growth potential, uniformity of growth, vigor index, and growth speed. The results showed that KNO_3 treatment with a concentration of 3% and a soaking time of 24 hours, showed the best results and was able to break the dormancy starting in the first week. and it is known that the rice seeds of Segreng Handayani varieties naturally break dormancy in the third week.

Keywords: After-Ripening, Rice seed, Dormancy, Segreng Handayani Variety, KNO_3.