Pengaruh Lama Waktu dan Suhu Pengeringan pada Alat Pengering Benih (flat bed dryer) Terhadap Mutu Benih Padi (Oryza sativa L.) di CV. Surya Kencana Agrifarm (The Effect of Drying Time and Temperature on a Flat Bed Dryer on the Quality of Rice Seeds (Oryza sativa L.) in CV. Surya Kencana Agrifarm). Supervisor: Putri Santika, S.ST., M.Sc.

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ABSTRACT

Postharvest processing is one means of maintaining the quality of agricultural products so that they have higher shelf life and usability. There is an urgent need for the use of appropriate post-harvest facilities to increase efficiency, reduce crop losses, and maintain seed quality. Using a seed dryer (flat bed drayer) is one effective way of drying. The drying process can be done at any time or not depending on seasonal conditions to dry the material. The purpose of this study was to determine the effect of drying time and temperature on the quality of rice seeds (Oryza sativa L.). This research will be conducted in September-December 2023 at CV. Surya Kencana Agrifarm. The experimental design used is a Factorial Group Randomized Design consisting of 2 factors. The first factor is the length of time 4 days (W1), the length of time 5 days (W2), and the length of time 6 days (W3). The second factor is 33°C (S1), 38°C (S2), and 43°C (S3). The results showed that the time treatment (W) had a very real different effect (**) on the parameters of the moisture content test, germination test for weeks 8 and 9, weight test of 1000 grains, growth speed test, and growth cohesiveness test. The temperature treatment (S) also showed a very noticeable difference (**) to the parameters of moisture content test, germination test week 8 and 9, weight test of 1000 grains, growing speed test, and growth coarseness test. Together the two treatments showed very real differences (**) on almost all parameters, but on germination parameters showed real differences (*). The best interaction treatment is W3S3 (length of 6 days and drying temperature of 43°C), giving results on moisture content test of 11.56%, germination test week 9 92.33%, weight test of 1000 grains 21.47 g, growth speed test 89.33%, and growth speed test 15.62%.

Keywords: Rice (Oryza sativa L.), drying, flat bed dryer