

Pengaruh Priming Ekstrak Rebung (*Dendrocalamus asper*) Pada Benih Tomat (*Solanum lycopersicum*) Kedaluwarsa Terhadap Mutu Benih Dan Pertumbuhan Bibit. *Effect of Bamboo (*Dendrocalamus asper*) Shoots Extract in Outdated Tomato (*Solanum lycopersicum*) Seed priming on Seed Quality and Seedlings Growth.*
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ABSTRACT

Tomato seeds have a small seed structure that affects small food reserves. The availability of food reserves in tomato seeds causes tomato seeds to not be stored for a long time which causes many tomato seeds to enter their expiration date. Expired seeds are seeds that have exceeded the recommended use limit but still have the potential to grow, although limited. Bamboo shoot extract contains the hormone gibberellin which is thought to be able to improve the quality of expired seeds at the start of growth. This study aims to determine the effect of concentration and soaking time of bamboo shoots extract and their interaction on expired tomato seeds on seed quality and seedling growth. This research was conducted at the Seed Technology Laboratory and Green House, Seed Production Engineering Study Program, Department of Agricultural Production, Jember State Polytechnic from August to November 2022. Treatment units were arranged according to Completely Randomized Design and Group Random Design with 3 x 3 factorial pattern with 4 replications and followed by a 5% level DMRT test on a significant F test result. The first factor is the concentration of bamboo shoots extract with 3 levels, namely 5, 15, and 25%, while the second factor is the soaking time with 3 levels, namely 8, 16, and 24 hours. The results of this study indicated that the best concentration of bamboo shoot extract was found at a concentration of 5% bamboo shoot extract on seed quality but had no effect on seedling growth. The best soaking time is found in the 8-hour soaking time on seed quality while it has no effect on seedling growth. There was no significant interaction between the concentration of bamboo shoots extract and the soaking time on the benchmarks of seed quality and seedling growth.

Keywords: Priming, bamboo shoot extract, seed quality, seedling growth, tomatoes