

**Peningkatan Mutu Fisiologis Benih Semangka (*Citrullus lanatus* L.)  
Kedaluwarsa Melalui *Seed Piming* Dengan Perendaman Air Kelapa.  
(*Improving the Physiological Quality of Expired Watermelon (*Citrullus lanatus* L.)  
Seeds Through Seed Piming with Coconut Water*) Supervisor: Putri Santika, S. ST.,  
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### ***ABSTRACT***

*Watermelon (*Citrullus lanatus* L.) is one of the fruits that is very popular with the people of Indonesia and there are still seeds in circulation that have entered their expiration date so that in future cultivation efforts the seeds must be treated using the hydropriming method so that they can produce good watermelon seed germination. The research was conducted from June 2023 to September 2023 at Jember State Polytechnic. This study used a Completely Randomised Design (CRD) factorial pattern for laboratory tests and Completely Randomized Design (RAK) for field testing with 2 treatment factors repeated 3 times. Factor 1 is the concentration of coconut water (A) which consists of 4 level, namely: (A0) 0%, (A1) 31%, (A2) 50%, (A3) 68%. Factor 2 is seed age (U) which consists of (U1) watermelon seeds that have expired 1 year and (U2) seeds that have not expired. Data were analysed using the F test formula (ANOVA) and further test using (BNT) with an error rate of 5%. The results of the research showed that the coconut water immersion concentration treatment had a very real influence on the germination parameters with a 68% concentration treatment which had an increase of 15% from 78.17% to 93.17%. Meanwhile, plant height, number of leaves, number of male and female flowers did not have a significant effect on increasing the physiological quality of expired watermelon (*Citrullus lanatus* L.) seeds through seed priming by soaking in coconut water.*

***Keywords:*** *expired watermelon seeds, seed quality, germination*