

Pengaruh Beberapa Metode Hidrasi dan KNO₃ Pada Priming Benih Jagung Manis (*Zea mays saccharata* Sturt) Terhadap Mutu Fisiologis Benih dan Pertumbuhan Vegetatif (*The Effect of Hydration Methods and KNO₃ during Seed Priming of Sweet Corn Seed (*Zea mays saccharata* Sturt) on Seed Physiological Quality and Vegetative Growth*) Supervisor: Putri Santika, S.ST., M.Sc.

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ABSTRACT

*Sweet corn (*Zea mays saccharata* Sturt) is a popular commodity in Indonesia because of the sweet taste. The sweet taste gene causes a low percentage of seed viability and vigor. This study aims to effect seed priming with KNO₃ and Some Seeds Hidration Methods towards Physiological Quality and Vegetative Growth of Sweet Corn. This research was conducted on the Seed Processing Laboratory and fields of Politeknik Negeri Jember from August 2022 until November 2022. The research used factorial Randomized Complete Block Design (RCBD) method with 4 replications. The data will be analyzed using anova and continued with Least Significant Difference level of 5%. The first factor is priming agent i.e reverse osmosis water and KNO₃. The second factor is hidration methods i.e soaking, moistened on top of paper and soaking with aeration. The result showed that priming agent and hidration methods gave the significant effect for seed uniformity, seed growth rate, mean germination time, vigor index, stem diameter and number of leaves. The interactions between KNO₃ primed and moistened on top of paper method has significant effect on the parameters of seed uniformity 37,50% and vigor index 59,25%.*

Key word: *sweet corn, KNO₃ and seeds hidration methods.*