

Pengaruh Teknik Penyimpanan Benih Secara Anoxia dan Dosis Bahan Seed Coating Terhadap Mutu Fisiologis Benih Jagung Manis (*Zea mays Saccharata Strut L.*). (The Relationship between Anoxia Seed Storage Technique and Seed Coating Material Dosage on the Physiological Quality of Sweet Corn Seeds (*Zea mays Saccharata Strut L.*)).
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ABSTRACT

*Sweet corn (*Zea mays Sucharata Strut L.*) is a botanical variety of corn that belongs to the grass family. High seed quality is crucial for achieving maximum crop production. Sweet corn seeds can be stored and used in the same season of a different year or in different seasons of the same year. Therefore, maintaining seed quality for as long as possible is the primary goal of seed storage. This research was conducted at CV. Enno Corporation (Jawara) in Jember with the aim of developing an independent Standard Operating Procedure (SOP) for seed coating treatment on hybrid sweet corn seeds of the Bimmo variety. The study also aimed to determine the storage period of Bimmo variety sweet corn seeds in the storage facility while still maintaining a minimum germination rate of 85%. The research was carried out from August to November 2022 using a Completely Randomized Design (CRD) factorial. The factors investigated were the different anoxia storage techniques with 4 treatment levels and different doses of seed coating materials with 4 treatment levels. Each treatment level was replicated 2 times, resulting in a total of 32 experimental units. The data obtained were analyzed using analysis of variance (ANOVA), and if there were significant differences, a post-hoc test (DMRT) at a 5% level of significance was conducted. The research results indicate that the interaction between the anoxia storage technique treatment and the seed coating dose treatment showed no significant differences across all parameters. Similarly, the seed coating dose treatment demonstrated no significant differences for all parameters. However, the seed storage technique treatment exhibited a highly significant difference in the growth rate at 19.41%/day, vigor index at 22.64%, synchronization of growth at 67.75%, and maximum growth potential at 87.69%. There was a significant difference in the seed moisture content parameter by 9.41% in the second month of storage, while a notable difference in the vigor index by 10.25% was observed in the fourth month of storage.*

Key words: *sweet corn, seed storage, seed coating, physiological quality of seed*