**Pengaruh Bahan Pengemas dan Suhu Penyimpanan Terhadap Mutu Benih Jagung (Zea mays L.).** The Effect of Packaging Materials and Storage Temperature on the Quality of Corn Seeds (Zea mays L.). Supervised by Ir. M. Bintoro, M.P

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## ABSTRACT

Corn is one of the staple ingredients in Indonesia, but its availability is lower than the demand. Corn seeds are one of the key factors determining the success of corn cultivation. Suboptimal seed storage can lead to a decline in seed quality, particularly in terms of germination rate, vigour, and moisture content. This study aims to determine the effect of packaging materials and storage temperatures on corn seed quality during storage. The study used a Completely Randomized Design (CRD) with two factors: packaging materials (letterhead paper, plastic clips, and aluminium foil) and storage temperatures (air-conditioned temperature 14°C and fluctuating temperature  $25-30^{\circ}$ C). The observed parameters included germination rate, growth speed, uniformity of growth, maximum growth potential, and seed moisture content. The results showed that the treatment of packaging material and temperature only affected the moisture content of corn seeds. The effect of the interaction and packaging material and storage temperature gives a significant effect, where corn seeds stored in aluminum foil packaging and AC temperature of 14°C (P3S2) give a fairly good effect on germination (96.8%), growth speed (25.15%), growth uniformity (25.13%), and maximum growth potential (99.50%).

Keywords: Seeds, Corn, Packaging, Temperature.

## RINGKASAN

menggunakan suhu AC 14°C lebih efektif dalam menjaga kualitas benih jagung. Oleh karena itu, teknik penyimpanan ini direkomendasikan untuk mempertahankan mutu benih jagung dalam jangka waktu penyimpanan yang lebih lama.