Vigor Benih Kakao (Theobroma cacao L.) Klon ICCRI 08H Terhadap

Vigor of Cocoa Seeds (*Theobroma cacao* L.) Clone ICCRI 08H to Different Types of Packaging and Storage Duration Ir. Titien Fatimah, M.P

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ABSTRACT

Cocoa is one of the plantation commodities that is a source of foreign exchange for the country. Cocoa seeds are recalcitrant seeds which cannot be stored for a long time, cold temperatures, moisture content below critical moisture content, and require special storage methods. This research was conducted in December 2023 -January 2024 at the Seed Technology Lab, Jember State Polytechnic. The experimental design used is Factorial Randomized Group Design (RAK) consisting of 2 factors with 4 replications. The first factor is different types of packaging, namely W1: Merang Paper and W2: Perforated Zipper Plastic. The second factor is the length of storage, namely P1: 8 days storage, P2: 12 days storage, and P3: 16 days storage. The parameters observed were moisture content before storage, moisture content after storage, number of moldy seeds, germinated seeds on storage, germination, number of normal sprouts, and sprout length. The results showed that the different types of packaging had a very significant effect on moldy seeds on storage, and had no significant effect on seed moisture content before storage, seed moisture content after storage, germinated seeds on storage, germination power, number of normal sprouts, and sprout length. The treatment of storage length had a significant effect on germinated seeds on storage, a very significant effect on seed moisture content before storage and the number of moldy seeds on storage. No significant effect on seed moisture content after storage, germination, number of normal sprouts, and sprout length. There was a very significantly different interaction on moldy seeds on storage. And there is no interaction between the different types of packaging media and storage duration on seed moisture content before storage, seed moisture content after storage, germination of seeds on storage, germination power, number of normal sprouts, and sprout length.

Keyword: Cocoa vigor, Recalcitrant, Packaging