Pengaruh Perendaman Benih dengan Cendawan Beauveria bassiana pada Beberapa Lama Penyimpanan terhadap Pertumbuhan Bibit Kakao (Theobroma cacao L.) Seed Soaking Effect with Beauveria bassiana in Different Storage Periode on Seedlings Growth of Cocoa (Theobroma cacao L.) Advisor : Dr. Ir. Nantil Bambang Eko S, M.Si and Indah Anita Sari, SP., M.Si

Endah Cahyani Simamora Study Program of Seed Production Technique Departement of Agriculture Production

ABSTRACT

Cocoa is recalcitrant seed which it has the high water content and the deterioration goes quickly. The distribution of cocoa seed need longer time and it will decrease the quality of cocoa seed and cocoa seedling. The research aimed to determine of effectiveness seed soaking with Beauveria bassiana after storage during the distribution of seed. This research was conducted on September 2019 until January 2020 in Indonesian Cofee and Cocoa Research Institute. The research was conduct using randomized complete block design with a factorial arrangement. First factor was the storage period of two days (L2), three days (3 hari), four days (L4), five days (L5), six (L6) and seven days (L7). The second factor was seed soaking with Beauveria bassiana (B1) and seed soaking with fungicide (B0). The result showed that the seed soaking with Beauveria bassiana after five days of storage was able to mantain the seed germination until 82, 67%, growth speed 8,745% and growth uniformity 8,00%. The interaction between storage periode and seed soaking with Beauveria bassiana had no significant effect on the height of seedling, stem diameter and leaf number of seedling.

Key words : cocoa seed, Beauveria bassiana, seed soaking, storage periode