

**PERKECAMBAHAN DAN PERTUMBUHAN BIBIT KAKAO
(*Theobroma cacao* L.) PADA BERBAGAI MEDIA PENYIMPANAN DAN
KONSENTRASI EKSTRAK TAUGE**

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui interaksi berbagai media penyimpanan dan konsentrasi ekstrak tauge terhadap perkecambahan dan pertumbuhan bibit kakao (*Theobroma cacao* L.). Penelitian ini telah dilaksanakan di Unit Pengolahan Hasil (UPH) Desa Nglanggeran Kabupaten Gunungkidul pada bulan Maret-Juni 2023. Percobaan lapangan menggunakan Rancangan Acak Kelompok Lengkap (RAKL) Faktorial dengan 2 faktor dan 1 kontrol. Faktor pertama media penyimpanan dengan 3 taraf yaitu cocopeat, sekam dan zeolit. Faktor yang kedua konsentrasi ekstrak tauge dengan 3 taraf yaitu 10%, 20%, dan 30%. Data analisis menggunakan *analysis of variance* (Anova) pada taraf uji 5% dan dilanjutkan uji *Duncan's Multiple Range test* (DMRT) dan Uji Kontras Orthogonal untuk membanding kontrol dengan kombinasi perlakuan. Hasil penelitian menunjukkan kombinasi perlakuan berbeda nyata dibandingkan dengan perlakuan kontrol untuk semua parameter. Interaksi terbaik parameter tinggi tanaman, jumlah daun umur 30 HST, diameter batang 45 HST, bobot segar dan bobot kering. Perlakuan media penyimpanan zeolit memberikan hasil terbaik pada jumlah daun 45 HST, diameter batang 30 HST dan 60 HST dan daya kecambah. Perlakuan konsentrasi ekstrak tauge 10% memberikan hasil terbaik pada jumlah daun 45 HST, diameter batang 30 HST dan 60 HST, dan daya kecambah.

Kata Kunci: Benih Kakao, Ekstrak Tauge, Media Simpan, Perkecambahan

Germination and Growth of Cocoa Seedlings (*Theobroma cacao* L.) on Various Storage Media and Mung Bean Extract Concentrations

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ABSTRAK

This study aimed to determine the interaction between different storage media and mung bean sprout extract concentrations on the germination and growth of cocoa (*Theobroma cacao* L.) seedlings. The research was conducted at the Post-Harvest Processing Unit (UPH), Nglanggeran Village, Gunungkidul Regency, from March to June 2023. The field experiment used a Completely Randomized Block Design (CRBD) in a factorial arrangement with two factors and one control. The first factor was the storage medium, consisting of three levels: cocopeat, husk, and zeolite. The second factor was the concentration of mung bean sprout extract at three levels: 10%, 20%, and 30%. Data were analyzed using analysis of variance (ANOVA) at a 5% significance level, followed by Duncan's Multiple Range Test (DMRT) and Orthogonal Contrast Test to compare the control with the treatment combinations. The results showed that the combination treatments were significantly higher than the control for all observed parameters. The best interaction was observed in plant height, number of leaves at 30 days after planting (DAP), stem diameter at 45 DAP, fresh weight, and dry weight. The zeolite storage medium produced the best results in terms of the number of leaves at 45 DAP, stem diameter at 30 and 60 DAP, and germination rate. A 10% concentration of mung bean sprout extract resulted in the best performance for the number of leaves at 45 DAP, stem diameter at 30 and 60 DAP, and germination rate.

Keywords: Cocoa seeds, Sprout extract, Storage media, Germination, Seedling growth