

**PENGARUH PEMBERIAN TEPUNG CANGKANG TELUR
AYAM DAN PUPUK KANDANG AYAM TERHADAP
PERTUMBUHAN BIBIT KAKAO (*Theobroma cacao* L.)**

SKRIPSI

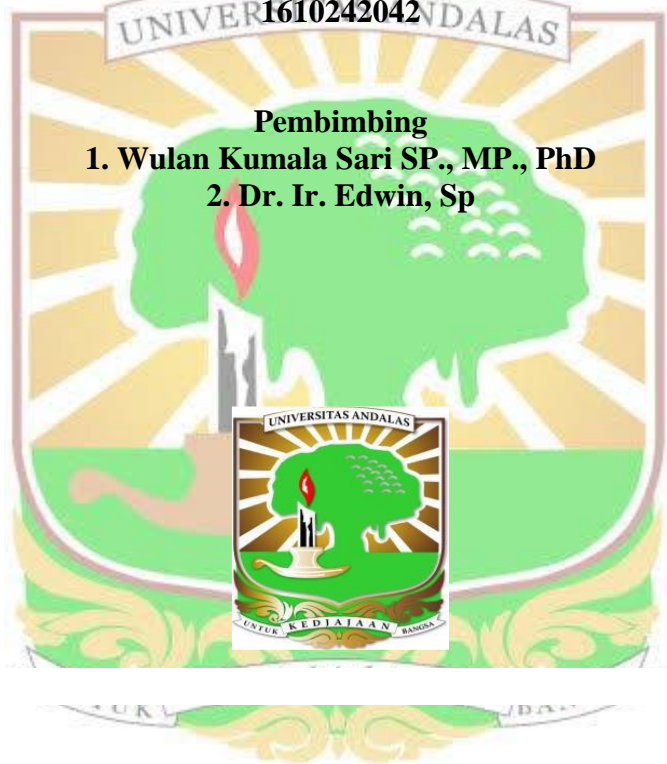
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**FAKULTAS PERTANIAN
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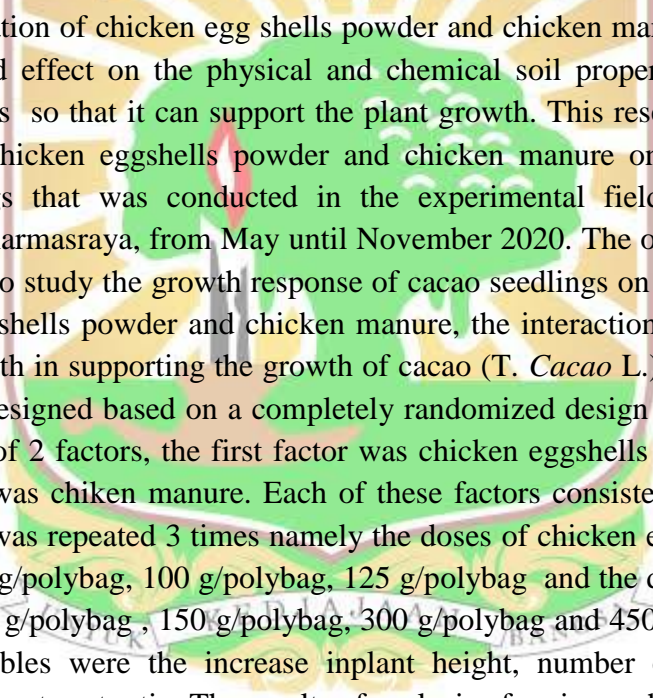
ABSTRAK

Pemberian tepung cangkang telur ayam dan pupuk kandang ayam diharapkan memberikan pengaruh yang baik terhadap sifat fisik dan kimia tanah dalam rangka memasok unsur hara sehingga dapat menunjang pertumbuhan tanaman. Penelitian ini adalah mengenai pengaruh pemberian tepung cangkang telur ayam dan pupuk kandang ayam terhadap pertumbuhan bibit kakao yang telah dilakukan di lahan percobaan Kampus III UNAND Dharmasraya, sejak bulan Mei sampai November 2020. Tujuan penelitian ini diantaranya untuk melihat respon pertumbuhan bibit kakao terhadap pemberian tepung cangkang telur ayam dan pupuk kandang ayam, pengaruh interaksi dan dosis terbaik dari kedua bahan tersebut dalam menunjang pertumbuhan bibit kakao (*T. cacao* L.). Penelitian ini disusun berdasarkan Rancangan Acak Lengkap (RAL) Faktorial yang terdiri dari 2 faktor, faktor pertama yaitu tepung cangkang telur ayam dan faktor kedua adalah pupuk kandang ayam. Masing – masing faktor tersebut terdiri dari 4 taraf perlakuan yang diulang sebanyak 3 kali, yaitu dosis cangkang telur ayam 0 g/polybag, 75 g/polybag, 100 g/polybag, 125 g/polybag, dan dosis pupuk kandang ayam 0 g/polybag, 150 g/polybag, 300 g/polybag, dan 450 g/polybag. Variabel pertumbuhan yang diamati yaitu pertambahan tinggi tanaman, jumlah daun, diameter batang dan rasio tajuk akar. Hasil analisis ragam menunjukkan bahwa adanya pengaruh interaksi antara kedua perlakuan terhadap variabel jumlah daun dan pengaruh tunggal pupuk kandang ayam terhadap tinggi tanaman dan diameter batang. Pemberian tepung cangkang telur ayam 125 g/ polybag dan 450 g/ polybag pupuk kandang ayam menunjukkan pertumbuhan terbaik pada setiap variabel pertumbuhan bibit kakao.

Kata kunci: bibit, kakao, cangkang telur ayam, media tanam, pengaruh interaksi, pupuk kandang ayam

THE EFFECT OF CHICKEN EGGSHELLS POWDERE AND CHICKEN MANURE ON THE GROWTH OF CACAO SEEDLINGS (*Theobroma cacao* L.)

ABSTRAK



Application of chicken egg shells powder and chicken manure is expected to have a good effect on the physical and chemical soil properties in order to supply nutrients so that it can support the plant growth. This research was about the effect of chicken eggshells powder and chicken manure on the growth of cacao seedlings that was conducted in the experimental field of 3rd Campus UNAND in Dharmasraya, from May until November 2020. The objectives of this research were to study the growth response of cacao seedlings on the applications of chicken eggshells powder and chicken manure, the interaction effects and the best dose of both in supporting the growth of cacao (*T. Cacao* L.) seedlings. This research was designed based on a completely randomized design (CRD) factorial that consisted of 2 factors, the first factor was chicken eggshells powder and the second factor was chicken manure. Each of these factors consisted of 4 levels of treatment and was repeated 3 times namely the doses of chicken eggshells were 0 g/polybag, 75 g/polybag, 100 g/polybag, 125 g/polybag and the doses of chicken manure were 0 g/polybag, 150 g/polybag, 300 g/polybag and 450 g/polybag. The observed variables were the increase in plant height, number of leaves, stem diameter and shoot root ratio. The results of analysis of variance showed that there was an interaction effect between the two treatments on the number of leaves and the single effect of chicken manure on plant height and stem diameter. The application of 125 g/polybag chicken eggshell powder and 450 g/polybag chicken manure showed the best growth in each growth variable of cacao seedlings.

Keywords: cacao seedlings, chicken egg-shells, growing media, interaction effects chicken manure.