

# **ADDITIONAL ORGANIC FERTILIZER TEMPE LIQUID WASTE AND FREQUENCY OF GIVING TIME AS EFFORTS TO IMPROVE CORN PRODUCTION RESULTS**

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## **ABSTRACT**

This study was to determine the effect of the addition of tempe liquid organic fertilizer with the frequency of time of administration to the production of corn varieties pertiwi. This research was conducted in Sukowono Sub-district, Jember Regency, East Java Province with a height of 344 meters above sea level. The implementation time is September 2018 until December 2018. The research method uses 2 factorial Randomized Block Design (RBD). The first factor is the addition of organic fertilizer liquid waste tempe (T) with 4 levels: without organic fertilizer liquid waste tempe (T0), organic fertilizer liquid waste tempe concentration of 300ml / ltr (T1), organic fertilizer liquid waste tempe 600 ml / ltr (T2 ), Tempe liquid organic fertilizer 1000 ml / liter (T3). The second factor is the frequency of time of administration (U) with 3 levels, namely without giving 2 days (U1), giving once a week (U2), giving 2 weeks (U3). Data were processed using ANOVA, followed by 5% DMRT. The results showed that tempe liquid organic fertilizer significantly affected the diameter of the leaf height and number of 45 HST, the weight of the dried cob sample, and the weight of 100 seeds. Very significant effect on the weight of the wet sample cob, seed weight per sample, and seed weight per plot. The frequency of time of administration significantly affected the weight diameter of the wet cobs per sample, the weight of dry cobs per sample, and the weight of seeds per sample. The interaction between the two had a significant effect on the wet cob sample weight, the dry cob sample weight, and the weight of the seed sample.

**Keywords:** *Pertiwi corn, Tempe Liquid Waste Organic Fertilizer, Frequency of Time of Giving.*

**PENAMBAHAN PUPUK ORGANIK LIMBAH CAIR TEMPE DAN  
FREKUENSI WAKTU PEMBERIAN SEBAGAI UPAYA  
MENINGKATKAN HASIL PRODUKSI JAGUNG**

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**ABSTRAK**

Penelitian ini untuk mengetahui pengaruh dari penambahan pupuk organik limbah cair tempe dengan frekuensi waktu pemberian terhadap hasil produksi Tanaman Jagung varietas pertiwi. Penelitian ini dilaksanakan di Kecamatan Sukowono, Kabupaten Jember Provinsi Jawa Timur dengan ketinggian 344 mdpl. Waktu pelaksanaan September 2018 sampai dengan Desember 2018. Metode penelitian menggunakan Rancangan Acak Kelompok (RAK) 2 faktorial. Faktor pertama adalah penambahan Pupuk organik limbah cair tempe (T) dengan 4 taraf: tanpa pupuk organik limbah cair tempe (T0), pupuk organik limbah cair tempe konsentrasi 300ml/ltr (T1), pupuk organik limbah cair tempe 600 ml/ltr (T2), pupuk organik limbah cair tempe 1000 ml/ltr (T3). Faktor kedua frekuensi waktu pemberian (U) dengan 3 taraf yaitu tanpa pemberian 2 hari sekali (U1), pemberian 1 minggu sekali (U2), pemberian 2 minggu sekali (U3). Data diolah menggunakan ANOVA, dilanjutkan DMRT 5%. Hasil penelitian menunjukkan bahwa pupuk organik limbah cair tempe berpengaruh nyata terhadap diameter tinggi dan jumlah daun 45 HST, berat tongkol kering persampel, dan berat 100 biji. Berpengaruh sangat nyata terhadap berat tongkol basah persampel, berat biji per sampel, dan berat biji per plot. Frekuensi waktu pemberian berpengaruh nyata terhadap diameter berat tongkol basah per sampel, berat tongkol kering per sampel, dan berat biji per sampel. Interaksi antara keduanya berpengaruh nyata terhadap berat tongkol basah persampel, berat tongkol kering persampel, dan berat biji persampel.

**Kata Kunci:** *Jagung pertiwi, Pupuk Organik Limbah Cair Tempe, Frekuensi Waktu Pemberian.*