

## **ABSTRAK**

### **PENGARUH INTERVAL PENYIRAMAN TERHADAP PERTUMBUHAN DUA VARIETAS TEBU (*Saccharum officinarum L.*)**

**Oleh**

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Tebu (*Saccharum officinarum L.*) merupakan komoditas strategis sebagai bahan baku utama industri gula nasional. Perubahan iklim yang ditandai oleh menurunnya curah hujan dan meningkatnya frekuensi musim kering menyebabkan keterbatasan ketersediaan air, sehingga berpotensi menurunkan pertumbuhan dan produktivitas tanaman tebu. Penelitian bertujuan untuk mengetahui pengaruh interval penyiraman dan varietas tebu terhadap pertumbuhan tebu. Penelitian dirancang menggunakan Rancangan Acak Kelompok (RAK) faktorial 4×2 dengan 3 kelompok. Faktor pertama Interval penyiraman (B), yaitu interval penyiraman 4 hari sekali (B1), 6 hari sekali (B2), 8 hari sekali (B3), dan 10 hari sekali (B4). Faktor kedua penggunaan varietas (A), yaitu GMP3 (A1), dan GMP 5 (A2). Homogenitas data diuji dengan uji Barlet, aditifitas data diuji menggunakan uji Tukey. Selanjutnya dilakukan analisis ragam dan uji nilai tengah menggunakan uji DMRT (*Ducan Multiple Range Test*) pada taraf 5%. Hasil penelitian ini menunjukkan bahwa perlakuan interval penyiraman memberikan pengaruh nyata terhadap variabel tinggi tanaman, jumlah daun menguning, kehijauan daun, bobot basah akar tunas, bobot kering akar tunas, bobot segar tajuk, dan bobot kering tajuk. Perlakuan varietas menunjukkan pengaruh nyata pada variabel, bobot basah akar tunas, bobot kering akar tunas, bobot basah tunas, dan bobot kering tunas. Interaksi antara interval penyiraman dan varietas memberikan pengaruh nyata terhadap variabel pengamatan, variabel jumlah daun menguning, dan bobot segar tajuk.

Kata kunci: Interval Penyiraman, Tebu, Varietas.

## **ABSTRACT**

### ***THE EFFECT OF IRRIGATION INTERVALS ON THE GROWTH OF TWO VARIETIES OF SUGARCANE (*Saccharum officinarum* L.)***

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*Sugarcane (*Saccharum officinarum* L.) is a strategic commodity as the main raw material for the national sugar industry. Climate change, characterized by decreasing rainfall and increasing frequency of dry seasons, has led to limited water availability, which potentially reduces sugarcane growth and productivity. This study aimed to evaluate the effects of irrigation interval and sugarcane variety on sugarcane growth. The experiment was arranged in a factorial Randomized Complete Block Design (RCBD) of 4×2 with three replications. The first factor was irrigation interval (B), consisting of watering every 4 days (B1), 6 days (B2), 8 days (B3), and 10 days (B4). The second factor was sugarcane variety (A), namely GMP 3 (A1) and GMP 5 (A2). Data homogeneity was tested using Bartlett's test, while data additivity was examined using Tukey's test. The data were further analyzed using analysis of variance (ANOVA), and mean separation was performed using Duncan's Multiple Range Test (DMRT) at the 5% significance level. The results showed that irrigation interval significantly affected plant height, number of yellowing leaves, leaf greenness, fresh weight of shoot roots, dry weight of shoot roots, fresh shoot weight, and dry shoot weight. Sugarcane variety had a significant effect on fresh weight of shoot roots, dry weight of shoot roots, fresh shoot weight, and dry shoot weight. The interaction between irrigation interval and variety significantly affected the number of yellowing leaves and fresh shoot weight.*

*Keywords: Sugarcane, Varietas, irrigation interval.*