

## **Respon Pertumbuhan Bibit Stek Tiga Varietas Tebu (*Saccharum officinarum* L.) terhadap Pemberian Berbagai Konsentrasi Pupuk Organik Cair**

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### **ABSTRAK**

Tebu (*Saccharum officinarum* L.) merupakan bahan baku utama dalam industri gula. Produksi gula nasional belum mencukupi terpenuhinya kebutuhan gula Indonesia. Salah satu faktor produksi yang esensial ialah bibit yang diperoleh dari cara stek sistem *single bud nursery* (SBN). Penggunaan varietas unggul dan pupuk organik cair membuat pertumbuhannya semakin cepat. Penelitian ini bertujuan untuk mengetahui respon varietas, konsentrasi pupuk organik cair yang terbaik dan interaksinya terhadap pertumbuhan stek tebu. Penelitian dilakukan di Kebun Pembibitan PT. MADUBARU. Penelitian dilaksanakan pada bulan April – bulan Juli 2018, menggunakan penelitian lapangan dengan rancangan percobaan *Split Plot Design*, sebagai main plot (petak utama) adalah konsentrasi POC (P) dan sebagai sub plot (anak petak) adalah varietas (V). Main plot yang terdiri dari empat aras: P0 = 0%, P1 = 0,8%, P2 = 1,6%, dan P3 = 2,4%. Sub plot yang terdiri dari tiga aras: V1 = Bululawang, V2 = PS 862, dan V3 = Kidang kencana. Hasil penelitian menunjukkan bahwa antara varietas PS 862 dan konsentrasi POC 0,8% memberikan daya tumbuh terbaik. Perlakuan tersebut mampu meningkatkan daya tumbuh bibit stek tebu sebesar 17,33% dibanding tanpa pupuk. Interaksi terbaik juga terjadi pada varietas Bululawang konsentrasi 0,8% parameter bobot kering bibit. Varietas PS 862 memberikan daya tumbuh, bobot segar bibit sebelum tanam pada polybag dan bobot kering tunas terbaik. Konsentrasi POC 0,8% memberikan persen tumbuh tunas umur 1 minggu, daya tumbuh, tinggi bibit umur 3 minggu dan bobot kering bibit terbaik.

Kata kunci : *single bud*, *POC*, *varietas*, *pertumbuhan*

# **The Growth Response of Three Seed Cuttings Sugarcane Variety (*Saccharum officinarum* L.) to The Application of Various Concentration Liquid Organic Fertilizer**

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## **ABSTRACT**

Sugarcane (*Saccharum officinarum* L.) is the main source of sugar raw material industry. The national sugar production which is not enough on the unfulfilled needs of Indonesia sugar. One of the essential production factor was seed can be obtained by the application of single bud nursery system (SBN). The used of superior variety and liquid organic fertilizer could accelerate the growth of sugarcane. This study aims to know the variety response, the best concentration of liquid organic fertilizer and the interaction of seed cutting sugarcane growth. The research carried out in the Nursery of PT. MADUBARU. This research conducted in April – July 2018, using field research with the Split Plot Design experiment design, as main plot was the concentration of liquid organic fertilizer (P) and as a sub plot was the variety (V). The main plot consists of four levels: P0 = 0%, P1 = 0,8%, P2 = 1,6%, dan P3 = 2,4%. Sub plots consisting of three levels: V1 = Bululawang, V2 = PS 862, dan V3 = Kidang kencana. The results showed that between PS 862 variety and 0,8% concentration of liquid organic fertilizer gave the best results at power grows. That treatment could increased the power grows of seed cutting sugarcane in the amount of 17,33% than without fertilizer. The best interaction also happened on Bululawang variety concentration 0,8% at seed dry weight parameter. PS 862 variety gave the best results at power grows, seed fresh weight before planted on polybag and shoot dry weight. The concentration of liquid organic fertilizer 0,8% gave the best results at the percent of growth shoot was 1 week, power grows, seed height was 3 weeks and seed dry weight.

Keywords: single bud, liquid organic fertilizer, variety, growth