# INTISARI

PENGARUH TAKARAN UREA TERHADAP PERTUMBUHAN DAN KANDUNGAN STEVIOSIDA TANAMAN STEVIA (*Stevia rebaudiana* Bertoni M.) PADA BERBAGAI UMUR PANEN DI DATARAN RENDAH

Percobaan ini dilaksanakan dengan tujuan untuk mempelajari pengaruh takaran urea terhadap pertumbuhan tanaman stevia di dataran rendah dan menentukan umur panen dan takaran urea optimum dimana stevia memiliki kandungan steviosida tertinggi di dataran rendah. Percobaan ini dilaksanakan di lahan percobaan Fakultas Pertanian, Universitas Gadjah Mada, Banguntapan, Yogyakarta mulai bulan Mei hingga Agustus 2014.

Percobaan disusun dalam rancangan acak lengkap (RAL) factorial 3 kali ulangan dengan 2 faktor perlakuan. Faktor pertama adalah takaran urea, yaitu 0 g/tanaman; 2,5 g/tanaman; dan 5 g/tanaman. Faktor kedua adalah variasi umur panen, yaitu 3 MSP; 6 MSP; dan 9 MSP, dimana MSP adalah Minggu Setelah Perlakuan. Data dianalisis dengan sidik ragam $\alpha = 5\%$. Hasil pada analisis yang memiliki beda nyata antar perlakuan dilanjutkan dengan Duncan Multiple Range Test (DMRT) $\alpha = 5\%$.

Hasil percobaan menunjukkan bahwa pengaruh takaran urea memberikan pengaruh nyata terhadap pertumbuhan tanaman stevia. Takaran 5 g/tanaman memberikan hasil terbaik pada tinggi tanaman, luas daun, dan bobot kering (tajuk dan akar) pada tanaman stevia. Umur panen dan takaran urea optimum tidak didapatkan, namun kombinasi perlakuan terbaik adalah 5 g/tanaman urea pada umur panen 9 MSP.

**Kata kunci**: *Stevia, urea, umur panen, steviosida, dataran rendah*

# ABSTRACT

THE EFFECT OF UREA DOSAGE ON GROWTH AND STEVIOSIDE CONTENT OF STEVIA (*Stevia rebaudiana* Bertoni M.) ON VARIOUS HARVEST TIME IN THE LOWLAND

This experiment was conducted with the aim of learning about the effect of urea dosage on stevia growth in the lowland and determine optimum harvest time and urea dosage which give the highest content of stevioside in the lowland. This study carried out on field trial of Faculty of Agriculture, Gadjah Mada University, Banguntapan, Bantul, Yogyakarta from May to August 2014.

Experiment arranged in a complete randomized design (CRD) factorial with three replications and 2 factors of treatment. The first factor is urea dosage, which are 0 g/plant; 2.5 g/plant; and 5 g/plant. The second factor is the variation of harvest time, which are 3 WAT; 6 WAT; and 9 WAT, which WAT is Weeks After Treatment. The data were analyzed with variance $\alpha = 5\%$. Result of analysis which have significant difference between treatment then followed by Duncan's Multiple Range Test (DMRT) $\alpha = 5\%$.

The result of experiment showed that urea dosages give the significant effect of stevia growth. Urea dosages 5 g/plan gave the best result for plant height, leaf area, and dried weight of stevia. The optimum harvest time and urea dosage which give the highest content of stevioside was not got, but the best combination of trearment is 5 g/plant in harvest time 9 weeks after treatment.

**Keywords**: *Stevia, Urea, harvesting time, steviosida, lowland*