

**PERTUMBUHAN DAN HASIL BAWANG MERAH
(*Allium ascalonicum* L.) PADA BERBAGAI PEMOTONGAN UJUNG UMBI
BIBIT DAN KONSENTRASI ZAT PENGATUR TUMBUH AUKSIN**

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ABSTRAK

Inovasi untuk meningkatkan produksi bawang merah di Indonesia yaitu dengan pemotongan ujung umbi dan pemberian zat pengatur tumbuh. Tujuan dari penelitian ini yaitu mendapatkan kombinasi antara pemotongan ujung umbi bibit dan konsentrasi auksin yang terbaik untuk pertumbuhan dan hasil bawang merah. Penelitian dilakukan di Desa Tirtosari, Kretek, Bantul dan dilaksanakan pada bulan Maret sampai Mei 2020. Percobaan diatur dalam Rancangan Acak Kelompok Lengkap (RAKL) yang terdiri dari 2 faktor ditambah kontrol dan setiap kombinasi perlakuan diulang 3 kali. Faktor pertama pemotongan ujung umbi bibit terdapat 3 taraf yaitu (P1) 1/2 bagian, (P2) 1/3 bagian dan (P3) 1/4 bagian. Faktor kedua pemberian auksin terdapat 3 taraf konsentrasi yaitu (A1) 100 ppm, (A2) 200 ppm dan (A3) 300 ppm. Data dianalisis dengan menggunakan analisis varian taraf 5%, untuk mengetahui beda nyata antara perlakuan dengan kontrol dilakukan uji *Contras Ortogonal* taraf 5% dan untuk mengetahui perbedaan antar perlakuan dengan *Duncan Multiple Range Test* (DMRT) taraf 5%. Hasil penelitian menunjukkan bahwa kombinasi perlakuan dengan kontrol tidak berbeda nyata kecuali pada parameter waktu tumbuh tunas dan tinggi tanaman umur 15 hari. Terdapat interaksi antara perlakuan pemotongan ujung umbi bibit dengan pemberian auksin pada parameter pengamatan volume akar umur 15 hari setelah tanam yaitu pemotongan 1/3 bagian dan konsentrasi 100 ppm. Pemotongan ujung umbi bibit dan konsentrasi auksin tidak berbeda nyata.

Kata kunci : bawang merah, pemotongan umbi, auksin.

**GROWTH AND RESULTS OF SHALLOT (*Allium ascalonicum* L.) ON
VARIOUS CUTTING TIPS OF SEED TUBERS AND CONCENTRATION
OF AUXIN PLANT GROWTH REGULATORS**

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ABSTRACT

Innovations to increase shallot production in Indonesia include cutting the tips of tubers and giving plant growth regulators. The purpose of this study was to obtain the best combination of cutting tip of seed tubers and auxin concentrations for growth and yield of shallots. The research was conducted in Tirtosari, Kretek, Bantul and was conducted from March to May 2020. The experiment was arranged in a Complete Randomized Block Design of 2 factors plus control and each treatment combination was repeated 3 times. The first factor is cutting the tip of the seed tubers, there are 3 levels, namely (P1) 1/2 part, (P2) 1/3 part and (P3) 1/4 part. The second factor was giving auxin, there were 3 levels of concentration, namely (A1) 100 ppm, (A2) 200 ppm and (A3) 300 ppm. Data were analyzed using analysis of variance with a 5% level, to determine the significant difference between treatment and control, a 5% level of *Orthogonal Contrast* test was performed and to determine the difference between treatments with the 5% *Duncan Multiple Range Test* (DMRT) level. The results showed that the combination of treatment and control was not significantly different except for the parameters of shoot growth time and plant height at 15 days. There was an interaction between cutting the tip of the seed tubers and giving auxin to the parameters of observing the root volume age 15 days after planting, namely cutting 1/3 part and a concentration of 100 ppm. Cutting tip of the seed tuber and auxin concentration were not significantly different.

Key words: shallots, cutting the tubers, auxin