

ABSTRAK

PENGARUH JENIS ZAT PENGATUR TUMBUH IBA, NAA, IAA DAN LAMA PERENDAMAN TERHADAP PERTUMBUHAN STEK RUMPUT PAKCHONG (*Pennisetum purpureum cv. Thailand*)

Oleh

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Penelitian ini bertujuan untuk mengetahui pengaruh dari pemberian ketiga jenis zat pengatur tumbuh IBA, NAA, IAA dan lama perendaman serta interaksi antara keduanya terhadap pertumbuhan stek rumput pakchong. Penelitian ini dilaksanakan pada November 2022--Januari 2023, dilakukan di Laboratorium Lapang Terpadu Fakultas Pertanian Universitas Lampung dan Laboratorium Nutrisi dan Makanan Ternak, Jurusan Peternakan, Fakultas Pertanian Universitas Lampung. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) pola faktorial yang terdiri dari 3 taraf perlakuan yaitu P1 (IBA 300 ppm), P2 (NAA 200 ppm), P3 (IAA 200 ppm) dan faktor lama perendaman terdiri dari 3 taraf perlakuan yaitu L1 (lama perendaman 1 jam), L2 (lama perendaman 3 jam), L3 (lama perendaman 5 jam) dengan 3 kali ulangan. Variabel yang diamati meliputi persentase tumbuh, jumlah anakan, jumlah daun, tinggi tanaman, produksi bobot segar, produksi bahan kering, kandungan bahan kering. Data yang diperoleh dianalisis menggunakan Sidik Ragam (*Analysis of Variance*) dan dilanjutkan dengan uji BNt (Beda Nyata terkecil). Hasil penelitian pemberian jenis zat pengatur tumbuh dan lama perendaman menunjukkan bahwa interaksi perlakuan tidak berpengaruh nyata ($P > 0,05$) terhadap persentase tumbuh dan kandungan bahan kering serta tidak ada pengaruh antara kedua perlakuan. Hasil penelitian pemberian jenis zat pengatur tumbuh dan lama perendaman menunjukkan bahwa adanya interaksi serta berpengaruh sangat nyata ($P < 0,05$) terhadap jumlah anakan dan jumlah daun pada perlakuan NAA dengan lama perendaman 1 jam (P2L1), serta pada tinggi tanaman, produksi bobot segar dan produksi bahan kering terdapat pada perlakuan IBA dengan lama perendaman 1 jam (P1L1).

Kata Kunci: Lama perendaman, Pertumbuhan, Rumput pakchong, Stek, Zat pengatur tumbuh

ABSTRACT

THE EFFECT TYPE OF GROWTH REGULATORS (IBA, NAA, IAA) AND SOAKING TIME ON THE GROWTH OF PAKCHONG GRASS CUTTINGS (*Pennisetum purpureum cv. Thailand*)

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This research aims to determine the effect of the three types of growth regulators IBA, NAA, IAA and the soaking time and the interaction between the two on the growth of pakchong grass cuttings. This research was conducted in November 2022--January 2023, conducted at the Integrated Field Laboratory, Faculty of Agriculture, University of Lampung and the Animal Feed and Nutrition Laboratory, Department of Animal Husbandry, Faculty of Agriculture, University of Lampung. This study used a factorial completely randomized design (CRD) consisting of 3 treatment levels, namely P1 (IBA 300 ppm), P2 (NAA 200 ppm), P3 (IAA 200 ppm) and the soaking time factor consisting of 3 treatment levels, namely L1 (soaking time 1 hours), L2 (soaking time 3 hours), L3 (soaking time 5 hours) with 3 replications. Variables observed included growth percentage, number of tillers, number of leaves, plant height, fresh weight production, dry matter production, dry matter content. The data obtained were analyzed using Sidik Variety (*Analysis of Variance*) and continued with the BNt (Smallest Significant Difference) test. The results of the study showed that the application of growth regulator and soaking time showed that the treatment interaction had no significant effect ($P>0.05$) on the percentage of growth and dry matter content and there was no effect between the two treatments. The results of the study of giving the type of growth regulator and soaking time showed that there was an interaction and had a very significant effect ($P<0.05$) on the number of tillers and the number of leaves in the NAA treatment with 1 hour soaking time (P2L1), as well as on plant height, weight production fresh and dry matter production found in IBA treatment with 1 hour soaking time (P1L1).

Key words: Soaking time, Growth, Pakchong grass, Cuttings, Growth regulator