ABSTRAK

Penurunan produksi kentang hitam menjadi masalah yang harus diperhatikan karena akan mempengaruhi ketahanan pangan di Indonesia. Penelitian ini bertujuan untuk mengetahui pengaruh pemberian hormon sitokinin dan paklobutrazol terhadap pertumbuhan dan hasil panen kentang hitam (*Plectranthus rotundifolius*) pada media tanam campuran arang sekam. Penelitian menggunakan Rancangan Acak Lengkap (RAL) dengan 7 perlakuan dan setiap perlakuan diulang sebanyak 3 kali. yang terdiri dari P0S0, P0S1, P0S2, P1S0, P1S1, P1S2, P2S0, P2S1, P2S2, P3S0, P3S1, P3S2. Data hasil penelitian di analisis dengan uji ANOVA dilanjutkan uji DMRT (Duncan Multiple Range Test). Hasil penelitian menunjukkan terdapat pengaruh perlakuan paklobutrazol dan sitokinin pada media tanam campuran arang sekam terhadap pertumbuhan yang meliputi tinggi tanaman, jumlah daun, lebar daun, dan jumlah tunas. Tinggi tanaman pada perlakuan P2S2 memiliki hasil optimal 72,3 cm, jumlah daun paling optimal ada pada perlakuan P0S1 sebanyak 234,7 helai, lebar daun paling optimal ada pada perlakuan P2S1 selebar 3,5 cm, jumlah tunas paling optimal ada pada perlakuan P2S2 sebanyak 27 tunas. Pada hasil panen yang meliputi, jumlah umbi, berat basah umbi, dan diameter umbi. Jumlah umbi optimal ada pada perlakuan P1S1 sebantak 4,3 buah. Berat basah umbi paling optimal ada pada perlakuan P1S1 seberat 1,17 gr. Pada perlakuan P1S2, P2S1, dan P3S1 memiliki diameter umbi yang sama besar yaitu 11,67 mm.

Kata kunci : kentang hitam, paklobutrazol, sitokinin, arang sekam, pertumbuhan, hasil panen

ABSTRACT

The decline in black potato production is a problem that must be considered because it will affect food security in Indonesia. This study aims to determine the effect of cytokinin and paklobutrazole hormones on the growth and yield of black potato (Plectranthus rotundifolius) on rice husk charcoal mixed planting media. The study used a completely randomized design (CRD) with 7 treatments and each treatment was repeated 3 times. consisting of P0S0, P0S1, P0S2, P1S0, P1S1, P1S2, P2S0, P2S1, P2S2, P3S0, P3S1, P3S2. The research data were analyzed using the ANOVA test followed by the DMRT (Duncan Multiple Range Test) test. The results showed that there was an effect of the treatment of paklobutrazole and cytokinins on rice husk charcoal mixed planting media on growth which included plant height, number of leaves, leaf width, and number of shoots. Plant height in the P2S2 treatment had an optimal yield of 72.3 cm, the most optimal number of leaves was in the P0S1 treatment as many as 234.7 strands, the most optimal leaf width was in the P2S1 treatment with a width of 3.5 cm, the most optimal number of shoots was in the P2S2 treatment as much as 27 shoots. The yields include the number of tubers, tuber wet weight, and tuber diameter. The optimal number of tubers in the P1S1 treatment was 4.3 pieces. The most optimal wet weight of tubers was in the P1S1 treatment weighing 1.17 g. In the P1S2, P2S1, and P3S1 treatments, the tuber diameter was the same, namely 11.67 mm.

Keywords : *black potato, paklobutrazole, cytokinin, husk charcoal, growth, yield*