

PENGARUH JARAK TANAM DAN KONSENTRASI AB MIX TERHADAP PERTUMBUHAN PAKCOY SISTEM HIDROPONIK

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ABSTRAK

Pakcoy adalah sayuran yang banyak diminati masyarakat, namun belakangan ini terjadi penurunan produktivitas pakcoy. Upaya peningkatan produksi pakcoy yaitu perlu dilakukannya budidaya pakcoy dengan sistem hidroponik dengan menambahkan AB mix dan jarak tanam. Tujuan penelitian ini yaitu untuk mengetahui pengaruh jarak tanam dan konsentrasi AB mix terhadap pertumbuhan pakcoy secara hidroponik. Penelitian dilaksanakan di Makna Nursery House, Kiaracondong, Kota Bandung pada bulan Februari – April 2024. Penelitian ini menggunakan Rancangan Acak Kelompok (RAK) dengan faktor pertama jarak tanam (10 cm dan 20 cm) serta tiga perlakuan konsentrasi AB mix yaitu (5 ml/L, 7,5 ml/L, 10 ml/). Parameter yang diamati adalah tinggi tanaman (cm), berat basah (gram), berat kering (gram), panjang helai daun (cm), lebar helai daun (cm), jumlah helai daun (helai), panjang akar (cm), dan kadar klorofil (mg/g). Hasil penelitian menunjukkan bahwa perlakuan AB mix 10 ml berpengaruh mandiri terhadap parameter tinggi tanaman, panjang daun, lebar daun, jumlah daun, panjang akar, dan kadar klorofil. Perlakuan AB mix 10 ml+ jarak tanam 20 cm memberikan hasil terbaik diantara perlakuan yang diberikan dengan nilai rata-rata tinggi tanaman 26,78 cm, panjang daun 7,2 cm, lebar daun 3,25 cm, jumlah daun 19 helai, kadar klorofil 26(mg/g), panjang akar 45,5 cm, berat kering 5,71 gram, dan berat basah 133,9 gram. Jarak tanam dan konstentrasi AB mix berpengaruh terhadap pertumbuhan tanaman pakcoy sistem hidroponik.

Kata kunci: AB mix, jarak tanam, hidroponik, pakcoy, pertumbuhan

THE EFFECT OF PLANTING DISTANCE AND AB MIX CONCENTRATION ON THE GROWTH OF PAKCOY HYDROPONIC SYSTEM

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ABSTRACT

Pakcoy is a vegetable that is in great demand by the Indonesian people, there are problems with pakcoy productivity, namely limited fertilizer and limited land. Efforts to increase pakcoy production are necessary to cultivate pakcoy with a hydroponic system by adding AB mix and planting distance. The purpose of this study was to determine the effect of planting distance and AB mix concentration on the growth of pakcoy hydroponically. The research was conducted at Makna Nursery House, Kiaracandong, Bandung City in February - April 2024. This study used a Randomized Group Design (RAK) with the first factor of planting distance (10 cm and 20 cm) and three AB mix concentration treatments namely (5 ml/L, 7.5 ml/L, 10 ml/L). The parameters observed were plant height (cm), wet weight (grams), dry weight (grams), leaf length (cm), leaf width (cm), number of leaves (strands), root length (cm), and chlorophyll content (mg/g), which were then analyzed using one way ANOVA test. The results showed that the AB mix 10 ml + 20 cm spacing treatment significantly affected the parameters of plant height, leaf length, leaf width, number of leaves, root length, and chlorophyll content. The AB mix 10 ml + 20 cm spacing treatment gave the best results among the treatments given with an average value of plant height 26.78 cm, leaf length 12.1 cm, leaf width 7.25 cm, number of leaves 19 strands, chlorophyll 26,6(mg/g), root length 45.5 cm, dry weight 5.71 grams, and wet weight 133.9 grams. Planting distance and AB mix concentration affect the growth of pakcoy plants in the hydroponic system.

Keywords: AB mix, spacing, hydroponics, pakcoy, grow