

RINGKASAN

Penelitian ini bertujuan untuk: (1) mengkaji varietas terbaik untuk pertumbuhan dan hasil pakcoy menggunakan sistem DFT hidroponik, (2) mengkaji media tanam pakcoy yang memberikan pertumbuhan dan hasil terbaik menggunakan sistem DFT hidroponik (3) mengkaji interaksi varietas pakcoy dengan media tanam hidroponik sistem DFT.

Penelitian dilaksanakan pada 19 November 2023 sampai 4 Januari 2024 di *Greenhouse* Dusun Gupakan, Desa Srowot, Kecamatan Kalibagor, Kabupaten Banyumas dan Laboratorium Agronomi dan Hortikultura Fakultas Pertanian, Universitas Jenderal Soedirman. Rancangan Penelitian yang digunakan yaitu Rancangan Acak Kelompok yang tersusun secara (*Split Plot Design*). Faktor pertama yaitu media tanam (M) yang terdiri atas 3 macam yaitu, M1 = *Rockwool*, M2 = *Spons* dan M3 = Arang sekam. Faktor kedua yaitu varietas pakcoy (V) yang terdiri atas 3 macam yaitu V1= Varietas Green, V2= Varietas White dan V3 = Varietas Nauli F1. Variabel yang diamati yaitu tinggi tanaman (cm), jumlah daun (helai), luas daun (cm²), diameter batang (mm), panjang akar (cm), volume akar (mm³), bobot tanaman segar (g), bobot daun segar (g), bobot batang segar (g), bobot akar segar (g), bobot daun kering (g), bobot batang kering (g), bobot akar kering (g), kehijauan daun (unit).

Hasil penelitian menunjukkan perbedaan varietas memberikan pertumbuhan dan hasil yang berbeda-beda. Varietas Green tidak terdapat perbedaan yang nyata, namun perbedaan tersebut relatif masih kecil sehingga secara analisa ragam menunjukkan tidak terdapat perbedaan yang nyata. Varietas White memberikan perbedaan yang nyata pada jumlah daun. Varietas Nauli F1 memberikan rerata tinggi tanaman, jumlah daun, volume akar, bobot batang segar, bobot akar segar, bobot daun kering, bobot batang kering, dan bobot akar kering. Media tanam *spons* merupakan media tanam terbaik pada tinggi tanaman, jumlah daun, lebih tinggi dibandingkan media tanam *rockwool* dan arang sekam. Terdapat interaksi media tanam dan varietas menunjukkan hasil yang nyata terhadap tinggi tanaman 7 HST, 14 HST dan 21 HST, jumlah daun 7 HST, panjang akar, bobot daun segar, bobot daun kering, bobot batang kering.

Kata kunci: Kata kunci: Pakcoy, varietas, media tanam

SUMMARY

This research aims to: (1) to study the best varieties for the growth and yield of pakcoy using the hydroponic DFT system, (2) to study the pakcoy planting medium that provides the best growth and yield using the hydroponic DFT system (3) to study the interaction of pakcoy varieties with the hydroponic planting media of the DFT system.

The research was conducted from 19 November 2023 until 4 January 2024 at the Greenhouse in Gupakan Hamlet, Srowot Village, Kalibagor District, Banyumas Regency and the Agronomy and Horticulture Laboratory, Faculty of Agriculture, Jenderal Soedirman University. The research design used was a randomized block design (Split Plot Design). The first factor is the planting medium (M) which consists of 3 types, namely, M1 = Rockwool, M2 = Sponge and M3 = Husk charcoal. The second factor is the pakcoy variety (V) which consists of 3 types, namely V1 = Green Variety, V2 = White Variety and V3 = Nauli F1 Variety. The variables observed were plant height (cm), number of leaves (sheets), leaf area (cm²), stem diameter (mm), root length (cm), root volume (mm³), fresh plant weight (g), fresh leaf weight (g), fresh stem weight (g), fresh root weight (g), dry leaf weight (g), dry stem weight (g), dry root weight (g), leaf greenness (unit).

The results of the study showed that different varieties gave different growth and yields. There is no real difference in the Green variety, but the difference is still relatively small so that the variety analysis shows that there is no real difference. The White variety makes a noticeable difference in the number of leaves. The Nauli F1 variety gives the average plant height, number of leaves, root volume, fresh stem weight, fresh root weight, dry leaf weight, dry stem weight, and dry root weight. Sponge planting medium is the best planting medium in plant height, number of leaves, higher than rockwool and husk charcoal planting media. There was an interaction of planting media and varieties showing real results on plant height of 7 HST, 14 HST and 21 HST, number of leaves 7 HST, root length, fresh leaf weight, dry leaf weight, dry stem weight.

Key words: Pakcoy, varieties, growing media