

# **PENGARUH MACAM SISTEM AKUAPONIK TERHADAP PERTUMBUHAN DAN HASIL PAKCOY (*Brassica rapa L*)**

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## **INTISARI**

Tujuan penelitian ini untuk mengetahui pengaruh 3 macam sistem akuaponik rakit apung, ebb and flow, dan NFT terhadap pertumbuhan pakcoy dan untuk mengetahui sistem akuaponik yang paling tepat untuk pertumbuhan dan produksi pakcoy. Penelitian ini telah dilaksanakan di Instalasi Aquaphonic Wana-wana, Dayakan Ngaglik, Yogyakarta dan penelitian dilaksanakan pada tanggal 05 September 2020 sampai dengan tanggal 31 November 2020. Penelitian ini menggunakan Rancangan Acak Lengkap faktor tunggal dengan tiga perlakuan yaitu perlakuan Sistem raft (P1), Sistem ebb dan flow (P2) dan Sistem NFT (P3) dan tiga ulangan, sehingga terdapat 9 satuan percobaan. Jumlah sampel yang diamati sebanyak 5 tanaman dengan 3 kali ulangan sehingga total tanaman diamati adalah 45 tanaman. Hasil penelitian ini bahwa perlakuan sistem akuaponik mempengaruhi pertumbuhan dan hasil pakcoy. Dibandingkan sistem NFT dan rakit apung, maka sistem ebb and flow memberikan pertumbuhan dan hasil pakcoy tertinggi .

Kata kunci :Akuaponik, Ebb and Flow, NFT, Pakcoy (*Brassica rapa L*), Rakit apung.

## **THE INFLUENCE OF KINDS OF AQUAPONIC SYSTEMS ON THE GROWTH AND YIELD OF PAKCOY**

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### ***ABSTRACT***

The purpose of this study was to determine the effect of 3 types of floating raft, ebb and flow, and NFT aquaponic systems on pakcoy growth and to determine the most appropriate aquaponics system for growth and production of pakcoy. This research was conducted at the WanaAquaphonic Installation wana, Dayakan Ngaglik, Yogyakarta and the research was carried out on September 5, 2020 to November 31, 2020. This study used a single factor completely randomized design with three treatments, namely the raft system (P1) treatment, the ebb system. and flow (P2) and NFT System (P3) and three replications, so that there are 9 experimental units. The number of samples observed was 5 plants with 3 replications so that the total plants observed were 45 plants. The results of this study indicate that the aquaponics system treatment affected the growth and yield of pakcoy. Compared to the NFT and floating raft systems, the ebb and flow system provides the highest growth and pakcoy yields.

Keywords: Aquaponics, Ebb and Flow, Floting Raft, NFT, Pakcoy (*Brassica rapa L*).