

## ABSTRAK

**Sayidatun Napisah. 2021. Pengaruh EC (*Electrical Conductivity*) dan Ragam Formulasi terhadap Pertumbuhan Tanaman Selada (*Lactuca sativa* var. *Grand rapids*) pada Sistem Hidroponik Rakit Apung. Di bawah bimbingan Suryaman Birnadi dan Budy Frasetya Taufik Qurrohman.**

Tanaman selada merupakan salah satu komoditi hortikultura yang memiliki prospek dan nilai komersial tinggi. Selada umumnya dikonsumsi dalam bentuk segar. Penelitian ini bertujuan untuk mengetahui pengaruh EC dan ragam formulasi terhadap pertumbuhan tanaman selada (*Lactuca sativa* var. *Grand rapids*) pada hidroponik sistem rakit apung. Penelitian ini dilaksanakan pada bulan April sampai Mei di Kebun Percobaan, Universitas Padjajaran. Percobaan yang dilakukan menggunakan Rancangan Acak Lengkap (RAL) faktorial dengan dua faktor yaitu nilai EC dan ragam formulasi terdiri dari 12 taraf perlakuan dan diulang sebanyak 3 kali. Variabel yang diamati adalah tinggi tanaman, jumlah daun, luas daun, bobot segar tanaman, bobot kering tanaman dan nisbah pupus akar. Hasil penelitian menunjukkan nilai EC dan formulasi berinteraksi pada tinggi tanaman umur 21 HST, jumlah daun umur 21 HST, 28 HST dan 35 HST, luas daun, bobot segar tanaman, berat kering tanaman dan nisbah pupus akar. Formulasi Sutiyoso dengan nilai EC pada fase vegetatif I  $1,7 \text{ mS cm}^{-1}$ , fase vegetatif II  $2,4 \text{ mS cm}^{-1}$  memberikan hasil terbaik terhadap variabel luas daun  $594,71 \text{ cm}^2$ , bobot segar tanaman 74,23 gram, bobot kering tanaman 4,59 gram dan nisbah pupus akar 2,38 gram.

Kata Kunci : Formula, Hidroponik, Nilai EC, Rakit Apung, Selada



## ABSTRACT

**Sayidatun Napisah. 2021. Effect of EC (*Electrical Conductivity*) and Variety of Formulations on Growth of Lettuce (*Lactuca sativa* var. Grand rapids) in Floating Raft Hydroponic System. Under the guidance of Suryaman Birnadi and Budy Frasetya Taufik Qurrohman.**

Lettuce is a horticultural commodity that has high commercial prospects and value. Lettuce is generally consumed fresh. This study aims to determine the effect of EC and various formulations on the growth of lettuce (*Lactuca sativa* var. Grand rapids) in a hydroponic floating raft system. This research was conducted from April to May at the Experimental Garden, Padjajaran University. The experiment was carried out using a factorial Completely Randomized Design (CRD) with two factors: the EC value and various formulations consisting of 12 treatment levels and repeated 3 times. The variables observed were plant height, leaves number, leaf area, plant fresh weight, plant dry weight and root loss ratio. The results showed that the EC value and the formulation interacted on plant height at 21 DAP, leaves number at 21 DAP, 28 DAP and 35 DAP, leaf area, plant fresh weight, plant dry weight and root loss ratio. Sutiyoso's formulation with EC value in the vegetative phase I of  $1,7 \text{ mS cm}^{-1}$ , vegetative phase II of  $2,4 \text{ mS cm}^{-1}$  affected leaf area  $594,71 \text{ cm}^2$ , plant fresh weight 74,23 grams, plant dry weight 4,59 grams and a root loss ratio of 2,38 grams.

Keywords: EC Value, Floating Raft, Formula, Hydroponics, Lettuce

