

**GROWTH AND RESULT OF LETTUCE (*Lactuca sativa* L.) OF VARIOUS  
CROP SPACING AND TYPES OF PLANTING MEDIA BY  
HYDROPONICS SYSTEM.**

**By: Luthfi Aditia Nur Rafif  
Supervised by: Rina Srilestari and Heti Herastuti**

**ABSTRACT**

Lettuce is one of vegetables who is very popular for Indonesian people. Hydroponic lettuce cultivation is able to produce products with optimum quality and quantity. This study aims to examine the interaction of crop spacing and planting media on the growth and yield of lettuce by an hydroponic system and to determine the optimal spacing and planting media. This study using an split plot design. Main plot is crop spacing, consist of :10 x 10 cm, 10 x 15 cm, 10 x 20 cm and sub plots is types of planting media, consist of : Rockwool, Husk Charcoal, Peatmoss + Perlite. The data obtained were processed by analysis of variance, if there was a significant difference between treatment, it was continued with the Duncan Multiple Range Test at a 5 % level. There is an interaction between the treatment of planting spacing and planting media for growth and yield of lettuce by hydroponic at parameters of plant height (4 and 5 week after plant), interaction between crop spacing 10 x 15 cm and peatmoss + perlite on parameter number of leaves 4 week after plant. The 10 x 10 cm spacing treatment gave the best result on plant height parameters (2 and 3 week after plant), while the 10 x 15 cm and 10 x 20 cm treatments gave the best result on root volume parameters , root fresh weight and root dry weight. Peatmoss + perlite treatment gave the best result on parameters plant height (1,2, and 3 week after plant), root volume, crown fresh weight, root fresh weight, crown dry weight, root dry weight and ratio crown root.

**Keyword :** Lettuce, crop spacing, growth media, Hydroponic.