

SUMMARY

Lettuce (*Lactuca sativa* L.) was a plant included in the horticultural group that can be cultivated using the hydroponic method. This plant was known to produce vitamin C and can be influenced by nutrients in the growth medium. Nutrients in tofu waste can support the growth of lettuce due to the organic material in waste. This research aims to know the effect of tofu waste on growth and vitamin C content in lettuce grown hydroponically and determine the concentration of tofu waste that can be tolerated by lettuce hydroponically.

This research was conducted experimentally with the Randomized Group Design (RBD) method. The independent variable in this study was the concentration of diluted tofu waste liquid as a planting medium with 4 levels of treatment, namely 0%, 5%, 10%, and 15% with each treatment consisting of 4 groups with 6 plants. The dependent variable in this study was the growth and vitamin C content of lettuce. The results obtained showed that lettuce plants grown using hydroponic media of tofu waste can still grow up to 15% treatment. The best lettuce growth was found in the 5% treatment which had a fresh weight of 34.04 g and a plant height of 42.75 cm. The highest number of leaves was found in the 10% concentration, which had 11 leaves. As for the vitamin C content in lettuce, it was found in the 0% treatment, which amounted to 0.425 mg/g.

Keywords: *Hydroponic, lettuce, tofu waste, vitamin C.*

