

ABTRACT

Ngaisah, Siti. 2014. **Effect of Combination of Tofu Liquid Waste and House Hold Organic Waste Compost on the Growth and Crop Yield Kailan (*Brassica oleracea* Var. Acephala)**. Thesis, Biology Department, Faculty of Science and Technology. Maulana Malik Ibrahim State Islamic University, Malang. Supervisor: Dr. Evika Sandi Savitri, M.P and Ach. Nasichuddin, M.A

Keywords: Tofu liquid waste, organic waste compost household, plant Kailan (*Brassica oleracea* Var. Acephala)

Tofu was a food processed of soybeans. In the manufacturing process was generated tofu liquid waste that many contained organic material that had potential as an organic fertilizer. Household organic waste compost was dense organic fertilizer that was obtained from the decay of organic waste household results with the microorganisms' addition that produced rich material needed by plants. This study aimed to determine the effect of tofu liquid waste and household organic waste compost toward the plant Kailan (*Brassica Oleracea* Var. Acephala).

This research was arranged in a completely randomized design (RAL) with 2 factors and 3 replications. The first factor was the tofu consisted of four level: 0 ml, 500 ml, 750 ml and 1000 ml. Second Factor was Household Organic Waste Compost consisted of 4 levels: 0 g, 405 g, 675 g and 945 g. The data obtained were analyzed by ANAVA, if any effects then was followed by Duncan test level of 5%.

Variant analysis result (ANAVA) showed that the treatment of tofu liquid waste of 500 ml / 5 kg of soil can increase plant height, leaf area, crop yields. Treatment of household organic waste compost of 675 gr / plant given best results on plant height, number of leaves, leaf area and crop yields. The interaction between tofu liquid waste and household organic waste compost was no give the effect on plant height, number of leaves, leaf area and crop yields.