ABSTRACT

Syafi'ah, Lailatus. 2014 **Effect of Compost *Azolla* sp. gift toward the Growth and product of Meat Sawi (*Brassica juncea* L.)**. Thesis, Biology Department, Faculty of Science and Technology, State Islamic University Maulana Malik Ibrahim Malang. Supervisor: Dr. Minarno Eko Budi H., M. Pd, Dr. H. Ahmad Barizi. M.A

Keywords: Compost, *Azolla* sp., Meat Sawi (*Brassica juncea* L.)

Azolla sp. was water spikes with Cyanobacteria of symbiotic N2. This symbiosis led to *Azolla* sp. had good nutritional qualities, so *Azolla* sp. This can be used as organic fertilizer and has contributed to the physical improvement, chemical and biological properties of soil. Utilization of composted *Azolla* sp. through composting could be expected to increase the nutrients in the soil so it can be used by plants to improve growth. The purpose of this study was to determine the effect of dose, time of application and interaction of dose and time of application of composted *Azolla* sp. on plant growth and product of meat sawi (*Brassica juncea* L.)

This study used a randomized block design (RAK) arranged as factorial consisting of two factors and three replications. The first factor was the dose of compost of *Azolla* sp. the control dose (D0), 64 grams (D1), 96 grams (D2), 128 (D3) and 160 grams (D4). The second factor was the application time of treatment application at planting (W1), 7 days before planting (W2), and 14 days before planting (W3). The data were then analyzed by analysis of variance (ANAVA) and for significant results continued to test of DMRT 5%.

The results showed compost dose of *Azolla* sp. 64 grams can improve the parameters of plant height, leaf number, total weight, and N content of plant tissues meat sawi (*Brassica juncea* L.), compost application time of *Azolla* sp 7 HST (Day Before Planting) increased the total chlorophyll parameters of meat sawi (*Brassica juncea* L .) and a combination dose of 160 grams and 7 HST application time (Days Before Planting) only affected the chlorophyll content parameter that was 3.93 x 104 mg / g.