THE EFFECTS OF DIFFERENT LEVELS OF FERTILIZERS APPLIED TO LETTUCE (*Lactuca sativa* L.) INOCULATED WITH ARBUSCULAR MYCORRHIZA

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By

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ABSTRACT

The study was conducted from November 15, 2019, to January 10, 2020, at the Research and Development Area, Central Philippine University, Jaro Iloilo City. This study aimed to determine the effects of different levels of fertilizers on the growth and yield of lettuce inoculated with mycorrhizal inoculum. The inoculum is a soil-based biofertilizer composed of dried roots that contain vesicular-arbuscular mycorrhiza (VAM), a product of the University of the Philippines at Los Baños, Laguna. The treatments were 25%, 50%, 75% of the recommended amount of fertilizer for lettuce infected with mycorrhiza, positive control (not infected with mycorrhiza but received the 100% recommend amount of fertilizer for lettuce) and negative control (infected with mycorrhiza but no fertilizer). These were laid out in a randomized complete block design with three replications. The results showed that plants from different treatments did not significantly differ in plant height, number of leaves, and leaf area index (LAI). However, in terms of fresh weight, plants from the positive control treatment were significantly heavier than those in the other treatments. Also, there is no significant difference observed on the fresh weights of lettuce applied with mycorrhizal inoculum receiving different levels (0%, 25%, 50%, and 75%) of the recommended rates of fertilizers. Thus, the use of mycorrhizal inoculum did not increase the yield of lettuce regardless of the amount of fertilizer applied.