Effect of Vesicle Arbuscular Mycorrhiza (VAM) and Chicken Manure Dose Toward Growth and Production of Maize (Zea mays L.)

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Abstract

The application of VAM and chicken manure dose was investigated toward growth and production of maize using split-plot design by complete randomized design method. The first factor as the main plot is VAM (without VAM and with VAM) and the second factor as subplot is the dose of chicken manure (0, 5, 10, 15, and 20 tons/ha). Doses of chicken manure 0 ton/ha was used to determine 100% inorganic fertilizer and the other dose of chicken manure was used to determine 50% of inorganic fertilizer. Statistically, the application of the VAM did not provide significant effect on the growth and yield of maize. However, at 9 weeks after planting, the use of VAM provide more than plant height without the use of VAM. In several treatment with VAM showed growth and higher production than without VAM. Application doses of chicken manure showed a significant effect on the growth and yield of corn. Doses of chicken manure give a linear response of plant height at 9 week after planting and corn grains.

Keywords: maize, mycorrhiza, chicken manure