ABSTRACT

THE EFFECT OF FERMENTED ORGANIC FERTILIZER ON GROWTH AND YIELD OF SWEET POTATO (*Ipomoea batatas* L.)

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The maturation of livestock manure can be accelerated by fermenting it first by making it into fermented organic fertilizer, fermented organic matter takes a relatively short time and produces organic compounds that are easily available and can be absorbed directly by plants. This study aims to determine which type of fermented organic fertilizer has the best effect on the growth and yield of sweet potato plants. The study used RBD with 5 treatments, namely control, chicken fermented organic fertilizer 10 tons/ha, goat fermented organic fertilizer 10 tons/ha, cow fermented organic fertilizer 10 tons/ha and mixed fermented organic fertilizer 10 tons/ha, with 5 replications. Data were analyzed using variance and followed by Duncan's multiple distance test at a 5% significance level. The results showed that the type of fermented organic fertilizer had a significant effect on stem length at 12 WAP, number of tubers per plant, tuber weight per plant, and tuber weight per plot, but had no significant effect on leaf number and leaf area. The effect of the type of chicken fermented organic fertilizer 10 tons/ha produces stem length, number of tuber per plant, tuber weight per plant.

Keywords: fermented organic fertilizer, sweet potato.