# THE EFFECTIVENESS OF CHICKEN MANURE AND MULSA FERTILIZER THE INCREASE IN THE PRODUCTION OF SWEET POTATO *(Ipomoea Batatas L.)* ANTIN 3 VARIETY

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## ABSTRACT

*This study aims to determine the yield of sweet potato plants with the use of chicken manure and straw mulch. The research was conducted in November 2018 - February 2019 on the Jember Polytechnic State research site. The design used was factorial Randomized Block Design (RBD) 2. The first factor is chicken manure dose (K), with 4 levels: Without chicken manure (K0), application of chicken manure 5 tons / Ha (K1), application of chicken manure 10 tons / Ha (K2), application of manure chicken 15 tons / ha (K3). The second factor is the application of straw mulch with 2 levels: without rice straw mulch (M0), application of rice straw mulch (M1). Data analysis using ANOVA and further tested using DMRT / BNT level of 5% and 1%. The results showed that the application of Chicken Cage Fertilizer had a significantly different effect (3.26) on the parameters of observation of strenght weight, number of tubers (3.36), and tuber length (3.95) but showed no significant difference (ns) in length parameters tendrils, tuber diameter, tuber weight, and tuber weight / plot. In addition, the application of straw mulch had a very significant effect (9.26) on the parameters of observation of tendrils length, tuber length (8.19) and gave a significantly different effect (5.08) on tuber weight / plot but showed no significant difference (ns) on the parameters of weight, tuber diameter, number of tubers, and tuber weight. The interaction between the two treatment factors had a significantly different effect (3.12) on the observation of tendrils length and tuber weight / plot (3.08) but it was not significantly different on weight, tuber diameter, tuber number, tuber weight, and tuber length.*

**Keywords:** *sweet potato antin variety 3, Chicken Manure, Mulsa Fertilizer*