## EFFECT OF ORGANIC FERTILIZER CONCENTRATION COW URINE LIQUID (POC) AGAINSTGROWTH OF COCOA SEEDS(Theobroma cacao L.) Guided by Ir. Lilik Mastuti, MP

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## **ABSTRACT**

This research was conducted at Jember State Polytechnic with an altitude of 89 meters above sea, from December 2019 to April 2020. This research was conducted with the determine the effect of the growth of cocoa plant seeds (Theobroma cacao L.) clone MCC 02 with the application of Liquid Organic Cow Urine (POC) fertilization. This study used a non-factorial randomized block design (RBD) with 6 levels and 4 replications. The treatments were P0 (SOP), P1 (50ml / lt), P2 (100 ml / lt), P3 (150 ml / lt), P4 (200 ml / lt), P5 (250 ml / lt) by giving as much as 500ml / Polybag. Parameters observed were seedling height, number of leaves, stem diameter, wet weight, dry weight. The data obtained on each parameter was tested with (ANOVA) and further tested using the 5% level BNJ. The results of the study of the application of liquid organic fertilizer (POC) cow urine affected all parameters (plant height, number of leaves, stem diameter, wet weight and dry weight) and at a concentration of P1 (50ml POC / lt) gave the best results with seed height of 61, 73 cm, total leaves 20.83, stem diameter 0.88 cm, wet weight 42.97 grams, and dry weight 13.23 grams.

Keywords: cow Urine Liquid Organic Fertilizer, cacao plant seeds.