## Implementation of POC Compost Tea Based On Local Ingredients For Soybean Crops

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## ABSTRACT

Soybeans are a food crop that has a high level of consumption in Indonesia. The diverse nutritional content of soybeans is one of the advantages of soybean plants. However, local farmers' production output is relatively low so it cannot meet community needs. Low production results are due to reduced soil productivity and pest and disease attacks. Efforts need to be made to increase soybean production in Indonesia, one of which is by using POC compost tea based on local ingredients. The aim of this research is to analyze the effect of the dose of compost tea POC filtrate by applying compost tea dregs on the growth and production of soybean plants. This research was conducted in Antirogo Village, Sumbersari District, Jember Regency, East Java Province in October 2023 – January 2024. This research used a factorial randomized block design (RAK) method consisting of 2 factors. The first factor is POC compost tea dregs with various ingredients in 3 levels including no application (P0), 0.5 kg/plot (P1), and 1 kg/plot. The second factor is POC compost tea filtrate with 3 levels including no application (K0); 1 liter/plant plot (K1) and 2 liters/plant plot (K2). The results showed that the application of POC compost tea filtrate at a dose of 2 liters/plot had a real effect and produced the highest value, namely 5,25 grams in the fresh weight of the plants pods. Meanwhile, the application of tea compost *POC* dregs at the level of 2 kg/plot showed significant results on the variable number of flowers appearing (21.36) compared to other treatments. And the interaction between the application of POC dregs and POC filtrate did not show significantly different results in all observed variables.

Keywords: Soybean, POC Compost Tea