

Growth Response of Porang (*Amorphophallus muelleri*) by Providing Goat Manure Liquid Organic Fertilizer with Cocopeat and Rice Husk Charcoal Planting Media

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ABSTRACT

The increase in demand for porang food products encourages productivity to be increased. The use of organic fertilizer and types of planting media is considered to have the potential to increase porang productivity. This research aims to determine the effect of providing liquid organic fertilizer made from goat manure and planting media type on the growth of porang plants. This field research was conducted at the Politeknik Negeri Jember from September 2023 to December 2023. This research used a Randomized Block Design with two factors and three replications. The first factor, the concentration of goat manure liquid fertilizer, consists of three levels, namely 150 ml/l, 200 ml/l, and 250 ml/l. while the second factor was the type of planting medium consisting of topsoil, rice husk charcoal mixed with soil, cocopeat mixed with soil, and rice husk charcoal mixed with cocopeat and soil. The results of the research showed that topsoil planting media had a significant influence, where fresh shoot biomass (98,66 g), dry shoot biomass (40,66 g), shoot height(35,89 cm), and stem diameter (16,01 cm) of porang plants showed the greatest results. In contrast, goat manure liquid fertilizer did not have significant results for every parameter. Generally, there was no interaction between the planting medium and goat manure liquid organic fertilizer on the parameters.

Keywords: Animal manure, Coconut husk, Konjac, Rice husk