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GERMINATION OF PORANG (*Amorphophalus muelleri*) FROM DIFFERENT BULBIL TO VARIOUS PLANTING MEDIA

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Abstract

Porang plant is atubers that havevarious benefits. Porang cultivation needs intensive management through cultivation efforts which of course must be supported by the availability of seeds. Therefore, it is necessary to procure porang seeds from vegetative (tubers) and generative (stem bulbil and branch bulbil). This study aims to obtain the best growing media for porang germination from various types of bulbil. The method used in this study was a factorial randomized block design. The way of working in this research is: Preparation of Seedling Media, Preparation of planting material (Bulbil), Seeding, Maintenance (including watering and weeding). The results showed that there was no significant interaction between the planting medium and the type of bulbil, the media had no significant effect on all observed variables, while the bulbil had a significant effect on the percentage of germination growth, stem height, and number of leaves. The best type of bulbil for breeding is stem bulbil which is superior to the variables of plumule emergence time, petiole length, stem height, and number of leaves compared to branch bulbil. Meanwhile, the best growing media in porang nurseries was a mixture of 50% husk charcoal + 50% sawdust on the variables when the plumule appeared, the percentage of germination, petiole length and stem height. The appearance of bulbil from stems on a mixture of 50% husk charcoal + 50% sawdust media, namely the time of emergence of plumules (5.61 days), percentage of sprouting (86.67%), petiole length (8.72 cm), height stems (31.11 cm) and number of leaves (7.72 strands).

Keywords: Porang, Germination, Bulbil, Planting Media

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1. Introduction

Porang (*Amorphophalus muelleri*) is a plant tubers that havethe benefits are more diverse than other root crops. One of the local varieties of superior production porang patented in collaboration with the Agricultural Research and Development Agency (Balitbangtan) of the Ministry of Agriculture is Madiun 1. Porang tubers contain 15% - 64% glucomannan (dry basis), which can be used as raw materials for the food and health industry [1]. Porang cultivation is an effort to diversify food ingredients and provide industrial raw materials that can increase the value of export commodities in Indonesia [2].Therefore, it is necessary to intensify and expand the porang cultivation area and the adequacy of seed material to meet the porang, domestic and export industries [3].

Porang cultivation requires intensive management such as land management for seedlings and planting, plant maintenance and how to harvest tubers. For seeds or plant seeds derived from seeds, it is necessary to prepare a nursery for seedlings, and if they have germinated, they can be transferred from the nursery to the field [4]. According to [5], intensive cultivation efforts must of course be supported by the availability of seeds. Therefore, it is necessary to procure seeds from seed sources other than root tubers. One of them is with bulbil.

Bulbil are generative tubers that grow at the base and axils of the leaves. Porang plants whose seed sources come

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