

# **THE EFFECT OF ORIGIN AND CUTTINGS LENGTH ON GROWTH OF BREADFRUIT (*Artocarpus altilis*) PLANT CUTTINGS**

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## **ABSTRACT**

Breadfruit is a forest plant that has an important role as a food source. Efforts to improve the quality and yield of breadfruit are needed by superior seeds from the parent tree by stem cuttings. This study aimed to determine the regional origin of breadfruit plant that is best in the ability to grow breadfruit plants, determine the best length of stem cuttings for the success of breadfruit plant growth and determine the interaction between the origin of breadfruit plant regional and the length of breadfruit plant cuttings to the growth of breadfruit stem cuttings. This research was conducted in July 2018 until September 2018 in the Nursery Center of Center for Forest Biotechnology and Tree Improvement Research Yogyakarta. The method used was a Complete Randomized Block Design (CRBD) with two factors. The first factor was the origin of the regional namely breadfruit from Yogyakarta, Cilacap, Manokwari, and Bone. The second factor was the length of stem cuttings namely 10, 15, 20, and 25 cm. The results showed that the regional origin and length of stem cuttings were the best in breadfruit plants from the Manokwari region on parameters when growing shoots, number of shoots, number of leaves, stem diameter, root length, root volume, and percentage of life. The length of 25 cm stem cuttings gave high results on the parameters of growing shoots, number of shoots, number of leaves, stem diameter, root length, root volume, and percentage of life. There was no real interaction between all the treatment regionals from the breadfruit region and the length of breadfruit stem cuttings.

**Keywords:** Origin, Length of Cuttings, Breadfruit