GROWTH LEAVES CUTTINGS OF LIDAH MERTUA (Sansevieria trifasciata "Laurentii") WITH VARIOUS SIZES OF CUTTINGS MATERIALS AND CONCENTRATIONS OF NATURAL GROWTH REGULATORS OF CHOCOLATE ALGAE

By: Faradilla Kurnia Putri

Supervised by: Tuti Setyaningrum and Endah Wahyurini

ABSTRACT

The technology vegetative propagation of plants by cuttings can be a way to fulfill the demand for lidah mertua in the domestic and international markets. It is necessary to use the right size of cutting material and concentration of natural ZPT so it can support the growth of cuttings. The aim of the study was to determine whether there was an interaction between the size of the cutting material and the concentration of brown algae extract on the growth of lidah mertua leaf cuttings, to obtain the best size of the cutting material and the concentration of brown algae extract for the growth of lidah mertua leaf cuttings. The research method was a field experiment in a paranet house using a split plot design with the main plot namely the size of the cutting material (5, 10, 15 cm), and the sub plot, namely the concentration of brown algae extract (15%, 30%, 45%). The data were analyzed using the ANOVA test at 5% significance level and followed by the DMRT method at 5% significance level. The results showed that there was no interaction between the size of the cutting material and the concentration of brown algae extract. The cutting material size of 15 cm has a better effect on the parameters of shoot length, root length, root fresh weight, shoot fresh weight, root dry weight and shoot dry weight. Natural growth regulators of brown algae gave the same good results on all parameters.

Keywords: Lidah mertua, cuttings, and brown algae