RESPONSE OF VARIOUS CUTTING LENGTHS AND AUXIN IMMERTION DURATION ON THE GROWTH OF GRAPEVINE CUTTINGS (*Vitis vinifera* L.)

By : Juan Maringga
Supervised by : Heti Herastuti and Ellen Rosyelina Sasmita

ABSTRACT

Ninel grape is one of the most popular grape varieties in Indonesia which is usually made into juice, jelly, oil, or eaten directly. Plant propagation vegetatively, namely by stem cuttings. The success of cuttings can be attempted by the use of optimal cuttings length and the application of ZPT Auksin with proper application. This study aims to obtain the interaction between the length of the cuttings and the soaking time, to obtain the optimal cuttings length and soaking time. The research method used is field research using a factorial Complete Random Design (RAL) with 2 factors. The first factor is the length of the cuttings with 3 levels of treatment, namely: 15 cm, 20 cm, and 25 cm. The second factor is the duration of auxin immersion with 4 treatment levels, namely: no soaking, 7.5 minutes, 15 minutes, and 22.5 minutes. There are 12 combinations of actions with 2 repetitions. The data of the research results were analyzed with Analysis Of Variant (ANOVA) at the level of 5% and continued with the Duncan Multiple Range Test (DMRT) at the level of 5%. The results of the study did not show any interaction between the length of the cuttings and the duration of auxin immersion in all observation parameters. The best treatment of cuttings is 25 cm on the root length paremeter, fresh weight of shoots and dry weight of shoots. A long treatment of 22.5 minutes of soaking provides good growth on the parameters of root length, root volume and fresh weight of shoots.

Keyword : *cuttings, grapes, auxin, cuttings length, immersion duration*