ABSTRACT

THE EFFECT OF BENZYLADENIN (BA) CONCENTRATION ON CORM PRODUCTION OF TWO GLADIOLUS VARIETIES (Gladiolus hybridus L.)

By

Yunita Ayu Saputri

Gladiolus is one of many ornamental plants that cultivated due to its high aesthetics value not only as cut flowers but also as garden plants. These plants can be propagated both vegetatively and generatively. Vegetative way can be done by using the corm and cormels, while the generative way is by using the seeds. The vegetative propagation by using corm is considered faster and easier to produce new plants than using the seeds or cormels.

The study was done in order to (1) know which gladiolus varieties produce higher corm production, (2) know the best concentration of benzyladenin (BA) that can increase the production of gladiolus corms, and (3) know the combined effect of benzyladenin (BA) and varieties in increasing production of gladiolus corms.

The research was conducted in the Gunung Terang Village, Tanjung Karang Barat District of Bandar Lampung, from May until November 2011. The treatment was designed factorially (2 x 4) by using a Randomized Block Design. The first factor was two gladiolus varieties, i.e Fatimah and Hunaena. The second factor was four Benzyladenin (BA) concentrations, which consists of 0 ppm (b_0), 10 ppm (b_1), 20 ppm (b₂), and 30 ppm (b₃). The experiment was grouped according to the size of the gladiolus corms. Statistical analysis was performed by analysis of variance, and the comparison among means by the Least Significant Difference (LSD) test at 5% probability.

The results showed that (1) Fatimah and Hunaena varieties were not significantly different in corm production, (2) Application of benzyladenin at 20 ppm and 30 ppm both increase corms production by 2,56 and 2,63. (3) There was no interaction between the varieties and benzyladenin (BA) concentration in the production of gladiolus corms.

Key word : Benzyladenin, Corm Production, Gladiolus