

## **ABSTRACT**

One of efforts to improve gladiolus flower production is by improving amounts of corm productions. Fertilizing is expected to be able to enhance the corm size, so that it will be able to use as production germ. The objective of this research was to find out: (1) gladiolus flower shoot amounts that produced the best corm production; (2) dosage of NPK fertilizer that influenced better gladiolus flower corm production; and (3) influences of NPK fertilizer to gladiolus flower corm for each different shoot amounts.

This research was conducted by using Completely Randomized Design. Treatments were arranged in factorial 4 x 3 with 3 repetitions. The first factor was shoot amount of one shoot (T<sub>1</sub>), two shoots (T<sub>2</sub>), three shoots (T<sub>3</sub>), and four shoots (T<sub>4</sub>). The second factor was NPK fertilizer dosages of 15 g/plant (P<sub>1</sub>), 30 g/plant (P<sub>2</sub>), and 45 g/plant (P<sub>3</sub>). The obtained data were analyzed with Analysis of Variance and Least Significant Different with 5% significance.

The results showed that the gladiolus flower shoot amounts influenced the plant height, leave amounts, corm amounts, corm weight, corm diameter, and stover dry weight. Administering fertilizer with 45 g per polybag did not influence all observation variables. NPK fertilizer dose to administer did not depend on corm shoot amounts to use in producing gladiolus flower germs.

**Keywords** : gladiolus flower, corm shoot amounts, NPF fertilizer dosage.