

Estimation of genetic variability, correlation and path analysis in gladiolus (*Gladiolus species* L.)

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SUMMARY

The experiment was carried out to access the extent of genetic variability, heritability, genetic advance, correlation and path co-efficient for 13 diverse genotypes of gladiolus during the year of 2010-2011. Considerable amount of variation was observed for all the characters under study. The phenotypic co-efficient of variance (PCV) was higher than their respective genotypic co-efficient of variance (GCV) for all the characters. The PCV and GCV estimate were high for number of cormels per plant followed by leaf width, corm weight per plot, corm weight per plant and number of corms per plant. Genotypic correlation co-efficient were higher in magnitude over phenotypic correlations co-efficient, corms weight per plant was significantly and positively correlated with spike weight, number of cormels per plant, number of corms per plant, spike initiation, number of floret per spike and number of leaves per plant. Path co-efficient studies show that the spike weight (0.9810) had highest direct effect on corms weight per plant followed by number of cormels per plant (0.8250), number of leaves per plant (0.3789) and spike initiation (0.3520) and direct selection could be made for these characters for improving the yield.

Key Words : Genetic variability, Correlation, Path analysis, Gladiolus

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