SUMMARY AND CONCLUSION
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Present chapter deals with main results in a brief form which are summarized in these lines. Experiments were Carried out in gladiolus varieties for two consecutive years during (1992-93 and 1993-94) Plant height and diameter of stem gave a great range of variation in different varieties. Variety Oscar \( (T_{12}) \) exhibited a good plant height 1.70 meter during 1991-93 and variety white friendship \( (T_{13}) \) showed 1.80 meter height during next year in the investigations. The best length 31.88 in 1992-93 variety Arti \( (T_{1}) \) exhibited length of leaf 32.34 Cm. Next to maximum length of leaf was found in Autum Moon \( (T_{3}) \), Apsara \( (T_{2}) \) and Arti Variety \( (T_{1}) \) where it was 31.84, 31.70 and 31.34 Cm, respectively. Width of leaf had variation from 3.04 in Winks Glory variety \( (T_{15}) \) to 3.85 cm. in Bright eye \( (T_{7}) \) during first and second year, respectively.

Period required for spike emergence and number of days for blooming which ranged from 68.04 in Apsara variety \( (T_{2}) \) to 77.38 days in Lavender Puff \( (T_{17}) \) and 60.286 Autum Moon \( (T_{3}) \) to 75.84 days in Lavender Puff \( (T_{17}) \) in 1991-93 and 1993-94, respectively. Length of spike and number of days for bud maturity had a range of
variation in length of spike from 62.54 in variety white Gold (T19) to 74.94 Cm in Rose supreme variety (T20) and 64.46 Autumn Moon (T3) to 74.01 days in variety Rose supreme (T20) during 1992-93 and 1993-94, respectively. The maximum length of spike was found in treatments Arti (T1), Winks Glory (T15) and Tambri (T16) which it was 72.98, 71.58 and 71.30 Cm during 1992-93. Minimum 12.58 days were found in Misty Button (T9) to 15.00 Lavender Puff (T17) and 13.05 Misty Button (T9) to 15.33 in treatment Apsara (T2) during 1992-93 and 1993-94, respectively.

Number of flowers reduced/spike and their length gave a considerable variation in different treatments. Maximum number of flowers/spike 19.27 and 19.55 was found in treatment. Apsara (T2) during both years. Length of flower gave a considerable variation ranging from 9.27 (T9) to 15.40 Cm (T16) in Tamri variety during 1993-94. Width of flower and number of Corms harvested/plant varied from 10.51 (T10) to 14.43 Cm (T1) and 1.29 (T2) to 2.98 (T10) during 1992-93. Number of days was found for vase life and number of cormlets production/plant showed significant variation. Arti (T1) produced 15.06 and 15.34 during both years of investigation.
Coefficient of variation, heriability and genetic advance have given important results. Highest heritability was found 23.218 during 1991-93. Length of flower had the highest value of heritability 23.717. Genetic advance was found highest for length of spike (5.9375) and days required for spike emergence (3.7425) during 1991-93 and 1993-94, respectively.

Phenotypic coefficient of variation was found to have a range from 4.4665 in days for spike emergence 16.8022 to length of leaf (4.0144) in days for spike emergence to 17.0765 in number of corms/plant during 1992-93 and 1993-94, respectively.

Plant height was found to have positive association with length of leaf (0.1608, 0.1078), period for spike emergence (0.1163, 0.02849), number of days for blooming of a spike (0.1602, 0.2016), number of corms produced/plant (0.0711, 0.2935), days of vase life (0.1448, 0.2866) during 1992-93 and 1993-94, respectively.

Number of days for bud maturity had given positive and significant phenotypic association with plant height (0.2525), diameter of stem (0.2573), width of leaf (0.2942), period for spike emergence (0.1949), length of spike (0.2817) and number of flowers/spike (0.3068). Further
Length of flower was found to have positive and significant correlation with plant height (0.00446).

Genotypic correlations have that height of plants was positive association with period for spike emergence (0.4159), number of days required for blooming (0.3539), length of flower (0.0785), Width of flowers (0.4707) and number of cormlets produced per plant (0.2049) in 1992-93. Similarly, length of leaf and width of leaf had positive correlation with diameter of stem (0.4287, 0.4592), number of days for blooming (0.3660, 0.2569) and number of flowers/spike (0.2737, 0.1698).

Length of flowers and width of flowers had positive association with plant height (0.0784, 0.47070), length of leaf (0.0116, 0.3678), number of days for bud maturity (0.3066, 0.1417) and number of flowers/spike (0.2245, 0.4145). It had also positive correlation with period for spike emergence (0.0923, 0.2366) in 1993-94.

Environmental correlations, height of plant was found to have positive and significant association with diameter of stem (0.2561, 0.1712), length of leaf (0.4508, 0.5323), number of flowers/spike (0.1574; 0.1043), number of cormlets / plant (0.2066, 0.1947) and number of cormlets / plant (0.0836, 0.1387) under these investigations.
Positive correlations of spike emergence, length of spike (0.3300, 0.2423), number of days for bud maturity (0.1824, 0.1084), number of corms/plant (0.1209, 0.0470) and days vase life (0.0624, 0.3422). Length of spike also had positive correlation with length of leaf (0.1484) width of leaf (0.358) and days required for spike emergence (0.3300). Further plant height was found to have positive relationship with length of leaf (0.01598) width of leaf (0.00856), days for spike emergence (0.01843) days for blooming spike (0.06597) and period required for bud development (0.07587). Stem diameter was found to have positive relation with length of leaf (0.03902), days for blooming (0.06040), length of spike (0.04593), days for bud development (0.07732), number of flowers/spike (0.06908) and vase life in days (0.02614) during (1993 - 94).

Length of leaf gave positive relationship with number of days for blooming (0.09717, 0.04325) length of spike (0.02709) and vase life of the flower (0.01 027, 0.07354) in 1992 - 93. Period required for spike emergence and for blooming also have positive relationship with plant height (0.02032, 0.02798). During 1993 -94 period needed for spike emergence and blooming gave positive relationship with length of leaf (0.00146, 0.00469) and period for vase life (0.00517, 0.00717), respectively.
Number of corms obtained / plant vase-life and number of cormlets / plant had positive and direct relationship with plant height (0.03606, 0.02528, 0.017477), length of leaf (0.02922), 0.04043, 0.09433 and days for blooming (0.11422, 0.07994, 0.41201).

Stem diameter was found to have positive association with leaf length (0.49787, 0.11676) days for bud development (0.45598, 0.15135) and days for vase-life (0.06694, 0.79150) during (1992-93 and 1993-94). Length of leaf was also found to have positive indirect relation with plant height (0.04842) length of leaf (1.16133) and width of leaf (0.25171). In growth aspects spike emergence had its positive relationship with plant height (2.12633), flower length (1.09630), width of flower (0.22873) days for vase life (0.47789) and number of cormlets produced plant (0.9218).

Blooming period was found in relation with plant height (0.38425), length of leaf (0.02261), length of leaf (0.02261), length of spike (1.37478), length of flower (1.21749) and width of flower (2.21788) during 1993 - 94. Period for bud development was found positive in relationship with days for spike emergence (0.39107), number of flowers / spike (0.22692) number of corms / plant (0.12265) and number of cormlets / Plant (0.30661). Stem diameter (0.77535) days for spike emergence (0.23171),
length of spike (0.47959), days for bud development (0.49030) and number of flowers / spike (0.18576) had positive relationship. Length of flower was also found positive relationship with length of leaf (0.42716) and number of flowers / spike (0.24494).

Height of plant was found positive relationship with days for spike emergence (0.02074) length of flower (0.02236) and days for vase-life (0.01093) during 1992 - 93. Stem diameter gave its positive relationship with plant height (0.01568), width of leaf (0.00601), days for spike emergence (0.01864), number of flowers/ spike (0.00922), number of corms / plant (0.01655) and vase life (0.00170), length of leaf also has positive relationship to plant height (0.02716) and width of leaf (0.009131). It had positive relationship with length of leaf (0.42497; 0.00012) and days for spike emergence (0.83719, 0.14435). Number of cormlets produced / plant (-0.00845) , (-0.010171), (-0.05396), (-0.00208), (-0.00173), (-0.14577) and (-0.02717) respectively.

Length of spike and days required for bud development was found positively related with bud development (0.59987, 1.16543) number of flowers / spike (0.30193, 0.22692), number of cormlets / plant (0.21026, 0.30661) 1992 - 93. Vase-life and number of cormlets produced plant was positive in relationship with length of leaf (0.64904 1-16133) and number of flowers / spike (0.102994, 0.58972).
It is concluded that the throughout the period of investigations varieties were found to show favourable results. Oscar, White friendship, Arti, Autum Moon, Apsara, Winks Glory, Bright Eye Lovender Puff and Tambri showed good results. Happy end Topic seas and Oscar were found to show the best results.

The genetic analysis revealed high heritability for length of flower days vase-life number of cormlets / plant maximum number of flowers produced / spike recommend the selection. Correlation coefficient and path coefficient relationship showed positive and significant relationship among themselves. Thus it can be concluded that these characters can be taken as basic lines for future experiments for improvement of this crop.