
SUMMARY AND CONCLUSION

The present investigation entitled "EFFECT OF MICRO-NUTRIENTS AS FOLIAR SPRAY ON THE PERFORMANCE OF GLADIOLUS Cv. AMERICAN BEAUTY" was carried out at Horticultural Research Farm, Institute of Advanced Studies, Meerut University, Meerut (U.P.) during the year 1991-92 and 1992-93. The experiment was laid out in Factorial Randomized Block Design.

There were 28 treatments, which were applied three times in factorial R.B.D. All the three micro-nutrients used individually as well as in all possible combinations. The source of micro-nutrients used for Co as CONO_3 (0.10, 0.15 and 0.30%), Bo as $\text{Na}_2\text{B}_4\text{O}_7$, borax (0.10, 0.15 and 0.30%) and Mn as MnSO_4 (0.10, 0.15 and 0.30%) and control was also maintained by using the distilled water. The data recorded at the various stages were analysed statistically. The main findings are summarized below:

(A) GROWTH PARAMETERS:

- 1.. The combined application at higher concentration (0.30%) of all the three micro-nutrients Co+Bo+Mn (Cobalt, Boron and Manganese) gave the maximum number of sprouts per corm, width of scape, width of leaf, height of plant, length of longest leaf and number of leaves per plant.
2. The application of Co alone in higher concentration produced the equally good results on the various parameters, mentioned above.

3. The application of Bo and Mn in higher concentration (0.30%) was found better than control.
4. The application of lower concentration (0.10%) was seen ineffective on the growth parameters.

(B) FLOWERING PARAMETERS:

5. The combined application of all the three micro-nutrients Co+Bo+Mn in higher concentration (0.30%) produced early visibility of spike, opening of first flower, maximum length of spike, diameter of spike, number of flowers per spike, number of spikes produced per corm and duration of flowering on the spike.
6. The application of Co alone in higher concentration (0.30%) produced the equally good results on flowering parameters mentioned above.
7. The application of lower concentrations (0.10%) of all the three micro-nutrients are less effective, but was found better over control.

(C) CORMS AND CORMLETS PARAMETERS:

8. The combined application of all the three micro-nutrients Co+Bo+Mn at higher concentrations (0.30%) gave the maximum number of corms per hill, weight of corms per hill, diameter of corms, number of cormlets per hill and weight of cormlets per hill.

9. The application of Co alone at higher concentration (0.30%) gave the similar results on the corms and cormlets parameters mentioned above.
10. The application of all the three micro-nutrients at lower concentrations was found ineffective on the corms and cormlets parameters.

CONCLUSION

Thus on the basis of the above findings it can be concluded that the better vegetative growth, flowering and production of corms and cormlets of gladiolus Cv. American Beauty can be obtained by the combined application of all the three micro-nutrients at higher concentrations. The application of Co alone at higher concentration may also give the equally good results under the climatic conditions of Meerut.

T 3763

T 3763
