EFFECT OF GROWTH REGULATING CHEMICALS ON GROWTH, FLOWERING AND SEED YIELD OF SOME WINTER ANNUALS.

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ABSTRACT

The effect of foliar application of GA3, NAA or IBA at rates of 100, 150 ppm and seed yield of Antirrhinum majus, L., Delphinum grandiflorum, L., Mathiola incana, L., and Callistephus chinensis, L. were investigated.

The results indicate that GA3 significantly advanced flowering of treated plants than those treated by NAA or IBA as well as control plants. NAA delayed flowering of M. incana and C. chinensis. GA3 caused significant decrease in number of florets per spike of A. majus, M. incana and number of flowers per plant of C. chinensis, while IBA at 100 ppm and NAA at 200 ppm increased florets number per spike of D. grandiflorum. It was noticed also that IBA and NAA at 100 ppm increased flowers number per plant of C. chinensis. All applied growth regulators increased seed yield per plant and the highest yield was achieved by high rate of application (200 ppm). It was noticed that NAA gave the highest seed yield of C. chinensis and D. grandiflorum while IBA gave the highest seed yield per plant of M. incana and A. majus. The results also revealed that GA3, IBA and NAA have stimulative effect on leaves content of DNA and RNA.