

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

BY

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ABSTRACT

The effect of foliar application of GA3 , NAA or IBA at rates of 100 , 150 and seed yield of Antirrhinum majus , L . : Delphinium 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 .