

# EFFECT OF TRYPTOPHAN AND ARGININE ON GROWTH AND FLOWERING OF SOME WINTER ANNUALS

BY

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## ABSTRACT

Tryptophan or arginine were sprayed 3 times at rates of 50 , 75 or 100 ppm at age of 25 , 40 and 55-days on Antirrhinum majus , L . : Delphinium grandiflorum , L . : Mathiola incana , L . and Callistephus chinensis , L . The obtained results indicate that , both tryptophan and arginine mainly at 100 ppm gave the tallest plants Arginine at 100 ppm was more effective in advancing flowering time of D . grandiflorum by 20 and 23 days and C . chinensis by 20 and 22 days . significant increase was recorded for number of florets , length of inflorescences stalk and portion and diameter of florets . Arginine treatment at 100 ppm gave higher seed yield per plant than tryptophan within all treated species , this increase reached to 91 , 96 , 84 and 201% for A . majus , D . grandiflorum , M . incana and C . chinensis , respectively compared with control plants . Both amino acids showed enhancing effect on RNA and DNA content .