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**EFFECT OF WEED CONTROL AND RATES OF IAA ON
PRODUCTIVITY OF FABA BEAN AND ASSOCIATED WEEDS
BY**

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ABSTRACT

Two field experiments were conducted during the two seasons (1992/93 and 1993/94) at the Agricultural, Research and Experiment Center Faculty of Agriculture Moshtohor, Qalyoubia, Egypt to study the effect of some herbicides and IAA concentration on yield and yield components of faba bean Giza 2 cultivar as well as associated weeds. The results revealed that all weed control treatments gave a satisfactory weed control except oxyfluorfen which gave a poor weed control as compared to the control. Handhoeing as well as Topogard and combination of penoxalin + oxyfluorfen were the best in depressing weed biomass under this study, followed by penoxalin alone. The best weed control of such former treatments reflect a good results on seed yield and its components, where the highest values in seed yield of faba bean and its attributes i.e. number and weight of pods and seeds/plant were remained with the handhoeing treatment followed by the herbicidal treatments (Topogard, penoxalin, penoxalin + oxyfluorfen and later came oxyfluorfen).

Concentration of IAA had no significant effect on controlling weeds or on faba bean seed yield and its components except plant height in the first season and seed yield in the second season compared to the control. The dose of 200 ppm IAA slightly improved the yield and some of its components and gave a slight effect in controlling weeds. The best increases in seed yield were obtained from using handhoeing or Topogard under 300 ppm IAA.