

EVALUATING SOME HERBICIDES AND THEIR COMBINATION RATES
ON WEED CONTROL GROWTH AND PRODUCTIVITY OF FABA BEAN
(*Vicia faba*, L)

BY

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ABSTRACT

Two field experiments were carried out in 1990/1991 and 1991/1992 seasons at the Research and Experimental Station, Faculty of Agriculture, Moshtohor, Qalyoubia. The aim of this investigation was to study the effect of using atrazine metribuzin and Primextra herbicides either single or in combination at different doses on weed control and yield and its components of faba bean.

All weed control treatments significantly decreased fresh and dry weights of weeds during the two experimental seasons compared with unweeded check. Weed control was improved with hand hoeing and herbicidal mixtures than single herbicides in both seasons.

Herbicidal treatments significantly decreased the establishment of faba bean seedlings, specially at high rates compared with hand hoeing or unweeded check during the two seasons. Hand hoeing surpassed other treatments in increasing number as well as fresh and dry weights of branches, leaves and pods/plant in 1990/1991 season. The significantly highest on number, fresh and dry weight of pods/plant in 1991/1992 season was obtained by hand hoeing and mixture of atrazine + Primextra at the high rate (complete rates of each)

The highest increases in yield component values were obtained with hand hoeing followed by atrazine + Primextra (at 50 % rates of each) in the first season, and with atrazine + metribuzin (at 50 % rates of each) in the second season. The heaviest 100-seed weight was recorded with atrazine alone or in combination with Primextra (at 50 % rates of each). The highest seed yield/fed. was obtained with hand hoeing followed by metribuzin in 1990/1991 season and with Primextra + metribuzin (complete rates of each) followed by metribuzin in 1991/1992 season. Low rates of herbicidal mixtures were generally better as single