PRODUCTIVITY OF FABA BEAN AS INFLUENCED BY WEED CONTROL METHODS AND PLANT DENSITIES.

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ABSTRACT

This investigation was conducted in the Experimental Farm, Faculty of Agriculture, Moshtohor, Zagazig University, Egypt, during 1992/93 and 1993/94 growing seasons to study the effect of weed control, number of rows/ridge and number of plants/hill on yield and yield components of faba bean and associated weeds. The results revealed that:

Handhoeing was the best treatment and significantly decreased both fresh and dry weights of total weeds/m² followed by Topogard and Igran in both seasons. Whereas Fusilade herbicide gave a satisfactory weed control and reduced fresh and dry weight of grassy weeds followed by handhoeing. The highest values of seed yield and its components were recorded with handhoeing followed by Topogard and Igran except 100-seed weight. Fusilade slightly increased 100-seed weight in both seasons as compared with the other herbicides and unweeded treatment.

Growing faba bean on one side/ridge gave the highest values of yield components characters under study. On the other hand, two sides/ridge produced the highest plant height and seed yield/bed and decreased fresh and dry weights of total weeds/m².

Fresh and dry weights of weeds/m², number of branches and pods per plant, weight of pods and seeds per plant and 100-seed weight were significantly decreased by increasing number of plants/hill from one to three plants/hill. Whereas three plants/hill gave the highest values of plant height and seed yield per feddan.

It could be concluded that handhoeing or Topogard herbicide combined with growing faba bean on two sides/ridge with three plants/hill gave the maximum seed yield per feddan.