EFFECT OF EXTRACT OF SEEDS OF Trigonella foenum-graecum L. AND VITAMIN C ON GROWTH AND YIEHD OF Vicia faba L.

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ABSTRACT

A biological experiment was conducted in botanical garden of Biology Department/Collage of Education (Ibn Al-Haitham), University of Baghdad during winter season of 2010-1011.

The aim of the experiment was to study the effect of extract of seeds of two concentration 1% and 2% of fenugreek (*Trigonella foenum-graecum*) and also effect of vitamin C in two concentration 40 and 60 ppm on growth and yield of *Vicia faba* L.

The results showed that the extract of seeds of fenugreek in 1% concentration increased, leaf area index 107.7%, chlorophyll content in leaves 13.4%, flowers number 183.8%, pods number 72.9%, weight of 100 grains 33.8%, the average weight of grain 51.5%, harvest index 34.2%, percentage of carbohydrate 22.6% and protein 45.9%.

The vitamin C in 40 ppm increase of leaf area index 63.46%, chlorophyll content 12.7%, grains number in pod 25.3%, weight of 100 grains 23.2%, the average weight of grain 38.9% and percentage of carbohydrate and protein 21.6%, 54.3% respectively compared with control plants.

Key words: *Vicia faba*, Extract of fenugreek seeds, Vitamins C.