INTRODUCTION

Chickpea *(Cicer arietinum, L.)* is one of the most important seed legume in the world .In Egypt, chickpea is the third important leguminous crop raised for seed production. Its seeds not only provide a cheap source of protein, but also a food of high calorific and nutritive value. The seeds are used either green or dry as human diet, moreover, these seeds are used in sweets and baby food blend. It is generally known that N_2 fixation by Rhizobium is enhanced in host plants. It can grow successfully in different soil types and it increases soil fertility.

Mostly concentrated in upper Egypt (about 90%).Farmers of Beheira, Sharkia, Ismailia, Assuit, Sohag and Qena Governorates used to grew chickpea for seed production, hence it is considered as a useful cash crop with numerous uses.

The total area of chickpea in Egypt is about 10859 faddan in 2007/2008 season. The average yield reached 5.85 ardabs/faddan in 2007/2008 season.[*] It is not easy to increase the cultivated area of chickpea due to the limitation in the land and competition with other winter cash crops. However, in the future, it may be grown as a winter crop in the newly reclaimed land as a leguminous soil building crop. Therefore, it is of vital importance to increase the total production by increasing the yield per unit area. This could be reached through developing

[*] Agricultural statistics, Economic (2007) winter crop. Affairs sector, Ministry of Agricultural and land Reclamation, Arab republic of Egypt, December vol.1pp 54-59 (In Arabic).

high yielding new varieties and the application of best agronomic practices. Now, there is a tendency to use high seeding rate than before.

This tendency is the result of some recent research work showing that the leguminous protein –rich plant depend completely on soil fertilizers for providing its high requirements of nitrogen and phosphorus.

Special attention should be paid to fertilization due to the contradictory investigation results. The present study aimes to investigate the effect of biofertilizer and micronutrients on some varieties of chickpea (*Cicer arietinum, L.*). To contribute some information concerning fertilization requirements in addition to decrease environmental pollution.