

## INTRODUCTION

Sunflower ( Heliathus annuus L. ) is considered one of the most important oil crops in the world. In Egypt, oil production is insufficient for local consumption. The total production of oil was 150 thousand tons in 1988, which represents 20 % of consumer requirements. The oil crops, in addition to cotton seed occupied 7.3 million feddans.

Sunflower ranks the sixth place among the main oil crops with regard to production with an average quantity of 20.2 thousand tons in and average area of 14.4 thousand feddans. The non importation of sunflower is due to the small area and small available quantities used for manufacture. Sunflower should talke its place in the new soils and more attention should be paid to its production by increasing and expanding the area under sunflower and using the optimal agricultural practices in addition to introducing the new high yielding varieties adaptable to the Egyptian conditions and with high oil content.

Determination of the place of sunflower in the crop rotation and the optimal rate of nitrogen and phosphorus fertilizers are of the main practices that contribute to high production.

This investigation was conducted to study the effect of some preceding winter crops as well as nitrogenou fertilizer on growth and yield of sunflower.