

## INTRODUCTION

Tomato is considered as one of the leading vegetable crops in the Arab Republic of Egypt. It is primarily important for local market, export and processing.

In 1982 the area under cultivation averaged 321748 feddans) with a total production of (2657045 tons). The average yield per feddan was estimated to be (8.26 tons).

Egypt as well as other developing countries suffer from lack of food substances including vegetables, therefore a great effort is needed to increase the production of vegetables including tomatoes to face the increase in population. It is also needed to face the foreign markets demand, and local processed tomatoes.

The increase in tomato production could be achieved either by the vertical expansion, i.e. the increase in yield per faddan or by the increase in cultivated area.

One of the important mean to increase production is to introduce high yielding cultivars and evaluating them under our local conditions and selecting the best suitable cultivar for the purpose which tomatoes are grown, local market, export or processing.

Many factors are considered in the evaluation of tomato variety, among these are high yielding variety considering the production per feddan. Another factor is the quality attributes of the variety including the color, the firmness to withstand transportation and the shape, all which reflect their acceptability to consumer for local market and export. Also the earliness in tomato production is considered an important aspect.

This investigation was carried out to evaluate four cultivars of tomatoes under the local conditions at different growing seasons.

Evaluation was conducted concerning the vegetative growth, flowering and fruiting. The keeping quality of these cultivars under cold and room temperature was also carried out in order to select or recommend one or more variety from the stand point of yield, earliness or keeping quality.