

INTRODUCTION

1. INTRODUCTION

The tomato is important throughout the world for both the fresh fruit market and the processed food industries. It is grown in a wide range of climates in the field and under protection in glasshouses. New varieties are introduced each year where some of them are cold and others are heat tolerant. Such tolerant varieties can grow under extremely diverse climates.

Among vegetables grown in Egypt, tomatoes rank the first in acreage and production. One third of the total vegetable acreage is devoted to tomato production. The* acreage and production of tomatoes reached 424963 faddan and 3996844 tons in 1989. Tomatoes play an important role in the national economy due to export. However, due to the great population increasing rate, the production of tomatoes is not sufficient enough to meet the needs for local consumption and for achievement of processing and exportation purposes. Moreover, a serious shortage in tomato production is likely to occur in April and early May, due to the low temperature during late December to early February which resulting in cold injury and poor fruit set. Since genetical and environmental factors may affect greatly tomato plant production, thus right choice

* Cited from the Economic and Statistical Department,
Ministry of Agriculture, Egypt.

of tomato cultivars and planting date are among the pathways for improving productivity and covering shortage. The chosen cultivars should be of high yielding ability with good quality, characteristics and well adaptation to our local conditions. This needs to evaluate some recently introduced cultivars under different planting dates and selecting the most suitable ones for the required purpose is one of the aims of this work.

Increasing the amount of tomato exported to foreign markets necessitates not only the increase in total production of tomato with the best fruit quality; but also the improvement of its keeping quality in order to minimize post harvest losses. The magnitude of these losses varies greatly due to variety, storage conditions and duration between harvest and consumption. The major causes of losses are fungal and bacterial diseases followed by physical injuries and physiological disorders. Such injuries result in increasing water loss and susceptibility to decay. Thus, due consideration was given to the effect of planting date, storage conditions and some fungicides, which are used as preservatives on the reduction of post-harvest decay problems and the improvement of storage ability of some selected cultivars of tomato was the prime aim of this study.