
INTRODUCTION

INTRODUCTION

Persimmon is botanically belonging to the family Ebonaceae, and the genus Diospyros. Four species only have been used commercially for fruit production. (*Diospyrus Kaki, D. Lotus, D. virgeniana and D. oleifera.*) *Diospyros Kaki* which is known as the Japanese persimmon or oriantal persimmon, named (Balah trabozan) in Arabic is most important species containing at the least one thousand horticultural varieties. It is thought to be a native of Japan, **[Fletcher (1915); Chandler (1957); Bailey (1961) and Hulme (1971)]**.

Persimmon trees are deciduous and growing well with good production under the native temperate and subtropical areas where soils are well drained with suitable cultural practices especially fertilization.

Undoubtedly, increasing fruit productivity under Egyptian environmental conditions is one of the main important purpose of the specialists to filfull the locally demonds.

According to the latest statistics of the Egyptian Ministry of Agriculture, the total acreage of persimmon orchards occupy about 993 feddans with the total fruit production of about 5369 metric tons.(*)

Therefore, there is a general agreement that many factors affect the productivity of persimmon trees. One of the important factors which plays an excellent role in this concern is

(*)Department of economic and statistics, Ministry of Agriculture, Egypt; 19.

fertilization with some macro and micro-elements. Moreover, the applied rate, the concentration, the date and method of application are so important factors which turn reflected by increasing the productivity and improving the fruit quality of persimmon trees.

In addition, there are a few of available information for fruit growers about persimmon fertilization either with some macro-elements or some micro-nutrients in this regard and little attempts were done to achieve the suitable amount and time of application for fertilization with some both macro and/or micro-nutrients.

Thus, the present investigation was planned and carried out to study concurrently the effect of different annual rates from both nitrogen and potassium soil applied on some vegetative growth measurements and fruiting aspects as well as nutritional status (leaf mineral composition) of both Costata and Hachyia persimmon cultivars under conditions of Kalyubeia Governorate. Furthermore, the study was also concerned with the evaluation of both investigated cultivars to foliar spraying with the chelated compound of zinc.