

1- INTRODUCTION

Banana is considered as one of the most popular and favourite fruits in the world since , it has an excellent flavour , nice taste and high nutritional value. Banana is consumed either as ripe fruits , or cooked vegetable , in addition to many other miscellaneous uses as banana flour , confections and alcoholic drinks. [Von Loesecke (1950) and Simmonds (1966)].

From the economical point of view, banana fruits are considered the green gold of some banana producing countries as, Mexico , Guatemala , Nicaragua , Costa Rica , Panama , Cuba , Dominican Republic , Haiti , Jamaica , Colombia , Brazil , Ecuador , Honduras , Canary Islands and Formosa [Von Loesecke (1950)] .

Botanically , Banana is a monocotyledonous plant under the family Musaceae , Order Zingiberales .

The banana family Musaceae contains species such as Musa textilis from which Manila hemp (abaca) is produced as well as 32 other species which are important as a source of fruit , vegetable , fiber , and ornamentals . The number of edible varieties of banana run into the hundreds [Simmond (1966)] . Also , Simmonds (1966) estimates that fewer than half of the varieties of the world are well- known so that many years will elaps before an authoritative list of names and identities is completed . Banana varieties vary in their plant height , leaf dimensions , stem color ,

bunch character and fruit characteristics such as dimensions , color , or waxiness .

Moreover , the world production of Banana reached 42.5 millions tons in 1985 . Most of this quantity is produced in tropical countries while few amounts are produced in subtropical regions . The largest part of this productoin (about 7 millions tons) is exported to other countries .

In Egypt , banana is one of the most popular fruits since its acreage ranks fourth after citrus , grapes and mangoes. Banana production was not sufficient to cover the demand of local Egyptian markets *. Therefore , Egypt imported about 12.000 tons of banana in 1981 and about 19.000 tons in 1982 . Since that time , several new banana cultivars were introduced to Egypt to improve the quality and quantity of banana production. In 1987 , total area of banana in Egypt attained 34895 feddans and produced 382298 tons.** However , 80 % of this area is planted with " Hindi " cultivar.

Accordingly , the present study was conducted to evaluate different varieties of banana i. e, local producing cultivars (Hindi , Maghrabi and Mohamed Ali) ; cultivars introduced from India (Basrai , paradica , Ambel and Sindihi) and cultivars introduced from Israel and Somalia (Williams and Poyo , respectively) through studying major characteristics of vegetative growth , yield , fruit properties and chemical analysis. Such evaluation is essential , at this stage , to allow for a sound selection of cultivars to be planted in new plantations in areas of the same environmental and cultural conditions .

* *FAO production year book , 1985.*

** *Ministry of Agric. , A. R. E. 1987 Acreage and total production of Agric. Crops in A. R. E. Bull. Agric. Econ. and Statistics (in Arabic).*