

INTRODUCTION

The importance of increasing corn productivity has been uttered on as many occasions on both the official and popular levels. Thus it does not need any further ascertainment. Recently, a complaint about the tendency of some corn varieties to form suckers has been raised up by some corn growers. Because of the importance of ^usucker formation, a program to study this phenomenon and its impact on productivity of corn has started at the department of agronomy and mechanical engineering as early as 1981. The aim of this program was to determine the factors that cause sucker formation. A host of factors could be held responsible for suckering phenomenon and these could be summed up in genotype and ecological factors; this latter branches out to several elements, such as, planting date through its effect on day length and length growth period, light intensity and fertilization. In a previous work by Salem, M.S.; El- Sayed Shokr; El- Grasi, M.E. and Aly, A. M. (Unpublished thesis, 1983), the investigators dealt with, planting date and fertilizations and their effects on sucker formation. In this work ~~we~~ concentrate on varieties and plant density in continuation of the previous one

and in order to make the study as an overall appraisal of sucker formation to fulfil the targets of the study integrative as much as possible.

Therefore, our aims of this work are as follows :

- 1- To study the effect of genotypes and plant density on sucker formation.
- 2- To study the effect of genotypes and plant density on characters of maize.