

A COMPARATIVE STUDY OF THE MORPHOLOGICAL CHARACTERISTICS OF THE LEAVES OF SOME SEEDLING DATE PALM MALES*

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ABSTRACT

Morphological characteristics of the leaves of about 100 selected males were studied. The characteristics were compared with those varieties that the female parent might be similar to males. This comparison was carried out to show how far such females are similar with their satellite males.

Morphological characteristics involved: leaf colour and length; spines number, length and width, pinnae number, length and width and apical angle.

Results showed that the above mentioned characteristics differed from one male to another, and there was similarity between the female cultivars and their satellite males in certain leaf morphological aspects.

Key words: Morphological characters, satellite males.

INTRODUCTION

This investigation is a part of an intensive research project aimed at evaluating date

palm males used in pollination in the Central Region of Saudi Arabia. About 100 males were selected in this evaluation. Basis of selection was dealt with in a previous paper (Nasr et al., 1986).

Since these males are raised from seeds of the standard cultivars, then it is expected that the female cultivars and their «satellite» males might be similar in one or more of the morphological characteristics of the leaves (Al Bekr, 1972). The term «satellite» is suggested by Mason (1927) for males raised from seeds of any specific cultivar.

The present investigation was carried out to compare the morphological characteristics of the leaves of female cultivars and their «satellite» males.

MATERIALS AND METHODS

This investigation was carried out in 1984 at the College of Agriculture, King Saud University. The palm trees, used in this study, were chosen for vigour and for being disease-free. Four leaves a year old were collected from each of the selected males. Similar leaf samples were also collected

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