

# بسم الله الرحمن الرحيم









شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم





# جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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# CLASSIFICATION AND EVALUATION OF SOME SOILS IN WESTERN SIDE OF NILE DELTA.

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#### **THESIS**

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## 1- INTRODUCTION

### 1- INTRODUCTION

The fast - growing population in Egypt, above a very limited area of agricultural land confining to the Nile Valley and Delta, makes a pressing need to set up expansion programmes to face and solve the problems of food, energy, employment and housing. Plans to invade the vast areas of Sahara in Egypt have been laid down. Priority has been given to develop the interference zone between both Nile Valley and Delta and the desert. Special attention has been drawn to the area located in the western side of the Nile Delta to establish settlements of agricultural communities.

The aim of the current work is to study the morphological, Physio-Chemical and mineralogical characteristics of some soils in the interference zone in the western side of Nile Delta as well as their classification and evaluation by using two systemes. This may help to understand how to deal with these soils for agricultural use.

# 2- REVIEW OF LITERATURE

#### 2. REVIEW OF LITERATURE

Soils is a product of various interacted factors such as geological, geomorphological, topographical, vegetational or land use, water resources and climatical factors. The following topics deal with the studies concern these factors with regard to the investigated areas in the western site of the Nile Delta.

#### 2.1. Geology:

El-Demerdash, (1970) reported that the western desert which is more to our concern, is occupied by old geological formations, mainly limestones belonging to the Cretaceous and sandstones belonging to the Tertiary. The desert is characterized by series of depressions mostly of agricultural potentialities including water reserves termed the oases. the oases depressions are occupied by formation, mainly geological, dominated by sandstone or limestone. Sedimentary formations also characterize the top surface of the depression, mainly formed during the Pleistocene which is considered as extremely wet period. This picture is complicated by the effect of wind as a result of erosion or deposition, the northern part of the western desert is occupied by a limestone plateau termed the libyan plateau. The plateau slopes gently northward forming a coastal plain and a foreshore plain.

He added that the foreshore plain is characterized by series of elongated ridges and depressions running parallel to the Mediterranean sea coast. The formations occupying this part are derived from a highly calcareous parent material.