شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%

بعض الوثائق الاصلية تالفة

بالرسالة صفحات لم ترد بالاصل

PEDOLOGICAL STUDIES ON WADI WATIR AREA USING REMOTE SENSING TECHNIQUE

By

Abd El-Latif Diab Abd El- Latif

B.Sc. Agric. (soil science), Zagazig University, 1995

Thesis

Submitted in Partial Fulfillment of the
Requirements for the degree of

MASTER OF SCIENCE
In
Agricultural science
(Soils)

Department of soil and water
Faculty of agriculture,
Suez Canal University

2007

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APPROVAL SHEET

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ABSTRACT

The current investigation was achieved to provide information about the dominant soils in wadi watir, by the aid of the spatial data integration and interpretation. The facilities introduced by image data processing and data capture and the manipulation in GIS are of hight values towards the main terrain mapping units delineation in particular. The supervised and unsupervised classification of sattallite data, triangulated irregular network (TIN) map, slope map in addition to the field truth, assisted in the verification of the terrain mapping units delineation five soil subgroubs, (Typic Torriorthents, Lithic Torriorthents, Typic Calcigypsids, Typic Haplocalcids, Typic torripsammments) were distinguished in the study area. Furthermore the classification was performed down to the family levels. According to the relative proportions of the identified clay minerals, nine assemblages are recognized namely, smectite, kaolinite, chlorite,illite, palygorskite, sepiolite, smectite- chlorite, illite- smectite and vermiculite, which means that the sediments are mostley originated from multi sources under different depositional environments.the ferquencey distribution of the heavy minerals (0.064-0.125mm)indicate that the soil under study are immature from pedological point of view . The land capability classification of the terrain mapping units for irrigated agriculture demonstrates marginally suitable (S3) (wadi bottom and delta) and not suitable (N1) land existence.

Key words: Satellite data, TIN map, slope map, GIS, Torrifluvents, Haplocalcis, Haplogypsids, land capability classification.

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