



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

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%



شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم

بالرسالة صفحات
لم ترد بالأصل

بعض الوثائق
الأصلية تالفه

**MICROPALEONTOLOGICAL AND
STRATIGRAPHICAL STUDIES ON SOME UPPER
CRETACEOUS-LOWER EOCENE SUCCESSIONS
IN NORTH AND SOUTHWEST SINAI, EGYPT.**

A Thesis

Submitted for the degree of Master of Science
(Geology)

By
MEDHAT MOHAMED MUSA MANDUR
(B.Sc. Geology)

Department of Geology
Faculty of Science
Tanta University
1999

0-4
J

SUPERVISORS

Prof. Dr. M. Faris Mohamed

Professor of
Micropaleontology,
Geology Department,
Faculty of Science,
Tanta University.

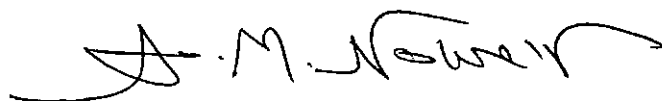
Dr. W. Z. M. El-Deeb

Assistant Professor of
Micropaleontology and
stratigraphy,
Exploration Department,
Egyptian Petroleum
Research Institute,
Cairo.

A handwritten signature in black ink, appearing to read 'A. M. N. El-Deeb', with a stylized, flowing script.

Curriculum Vitae

Name : Medhat Mohamed Musa Mandur
Date of Birth : 17 / 5 / 1966
Locality : Saadit Abo-Khalil / Facous / El-Sharkia
Nationality : Egyptian
Qualifications : B. Sc. (1988), Geology Department,
Faculty of Science, Zagazig University,
Egypt
Experience : Geologist, Micropaleontology &
Stratigraphy Lab.,
Exploration Department, Egyptian
Petroleum Research Institute,
since April 1993.



Note

Besides the research work materialized in this thesis, the candidate has attended the following courses for one year in the following topics :

- 1 - Sedimentary petrology
- 2 - Sedimentation and correlation
- 3 - Stratigraphy
- 4 - Paleontology
- 5 - Essay
- 6 - Statistics
- 7 - German Language

He has successfully passed the final examinations of these courses held in September, 1996.

Head of Geology Department

A handwritten signature in black ink, appearing to read 'M. Noweir', with a long horizontal stroke extending to the left.

Prof. Dr. A. M. Noweir

CONTENTS

Page

ACKNOWLEDGMENTS

LIST OF FIGURES

LIST OF TABLES

ABSTRACT

CHAPTER I : INTRODUCTION.	1
1.1. General statement.	1
1.2. Previous work.	1
1.3. Materials.	4
1.4. Aim of the present study.	4
1.5. Methodology.	6
 CHAPTER II : LITHOSTRATIGRAPHY.	8
2.1. Introduction.	8
2.2. Sudr Formation.	8
2.3. Esna Formation.	14
2.4. Thebes Formation.	15
 CHAPTER III : BIOSTRATIGRAPHY.	17
3.1. Introduction.	18
3.2. Planktonic foraminiferal zonation.	18
3.2.1. Zones of Maastrichtian.	18
3.2.2. Zones of Paleocene.	33
3.2.3. Zones of Eocene.	58
3.3. Calcareous nannofossil zonation.	65
3.3.1. Zones of Maastrichtian.	66
3.3.2. Zones of Paleocene.	73
3.3.3. Zones of Eocene.	102

	<i>Page</i>
CHAPTER IV : STAGE BOUNDARIES.	110
4.1. Introduction.	110
4.2. The Cretaceous/Paleogene (K/P) boundary. . .	110
4.3. Early Paleogene boundaries.	112
4.3.1. Early/Late Paleocene (Danian/Thanetian) boundary.	116
4.3.2. Paleocene/Eocene (Thanetian/Ypresian) boundary.	117
 CHAPTAER V : PALEOECOLOGICAL STUDIES. .	 121
5.1. Introduction.	121
5.2. Paleocological indicators.	122
5.2.1. Frequency.	122
5.2.2. Planktonic foraminiferal groups.	123
5.2.3. Benthonic foraminiferal groups.	126
5.2.4. Diversity.	134
5.2.5. Planktonic/Benthonic (P/B) foraminiferal ratio.	141
5.2.6. Arenaceous/Calcareous benthonic (A/C) foraminiferal ratio.	146
5.2.7. Benthonic Genus/Genera Predominance. .	146
5.3. Foraminiferal Paleocology.	149
5.3.1. <i>Globotruncana aegyptiaca</i> Ecozone. . . .	155
5.3.2. <i>Gansserina gansseri</i> Ecozone.	155
5.3.3. <i>Abathomphalus mayaroensis</i> Ecozone. . .	156
5.3.4. <i>Morozovella pseudobulloides</i> Ecozone. . .	157
5.3.5. <i>Morozovella trinidadensis</i> Ecozone. . . .	159
5.3.6. <i>Morozovella uncinata</i> Ecozone.	159
5.3.7. <i>Morozovella angulata</i> Ecozone.	161
5.3.8. <i>Planorotalites pusilla pusilla</i> Ecozone. . . .	162