

General Introduction

Most of the works dealing with the study of fossil plants of Egypt are recorded in a bibliography published by *EL- Saadawi (1979)*. This bibliography missed *El- Ramly (1973) and Louvet (1973)*. Numerous works were later published including : *Said (1962,1990); Barthel & Bottcher (1978); Klitzsch (1978, 1984) ; Klitzsch et al. (1979) ; Lejal - Nicol (1981 , 1987) ; Issawi & Jux (1982) ; Gregor & Hagn (1983); Jux & Issawi (1983) ; Klitzsch & Lejal- Nicol (1984) ; Dominik (1985) ; Vaudois - Mieja & Lejal - Nicol (1986) ; Süß & Gregor (1987) ; Aboul-El-Ela et al. (1989) ; El- Saadawi & Kedves (1991) ; and Osman (1992).*

The geologic ages of the collected fossils, range between the Devonian - Carboniferous and Quaternary ; none from ages earlier than the Devonian. These fossil plants were collected from 65 sites distributed all over Egypt (see fig. 1).

The recorded fossils include : fossil fungi (*Cf. Kräusel 1924*) ; fossil algae (*Cf. Montagne 1944 ; Barthoux & Fritel 1912 ; Frenguelli 1927 ; Chierugi 1933 and El-Saddawi et al. 1979*) ; fossil pteridophytes (*Cf. Seward 1935, El- Saadawi & Farag 1972 ; Klitzsch & Lejal - Nicol 1984 ; Abd El- Shafy & El- Saadawi 1982 ; Darwish 1990*) ; fossil gymnosperms (*Cf. El-Saadawi & Farag 1972 ; Lejal - Nicol 1987 ; Darwish 1990 ; El- Saadawi & Kedves 1991*) ; fossil monocotyledons (*Cf. Kräusel 1924 ; EL-Saadawi et al. 1975*)

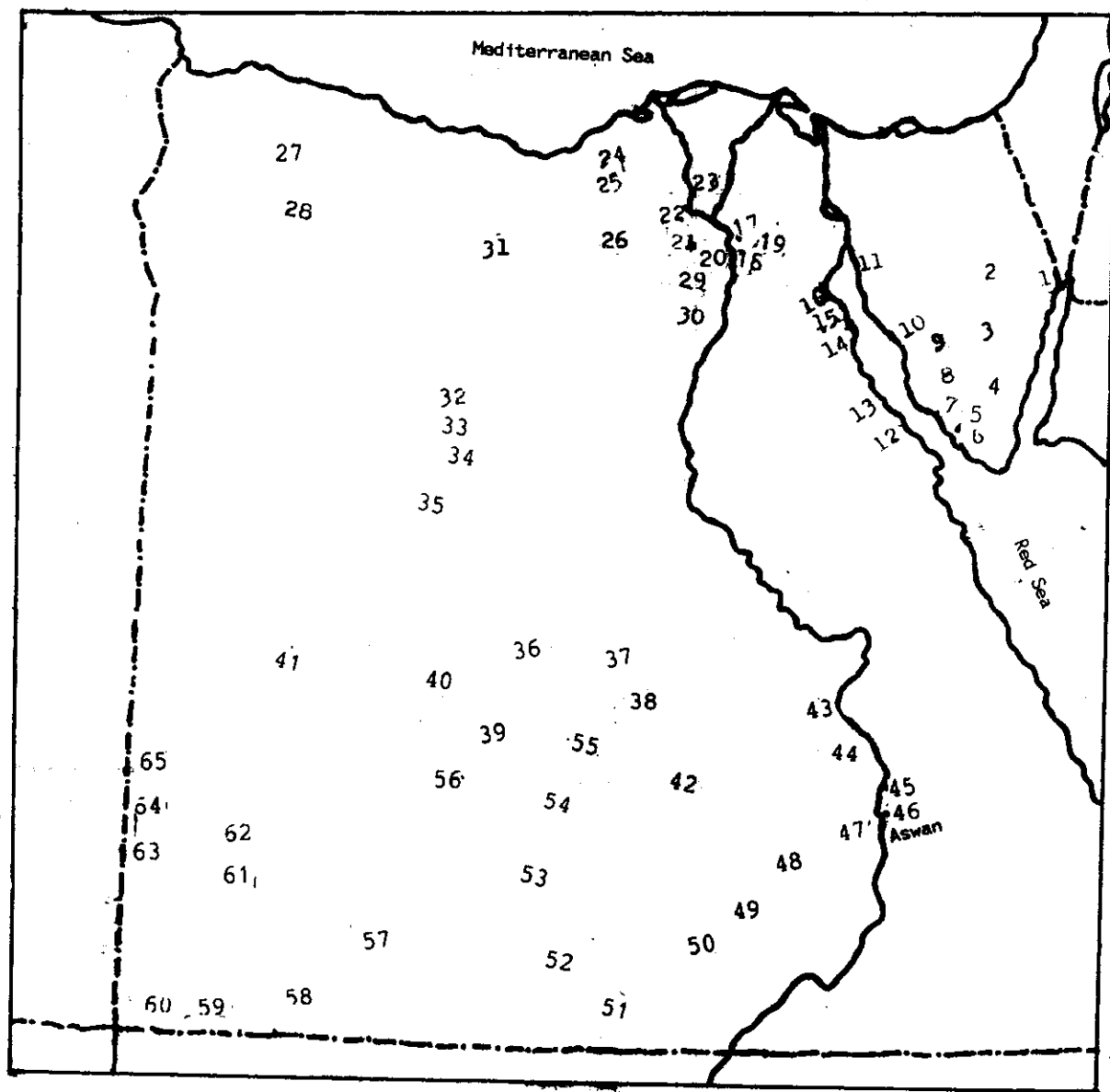


Fig (1) : Map showing sites of collection of fossil plants in Egypt .

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| 1- Wadi El-Hommur , 2- Plateau El-Tih, 3- Magharet El-Maiah, 4- Gebel Ragaba , 5- SW. Sinai, 6- Umm Bogma, 7- El-Beda-Thora, 8- Gebel Nukul, 9- Wadi Khaboba, 10- Abu Zenima , 11- Ayun Musa, 12- Ras Gharib, 13- Abu Darag, 14- Wadi Araba, 15- Ras Abd, 16- North Galala , 17- Gebel Ahmer, | 18- Mokattam, 19- Petrified forest, 20- Giza, 21- Gebel Khashab, 22- Tahrir, 23- Shibin El-kom, 24- Burg El Arab, 25- Wadi El-Natrun, 26- Wadi Fareigh, 27- Umm Baraka, 28- Ghazalate, 29- Gebel qatrani, 30- Fayum, 31- Moghra, 32- Gebel Dist, 33- Bahariya , 34- Gebel Hufhuf, 35- Farafra, 36- Abu | Tartur Blateau, 37- Gebel Taref, 38- Kharga, 39- Quluel El-Sabaya 40- Dakhla, 41- Ammonite Hills, 42- Baria, 43- Esna, 44- Edfu, 45- Comombo, 46 - Abu Agag, 47- Gebel El Garra, 48- Kurkur, 49- Dungul, 50- Gebel El- Nabatat, 51- Berket El-Shah, 52- Bir Takhlis, 53- Bir Kiseiba, 54- Nusab El | Balgum, 55- Six hills, 56- Abu Ballas, 57- Tarfawi, 58- Gebel Kamil , 59- Karkur Tath, 60 Gebel Uwinat, 61- Gilf Kebir, 62- Ataba, 63- Umm Ras, 64- Abu Ras, 65- Wadi Abd El Malik . |
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and fossil dicotyledons (*Cf. Edward 1932 ; Seward 1935 ; Kräusel 1939 ; El- Saadawi et al. 1979 and Süss & Gregor 1987*).

Up till now, the total number of fossil land plants recorded in Egypt according to the available literature is 281 taxa (see appendix 1); 135 of these taxa are pteridophyts, 36 are gymnosperms and 110 taxa are angiosperms.

Most of the recorded gymnosperms and angiosperms are in the form of impressions and petrified woods. The latter are met with in many different localities (see fig. 2) and their ages range between Permian and Quaternary as shown in Table 1. This table shows also that, the number of recorded species of gymnosperms and angiosperms fossil woods is 7 and 36 respectively.

The present work deals with the study of petrified gymnosperms and angiosperms logs of wood collected from three different areas in Egypt. The first is Aswan area which includes two localities to the west of Lake Nasser (see fig. 3 on page 10). The second is the Qattamiya petrified forest east of Cairo (see fig. 6, on page 34). The third area lies to the south of wadi fareigh in the northeast part of the weastern desert west of Giza pyramids (see fig. 8, on page 80).

The petrified logs of wood collected from Aswan area belong to gymnosperms (Coniferophyta) and angiosperms (Dicotyledonae) and are of Upper-Cretaceous age. They form part I of this work.

The Qattamiya petrified forest east of Cairo belongs to the Tertiary (Oligocene age). Wood logs collected from this forest belong

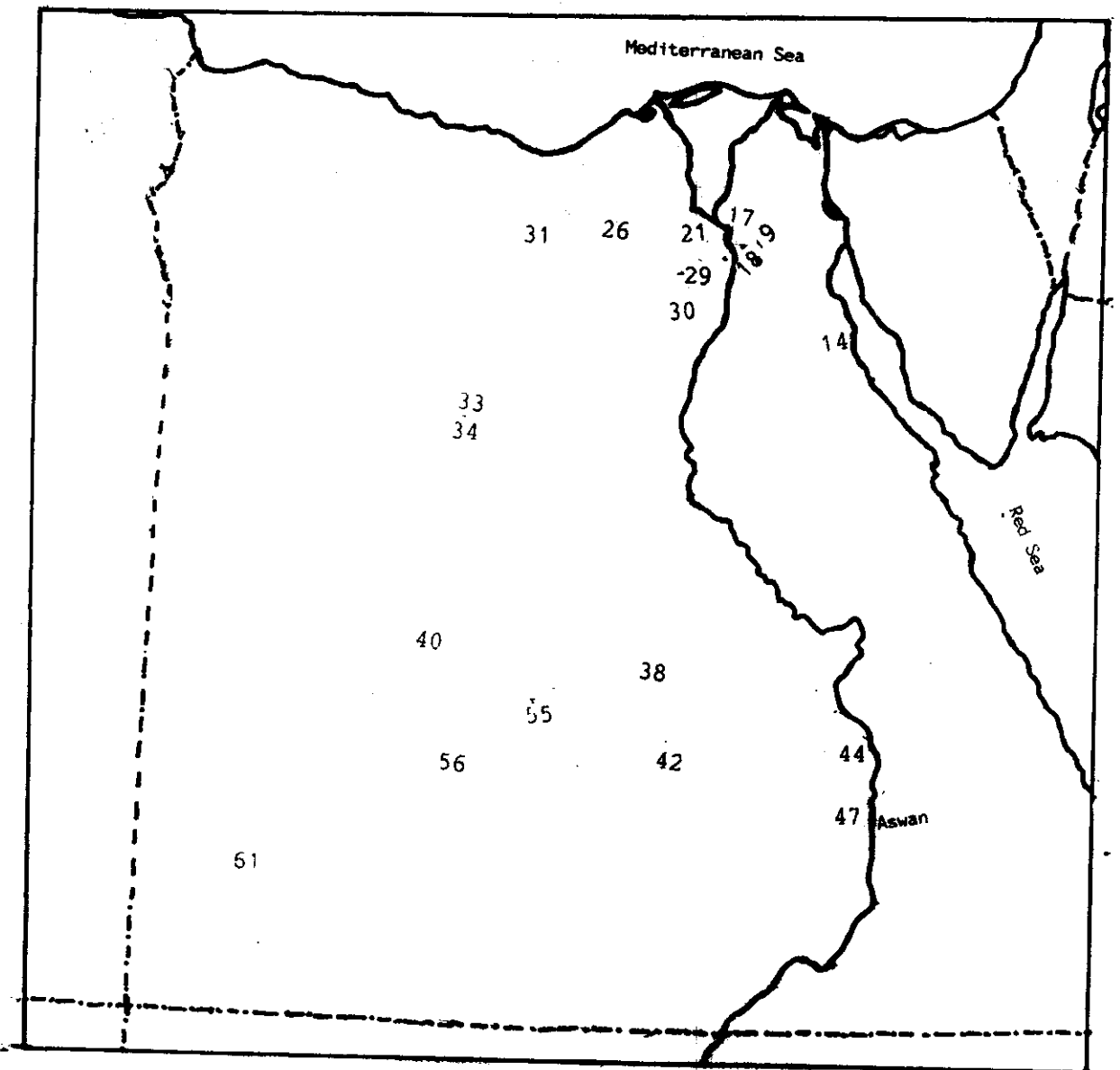


Fig (2) : Map showing sites of collection of fossil wood in Egypt .

Numbers given to sites here are the same as in fig. 1 .

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|----------------------|-------------------|-------------------|---------------------------------------|----------------|
| 14- Wadi Araba | 21- Gebel Khashab | 29- Gebel Qatrani | 34- Gebel Hufhuf | 55- Six Hills |
| 17- Gebel Ahmer | | 30- Fayum | 38- Kharga Oasis | 56- Abu Ballas |
| 18- Gebel Mokattam | 26- Wadi Fareigh | 31- Moghra | 40- Dakhla Oasis | 61- Gilf Kebir |
| 19- Petrified forest | | 33- Bahariya | 42- Baris | |
| | | | 44- Road between Esna and wadi Halfa, | |
| | | | 47- Gebel Garra | |

to angiosperms (Monocotyledonae and Dicotyledonae) and form part II of this work.

The petrified wood pieces collected from the third area, west of Giza pyramids which belongs to the Tertiary - Miocene age, are all remains of dicotyledonous plants and form part III of this work.

Localities. 14- Wadi Araba, 17- Gebel Ahmer, 18- Gebel Mokattam, 19- Perfired forest east of Cairo, 21- Gebel Khashab, 26- Wadi Fareigh, 29- Gebel Qatran, 30- Fayum, 31- Moghra, 33- Bahariya Oasis, 34- Gebel Hufhuf, 38- Kharga Oasis, 40- Dakhla Oasis, 42- Baris, 44- Road between Esna and wadi Halfa, 47- Gebel Garra, 55- Six Hills, 56- Abu Ballas, 61- Gilf Kebir. In this table the numbers referring to the localities are the same as on the map in (fig. 2) Cret. = Cretaceous, Quat. = Quaternary. Low. = Lower, Upp. = Upper, Pal. = Paleocene, Eo. = Eocene, Olig. = Oligocene, Mio. = Miocene, Pli. = Pliocene, Ple. = Pleistocene, Hol. = Holocene.

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Table (1) Cont.

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