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NEW CARNIVOROUS MAMMALS FROM THE OLIGOCENE OF EGYPT

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ABSTRACT

Recent Yale expeditions to the Oligocene Gabal el Qatrani Formation, Fayum Province of Egypt, collected several new specimens of small carnivorous mammals. *Masrasector aegypticum, gen. et sp. nov.*, is a proviverrine hyaenodontid possibly related to *Anasinopa* from the Miocene of East Africa. A newly discovered mandible of the poorly known *Ptolemaia lyonsi* differs from the only previously known specimen in retaining a second premolar. Material previously referred to *Ptolemaia* by Schlosser is here redescribed as the new genus and species *Qarunavus meyeri*. *Ptolemaia* and *Qarunavus* are referred to the family Ptolemaiidae, order *Incertae sedis*.

INTRODUCTION

The recent Yale expeditions to the Fayum Province of Egypt have added greatly to our knowledge of early African primates and other mammals (Simons, 1968). The carnivores which have been collected are mostly species of *Apterodon*, however one microfaunal quarry, Yale Quarry G, has yielded several specimens of a new proviverrine hyaenodontid which is described below.

A mandible found near the American Museum Quarry A is here referred to *Ptolemaia lyonsi* although it differs in dental formula from the type specimen of *P. lyonsi*. Schlosser (1910, 1911) referred a juvenile jaw and other fragments of a distinctive genus and species to *Ptolemaia*. Matthew (1918) noted that this juvenile jaw is clearly not congeneric with *Ptolemaia*. Recently Van Valen (1966) restated that *Ptolemaia* and the juvenile are generically distinct and further that both should be excluded from the Creodonta (= Deltatheridia of Van Valen, 1966). We recently examined a juvenile mandible in the British Museum (Natural History) which is identical to the figure and description of the jaw Schlosser referred to *Ptolemaia*. This juvenile

Masrasector aegypticum, new species.

(Figure 1 C, D)

Type : CGM 30978, left lower jaw with P_3, M_{1-3}.

Hypodigm : Type, and provisionally YPM 30030, right maxillary fragment with P^{3-4}; YPM 30029, right M^1 or M^2; YPM 30019, right P^4; YPM 30020, broken right M_2; YPM 30031, crown of right P^3.

Diagnosis : As for the genus. Tooth measurements are given in Table 1.

Distribution : All known specimens are from Yale Quarry G, Gabal el Qatrani Formation, Oligocene, Egypt.

Table 1. Measurements (in mm) of the teeth of *Masrasector aegypticum* CGM 30978

	Length	Width
P_3	5.4	2.5
M_1	5.8	2.8
M_2	6.8	4.0
M_3	6.9	3.7

A slightly smaller mandible (YPM 18026), edentulous except for a broken M_3, is known from near AMNH Quarry A, Lower fossil wood beds. When better material is known it may be necessary to include this specimen in *M. aegypticum* and to extend the stratigraphic range of the species to include the lower beds of the Gabal el Qatrani Formation. A partial mandible with M_{1-2} (YPM 20944) about one half the size of *M. aegypticum* has been found together with it in Quarry G. Thus a second species of *Masrasector* may be present at this level.

Masrasector appears to represent a stage or grade of evolution between an ancestral Eocene *Sinopa* or *Proviverra* and *Metasinopa* of the African Oligocene and Miocene. The predominant structural modifications of the lower molars in the sequence *Proviverra* or *Sinopa* - *Macrasector* - *Metasinopa* are the progressive enlargement of the paraconids, of the metaconids and protoconids. The result is a shift from balanced prevallid and postvallid shear to predominantly prevallid shear. *Masrasector* is structurally intermediate in this transition.