

# Accepted Manuscript

An enigmatic crocodyliform from the Upper Cretaceous Quseir Formation, central Egypt

Sara Saber, Joseph J.W. Sertich, Hesham M. Sallam, Khaled A. Ouda, Patrick M. O'Connor, Erik R. Seiffert



PII: S0195-6671(17)30145-3

DOI: [10.1016/j.cretres.2018.04.004](https://doi.org/10.1016/j.cretres.2018.04.004)

Reference: YCRES 3853

To appear in: *Cretaceous Research*

Received Date: 24 March 2017

Revised Date: 5 March 2018

Accepted Date: 5 April 2018

Please cite this article as: Saber, S., Sertich, J.J.W., Sallam, H.M., Ouda, K.A., O'Connor, P.M., Seiffert, E.R., An enigmatic crocodyliform from the Upper Cretaceous Quseir Formation, central Egypt, *Cretaceous Research* (2018), doi: 10.1016/j.cretres.2018.04.004.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

**An enigmatic crocodyliform from the Upper Cretaceous Quseir Formation, central Egypt**

Sara Saber<sup>1,2</sup>, Joseph J.W. Sertich<sup>3</sup>, Hesham M. Sallam<sup>2</sup>, Khaled A. Ouda<sup>1</sup>, Patrick M. O'Connor<sup>4</sup>, Erik R. Seiffert<sup>5</sup>

<sup>1</sup>Department of Geology, Faculty of Science, Assiut University, Assiut, Egypt, [sarah\\_saber@aun.edu.eg](mailto:sarah_saber@aun.edu.eg)

<sup>2</sup>Mansoura University Vertebrate Paleontology Center, Department of Geology, Faculty of Science, Mansoura University, Mansoura, Egypt, [sallam@mans.edu.eg](mailto:sallam@mans.edu.eg)

<sup>3</sup>Department of Earth Sciences, Denver Museum of Nature & Science, Denver, Colorado 80205, USA, [jsertich@dmns.org](mailto:jsertich@dmns.org)

<sup>4</sup>Department of Biomedical Sciences, Ohio University Heritage College of Osteopathic Medicine, Athens, Ohio 45701, USA, [oconnorp@ohio.edu](mailto:oconnorp@ohio.edu)

<sup>5</sup>Department of Integrative Anatomical Sciences, Keck School of Medicine, University of Southern California, Los Angeles, California, 90033 USA, [seiffert@usc.edu](mailto:seiffert@usc.edu)

**Abstract**—Non-marine vertebrates, including many crocodyliform clades, remain poorly documented from uppermost Cretaceous deposits of Africa. Recent exploratory fieldwork in the Upper Cretaceous (middle Campanian) Quseir Formation exposed around Dakhla Oasis (Western Desert of Egypt) has revealed new fossils from continental and marginal marine settings that include abundant crocodyliform remains. In particular, materials of an enigmatic crocodyliform, represented by both cranial and postcranial remains, suggest the presence of a novel southern Tethyan crocodyliform assemblage from northern Africa during the Late Cretaceous. Materials recovered of this taxon thus far include fragmentary portions of the skull and mandible, amphicoelous dorsal vertebrae, and fragmentary appendicular remains. This form is distinguished by a number of unique features including a domed platyrostral skull; a strongly festooned lateral margin of the maxilla with two waves of tooth enlargement; a deep, sculptured fossa at the base of the postorbital bar; a jugal with an anterior process that is at least three times broader than the posterior process; an orbital margin dorsally overlapping the lateral temporal

Download English Version:

<https://daneshyari.com/en/article/8916196>

Download Persian Version:

<https://daneshyari.com/article/8916196>

[Daneshyari.com](https://daneshyari.com)