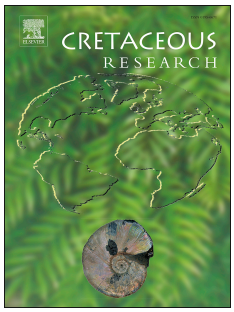
Accepted Manuscript



Cymopolia eochoristosporica Elliott, 1968 (green alga, Dasycladale) from the upper Maastrichtian of the Tarbur Formation (SW Iran)

Koorosh Rashidi, Felix Schlagintweit

PII: S0195-6671(17)30352-X

DOI: 10.1016/j.cretres.2017.10.002

Reference: YCRES 3713

To appear in: *Cretaceous Research*

Received Date: 7 August 2017

Revised Date: 30 September 2017

Accepted Date: 1 October 2017

Please cite this article as: Rashidi, K., Schlagintweit, F., *Cymopolia eochoristosporica* Elliott, 1968 (green alga, Dasycladale) from the upper Maastrichtian of the Tarbur Formation (SW Iran), *Cretaceous Research* (2017), doi: 10.1016/j.cretres.2017.10.002.

Cymopolia eochoristosporica Elliott, 1968 (green alga, Dasycladale) from the upper Maastrichtian of the Tarbur Formation (SW Iran) ~~and its calcification pattern~~

Koorosh Rashidi[1] & Felix Schlagintweit[2]

[1]Department of Geology, Payame Noor University, Po Box 19395-3697 Tehran, Iran.
e-mail: kooroshrashidi@pnu.ac.ir
[2]Lerchenauerstr. 167, 80935 Munich, Germany
e-mail: felix.schlagintweit@gmx.de

Abstract

The poorly known dasycladalean alga *Cymopolia eochoristosporica* Elliott, 1968 is reported for the first time from the upper part of the Tarbur Formation (Zagros Zone, SW Iran) assigned to a late Maastrichtian age. It was reported so far from the Maastrichtian Aruma Formation of Saudi Arabia (type-locality), the Maastrichtian Simsima Formation of Oman, and the Maastrichtian (e.g., Zongshan Formation) of Tibet. All these Maastrichtian occurrences belong to the southern Tethyan margin, with special concentration within the Arabian plate, evidencing its palaeobiogeographic as well as biostratigraphic importance. *C. eochoristosporica* occurs in algal-foraminiferan wackestones together with other dasycladaleans (e.g., *Salpingoporella pasmanica* Radoičić) and halimedaceans, benthic foraminifera (*Broeckina*, *Tarburina*, *Laffiteina*, *Gyroconulina*, *Loftusia*, *Omphalocyclus*), rudists, gastropods, as well as corals. As a peculiarity, the calcification of the alga is made up of light-brownish calcite, presumably replacement of the original aragonitic composition. The dasyclad-bearing deposits are assigned to an internal infralittoral, possibly polyhaline depositional setting.

Keywords: Calcareous Algae, Dasycladales, Systematics, Palaeobiogeography, Micropalaeontology

Introduction

The Upper Cretaceous Tarbur Formation, named after the village of Tarbur (Fars Province), and cropping out in the SW Zagros basin, represents a predominantly carbonate lithostratigraphic unit that contains rich microfauna and microflora associated with rudists