Echinoids from Upper Cretaceous
in Northern Jordan

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Abstract

Echinoids and their biostratigraphic significance, as well as lithofacies and palaeoenvironment of the Upper Cretaceous in Northern Jordan are studied.

Systematic classification led to recognition of the following species: for the first time oniopygus jordanicus n.sp recovered from the marly Limestone of the Hummer Formation, the other species are: Epiaster cf. blanckenhorni Menten, 1913, Mecaster pseudofourneli Peron & Gauthier, 1878, Hemiaster grossouveli Gauthier, 1889, Lambertiaster cf. douvillei, Micraster coranguinum Leske, 1778, Caenholoctopus excisus Cotteau, 1861, Heterodiadema lybicum Agassiz and Desor, 1846, Tetragramma variolare Brongniart, 1822, Tetragramma texanum Roemer, -Pseudodiadema bigranulatum Gregory, 1906, Goniopygus menardi Desmarest, 1825, and Salenia petalifera Defrance, in Desmarest, 1825.

The studied Echinoids are grouped in biozones, indicating Early Cenomanian, Middle Cenomanian and Late Cenomanian. The following biozones are suggested.

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1- *Salenia petalifera* Zone.

It is described from the Naur Formation indicating Early Cenomanian.

2- *Tetragramma texanum* Zone.

It is described from the Fuheis Formation indicating Middle Cenomanian.

3- *Goniopygus menardi* Zone.

It is described from the Hummer Formation indicating late Cenomanian.

Lithofacies analysis of Naur, Fuheis Hummer Wadi Sir Formations indicated that these Formations were deposited in middle to inner shelf shallow water environment.