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**MONSTROSERIS, A NEW UPPER TRIASSIC SCLERACTINIAN  
CORAL FROM IRAN**

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A new scleractinian genus of the suborder *Stylophyllina* Beauvais, 1981 has been found in the upper Norian (= Rhaetian) series in the Central Iran. The genus *Monstroseris* nov. has its skeleton built exclusively of septal spines, differing from other corals of that group.

**Key words:** Scleractinia, Triassic, Rhaetian, Central Iran.

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INTRODUCTION

The corals here considered origin from upper Norian limestones of the How-Khan suite, Nayband Formation, cropping out in Parvarde region at the vicinity of the village Lut, Central Iran. There are other corals known from Central Iran, the Shurabe-Nagi coral — bearing site in the Nayband region, which were earlier described by the author, and which show many resemblances to the upper Norian fauna of the Pamirs (Melnikova 1975).

The material here described was collected by Mr. Yu. S. Repin (Dushanbe) and is housed at the Museum of the Geological Institute of the Academy of Sciences, Tadjik Soviet Socialist Republic, Dushanbe (MIGD).

DESCRIPTION

Suborder **Stylophyllina** Beauvais, 1981

Family **Stylophyllidae** Frech, 1890

Genus *Monstroseris* nov.

*Species typica:* *Monstroseris iranica* gen. et sp. n.

*Derivatio nominis:* Latin *monstrum* — monster and *seris* — series, corresponding

to corallites well ordered in colony and enormous density of skeleton of this coral; femin.

*Diagnosis.*—Massive cerioid colonies increasing by intercorallite budding. Calices convex, filled with stereome, delimited by a groove. Skeleton built of septal spines; transverse elements lacking.

The genus is monotypic.

*Comparison.*—The genus differs from externally similar cerioid forms of *Stylophyllum* and all other genera of the suborder Stylophyllina in having dense skeleton built exclusively of septal spines and devoid of transverse elements.

*Stratigraphic and geographic ranges.*—Upper Triassic, upper Norian (Rhaetian), Nayband Formation in the Central Iran.

*Monstroseris iranica* gen. et sp. n.

(pl. 13: 1, 2; pl. 14: 1)

*Holotypus:* Specimen No. MIGD 25/3; pl. 13: 1 and pl. 14: labc.

*Locus typicus:* vicinity of the village Lut, region Parvarde, Central Iran.

*Stratum typicum:* Limestone of the Howz-Khan suite, Nayband Formation, Upper Norian (Rhaetian).

*Diagnosis.*—Corallites up to 15–17 mm in diameter with more than 100 septa.

*Material.*—Three colonies Nos. MIGD 25/2, 3, 4 from the type locality; four thin sections.

Dimensions (in mm):

d in juveniles	from 2–3 up to 5–6
d in adults	up to 15–17
c—c	ca. 15
radial elements	
at calicular margin	8–10/3 mm

*Description.*—Colonies of cerioid type, hemispheric (holotype) or subcylindrical (MIGD 25/2) in shape, with corallites covering the whole colony surface. Increase by intercalicular budding producing corallites of small initial dimensions. Diameter of the hemispheric colony reaches 50 mm and height of the cylindrical one 70 mm.

Calices shallow, in the form of polygonal, slightly convex shields delimited by a narrow groove (pl. 13: 1, 2ab and pl. 14: 1a). Radial elements densely crowded on the calicular shields and developed as ridges (pl. 13: 2ab) or rows of tubercles (pl. 13: 1). The ridges differ in thickness and height. They are more or less continuous but also may decompose into individual tubercles. At the calicular margin, ridges are thin and subequal (pl. 13: 2b). There is about 130 radial elements in the corallites measuring 155 mm in diameter.

*Microstructure.*—The skeleton consists of a uniform mass of sclerenchyme formed by septal spines. When observed in longitudinal thin section, it shows superimposing growth lines (pl. 14: 1bc). Individual spines may be observed in sections (pl. 14: 1a–c). Transverse sections do not show any special arrangement of septal spines at the boundary of corallites. Tops of septal spines are seen on the corallite surface as isolated tubercles or radial ridges, if connected (pl. 13: 1, 2ab). Contrary to other stylophyllids, in this coral no traces of transverse skeletal elements have been observed in thin sections (compare Cuif 1973: transverse elements in *Stylophyllum* and *Stylophyllopsis*).

*Occurrence.*—As for the holotype.

## REFERENCES

- CUIF, J. P. 1973. Recherche sur les Madréporaires du Trias. I. Famille des Stylophyllidae. — *Bull. Mus. Nat. Hist. Natur.*, 3 sér., 97, novembre-décembre 1972, *Sciences de la Terre*, 17, 211—291.
- [MELNIKOVA, G. K.] МЕЛЬНИКОВА, Г. К. 1975. Позднетриасовые склерактинии юго-восточного Памира. Академия Наук Таджикской ССР. 234 pp., 38 pls. Дониш, Душанбе.

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## MONSTROSERIS, NOWY KORAL SKLERAKTINIOWY Z TRIASU IRANU

*Streszczenie*

Wśród koralowców z wapieni triasu późnego z Iranu Centralnego, przechowywanych w kolekcjach Instytutu Geologii Akademii Nauk Tadżyckiej SRR w Duszanbe, znajdują się okazy, które reprezentują rzadki nowy rodzaj i gatunek, *Monstroseris iranica*. Rodzaj ten odznacza się masywnym szkieletem zbudowanym ze zwartej masy kolców septalnych i nie wykazuje obecności poprzecznych elementów szkieletowych (pls. 13—14), które są charakterystyczne dla pozostałych przedstawicieli podrzędu Stylophyllina (porównaj Cuif 1973). We wcześniejszej pracy autorka opisała inne gatunki koralowców z utworów triasu późnego Iranu Centralnego (Melnikova 1975).

## EXPLANATION OF PLATES 13 AND 14

All specimens are from the upper part of the Nayband Formation, upper Norian (Rhaetian), Parvarde region, locality Lut, Central Iran

## Plate 13

*Monstroseris iranica* gen. et sp. n.

1. Hemispherical colony, MIGD 25/3, holotype: visible are calices in the form of polygonal shields delimited by dividing grooves, and radial elements in the form of rows of tubercles developed on the surface of the calicular shields;  $\times 2$ .

2. Subcylindric colony, MIGD 25/2 in side view: *a* colony surface,  $\times 2$ , *b* a detail,  $\times 4.5$ ; visible are calices in the form of polygonal shields, dividing grooves and radial elements developed as thin ridges at the calicular periphery and thick ridges axialwards.

## Plate 14

*Monstroseris iranica* gen. et sp. n.

1. Sections of a holotype colony, MIGD 25/3: *a* transverse thin section,  $\times 10$ , *b* longitudinal section,  $\times 2$ , and *c* a detail,  $\times 10$ ; visible are septal spines (*s*), growth lines (in *1b* and *1c*), and fragmentary outline of a groove (*g*) dividing three corallites (in *1a*).



