

## THE ORIGIN OF PALAEOZOIC CORALS BY THE WAY OF PEDOMORPHOSIS

Narima K. OSPANOVA

Institute of Geology , Tajik Academy of Sciences, ul Ainy, 267, Dushanbe, 734063, Tajikistan;  
[ospanova@ac.tajik.net](mailto:ospanova@ac.tajik.net)

Tabulata, Heliolitida and Rugosa are main groups of Palaeozoic corals. They are characterized by high frequency of founding in sections, mass appearance and a long history of the coexistence. At present their studying level is sufficiently high. But there are no unity of views on the coral origin, taxonomic rank and degree of their relationship among present researchers. For example, Heliolitida consider as a part of Tabulata or independent; separate taxas of Tabulata connect with Spongia, Hydrozoa, Alcyonaria; Rugosa take out Tabulata or out relationship groups of sea anemones, etc.

The higher probability of the similarity is the higher probability of the relationship. Separate similar feature can to testify both to possibility of relationship and to possibility of casual similarity or convergence with the some probability. The relationship of Palaeozoic corals is confirmed through by the conception of the sum of common features: near related taxas of high level (subclasses, orders or superorders) must to have the sum of common features.

Some new interesting datas arise from analysis of common and specific features of Tabulata, Heliolitida and Rugosa, for example:

- development of the syringoporoid habit was modeled and new genesis of porosity of Tabulata was proposed (Ospanova, 1998);
- it was argued that Chaetetida are acromicric forms of Tabulata (Ospanova, 1994);
- the diversity of ways of beginning of coenenchime in different groups of Palaeozoic corals was established (Ospanova, 1993);
- specific features indicate about a passage by the phylum of specific stage of evolution;
- common features display in every order differently, i.e. in unadequate qualitative and quantitative expression that witness about early divergence of groups of corals and self-dependent evolution.

The analysis of the development of features forces to disclaim direct origin of Palaeozoic corals from more ancient skeletal forms or soft-body polyps and allows to draw a conclusion about origin of three main groups (order Heliolitida, order Tabulata and order Rugosa) by the way of pedomorphosis from medusoid forms.

### References

- Ospanova, N.K 1993. O khalizitinakh. Izv. AN Respubliki Tadjhikistan. Otd. nauk o Zemle, 2,5: 8-14.  
Ospanova, N.K 1994. O khetetidakh. Izv. AN Respubliki Tadjhikistan. Otd. nauk o Zemle, 2,9:3-9.  
Ospanova, N.K 1998. O poristosti tabuljat. Dokl. AN Respubliki Tadjhikistan, 8: 10-17.