## **CNIDARIA DISTRIBUTION ON THE SILURIAN SHELF OF PODOLIA**

## Volodymyr GRYTSENKO

Kyiv National Taras Shevchenko University, 90 Vasilkivska st., Kyiv Ukraine, 03022; <u>favosites@mail.univ.kiev.ua</u>

The huge value of Podolian Silurian sequence does not cause of doubt. Paleontologists and Geologists image it especially good. There were carry out two Silurian international symposia field trip [3]. Nevertheless, intensity of study of this unique geologic monument has fallen. In 1985 Novodniestrovsk hydroelectric station was build near Bernashivka village. As a result of this construction many exposures, including stratotypes, were submerged by water storage, others were covered by landslides, new were discovered by water abrasion.

The urgency of Silurian section analysis linked now with expansion of Geological mapping and prospecting in the Ukraine. In our country the Geological Service passes to large-scale state geological mapping project.

The Silurian formations are widespread on western slope of the Ukrainian Shield, but the exposures of this system are only in Middle Dniester River Region. On other areas of location Silurian deposits are studied on borehole material and by geophysical methods.

Complex Study of fossil and lithological attributes of rocks point on shelf nature of Podolian Sequence. The Paleogeographical schema of west part of the East Europe shows that Podolian Silurian Sea was closely connected with the Paleobaltic Sea Basin. We can see that both basins had pericontinental position [1]

The field investigation points that Cnidarians dominates above other fossils on the special intervals of the Sequence, in others part corals are rare or are absent. The fossils corals and stromatoporata are abundant in the bioherms and biostroms, on which one in Podolian Sequence paid more attention after investigation of Vera Sytova deal with Malynivtsy coral bioherms [2]. On our observations bioherms are meet only in paragenesis with rocks of a shallow-water origin. Bioherms are found into Mouksha, Konivka, Grinchouk and Troubshin deposits of Silurian Sequence in Dniester River basin. Besides, Cnidarians Buildups crossed by boreholes on Volynian region, Ternopil area and territory of Moldova.

For definition of facial affinities of Sequence subdivision and correlation we use simple facial model of Silurian Podolian Pericontinental Basin. A volcanic ash bed (benthonites) very important for correlation aims too. The necessity simplification of the model is connected with less detail regional level of operations then in Estonia for instance [1].

Shore line and facial zones migration depend on tectonic moves which were marked by deposition on the determined sediments. Transgressions and regressions of the sea leaded to complication of sedimentation. It may be seen in the sections. The cumulative picture looks rather complicated, but for separates sections and strata levels there is an opportunity to construct more or less simple schemas, which one would mirror a natural courses of processes. We made an attempt of such reconstruction for a Podolian Sequence.

In Silurian Sequence of Podolian shelf bioherms are accessible to analysis in exposures Bagovitsa, Konivka, Tsviklivtsy, Rykhta and Troubchin Suites [3]. Thus, the organogenous buildups and its cnidarians connected with Upper Silurian deposits can be more detail investigated.

## References

Kaljo D. (ed.), Silurian of Estonia, Valgus, Tallinn, 1970, 342 p.(in Russian).

- Sytova V. Bioherms of Malinovtsy horizon (Silurian) Podolii, Bull.MOIP, dep. Geol., 1966, v.41, 6, pp.130-131 (in Russian).
- Tsegelnjuk P., Gritsenko V. et al., The Silurian of Podolia, a guide of excursion, Kiev: Naukova dumka, 1983, p.224 (in Russian).

## **ZOBODAT - www.zobodat.at**

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: <u>Berichte des Institutes für Geologie und Paläontologie der Karl-</u> <u>Franzens-Universität Graz</u>

Jahr/Year: 2003

Band/Volume: 7

Autor(en)/Author(s): Grytsenko Volodymyr

Artikel/Article: Cnidaria distribution on the silurian shelf of podolia 30