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**FAUNISTIC CONNECTIONS OF THE PREDDOBRUDZHISKY BASIN AT THE  
LATE BAYESIAN – EARLY BATIAN TIME WITH WESTERNEUROPEAN AND  
EASTERNEUROPEAN AQUATORIES**

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When studying the species diversity of a group of small-sized mollusks (Bivalvia and Gastropoda) from the Upper Bayesian deposits of the Dniester-Prut interfluvium, the question arose about the faunistic connections of the small-sized fauna of the Jurassic of the Predobudruzhsky trough with western European and eastern European water areas.

At the beginning of the Late Bayesian, the paleogeographic situation is restructured, due to a major transgression and accompanied by migration of fauna. The similarity of the faunal complexes of the Dnieper-Donets basin, the Donbas and the Predobudruzhsky trough is explained by the identical ecological conditions of these basins and very close facies conditions.

*Key words:* small-scale fauna, upper Bayesian, Batian, bivalves and gastropods, Predobudruzhsky basin, Dniester-Prut interfluvium, Dnieper-Donetsk basin, facies conditions.

When studying the species diversity and taxonomic affiliation of the group of small-sized mollusks (Bivalvia and Gastropoda) from the core of the Upper Bayesian deposits of the Dniester-Prut interfluvium, an assessment of the biogeographical and biofacial features of the studied sediments was carried out. In the course of the work an interesting question arose about the faunistic connections of the small-sized fauna of the Jurassic of the Predobudruzhsky trough with neighboring regions and possible finding of a similar small-sized mollusk fauna with rather remote regions.

On the territory of the Dniester-Prut interfluvium these small-sized mollusks have a narrow stratigraphic distribution, within 1 to 2 ammonite zones of the Middle Jurassic, which allows them to be used as extremely important groups for the Middle Jurassic deposits of the region.

Among the ammonites there are genera typical of the Middle Jurassic waters of the Predobudruzhsky Basin, the Dniester-Prut interfluvium, the Dnieper-Donets Basin: *Stephanoceras*, *Parkinsonia*, *Garantiana*, *Bigotites*, *Spiroceras*, *Sphacroceras*, *Lissoceras*, *Oppelia*, *Nannolytoceras*, *Phylloceras*, *Calliphilloceras*, *Partchiceras*, *Siemiradzka*, etc. [6; 7].

In 1987 I. M. Yamnichenko [11] described a peculiar fauna of small-sized gastropods from the Jurassic deposits of the northwestern margins of Donbas and the Dnieper-Donets basin.

When comparing the small-sized Gastropoda from the sediments of the Bayesian deposits of the Dniester-Prut interfluvium and the Dnieper-Donets basin, seventeen common species are noted. Here are some of them: *Pleurotomaria* ex. gr. *papilla* Jam., *Discochelis*

desertus Jam., Amberleya diffusa Jam., Solariella brevicula Jam., Lischkeia cincinata Jam., Zygopleura plumata Jam., Zygopleura clivosa Jam., Pseudomelania pustula Jam., Astaonina citrea Jam. And there is a coincidence of seventeen genera.

At the same time I.M. Yamnichenko notes that the search for small-sized fauna outside the Donbas and the Dnieper-Donets basin has not been successful, except for Zygopleura innumera Jam. (Precarpathian and Predobudruzhsy trough).

In the same paper, he notes that, together with gastropods, small-sized bivalve molluscs, mostly of the geni Astarte, Meleagrinella, Cypricardia, Phaenodesmia, Nucula, Leda, Parallelodon, still occur in greater numbers. But these small-sized bivalves were not studied by him.

When comparing the small-sized Bivalvia found in the deposits of the Biaos of the Dniester-Prut interfluvium and the Dnieper-Donets basin, general species are noted: Nucula simmetrica (Borissyak), Nucula subovalis (Goldfuss), Parallelodon verevkinense (Borissyak). There is also a coincidence of eleven common geni.

Along with these small-sized forms forming aggregations, and in the deposits of the Bajocian Dnieper-Donets basin and in the deposits of the Biaos of the Dniester-Prut interfluvium, faunistic remains of normal sizes, represented by ammonites, belemnites, bivalves of ordinary sizes and other fossils, were encountered.

Thus, the connection of the fauna of the Dniester-Prut interfluvium with the basin of the Dnieper-Donets basin in the Middle Jurassic time is clearly traced, since the complexes of bivalve mollusks in the deposits of the upper Bajocian and the bottoms of the baht of these territories are very similar. (Pchelintsev, 1937, Sterlin, 1962). [5; 10]

The presence of close ties in the Jurassic times of the Dnieper-Donets basin and the Predobudruzhsy basin is confirmed by the discovery in both regions of the small-sized fauna of bivalve and gastropod mollusks. In a number of our articles [2; 3; 8; 9], we present arguments on the existence of close ties in the Jurassic times of the basins of the Dnieper-Donets Basin and the Predobudruzhsy Basin, as evidenced by the discovery in both regions of the small-sized fauna of bivalve and gastropod mollusks.

It should be noted that in the work of the Romanian researchers Barbu V. and Lazar I. (2004) on the statistical analysis of Middle Jurassic bivalve complexes from Romania and their paleoecological significance, it is pointed out that in facies of the Upper Bata of Central and Eastern Romania recently discovered Bositra buchi (Roem.). These facies are similar in lithology composition to the upper Bajocian deposits of the Dniester-Prut interfluvium, and this is further evidence of the Late Bajocian transgression, which opened connections between the basin system: European basins-the Dniester-Prut interfluvium basin [12].

The Middle Jurassic basins of the Dnieper-Donets Basin, the Donbas and the Predobudruzhsy trough had very similar lithologic-facies conditions. The deposits of the Upper Bajocian are mainly composed of clayey rocks with interlayers of siltstones and sandstones and rarely thin strata of limestone. Among the deposits of the Upper Bajocian, the facies are distinguished by their lithological composition: 1) deep-water mudstones; 2) – shallow siltstones, sandstones and gravelites; 3) – shallow clay.

Geochemically, leptochlorite-glaucinite, siderite-chamosite and siderite facies are common [1]. In the sandstones there are numerous remains of various fauna groups indicating the Upper Bajocian (G. garantiana) zone and the normal salinity of the basin. In the zone of the Predobudruzhsy trough, mainly clay rocks lie, which as a result of diagenetic transformations have been modified into mudstones.

This is explained by the fact that at the beginning of the late Bajocian there is a significant rearrangement of the paleogeographic situation, caused by a large transgression from the Black Sea and the Byrlad depression. The fauna of the Middle European and Mediterranean paleozoogeographic regions migrate to the interfluvial territory [4]. The similarity of the faunal complexes of the Dnieper-Donets Basin, the Donbas and the Predobudruzhsy trough is also explained by the same ecological conditions of these basins.

Thus, the faunistic connections of the Predobudruzhsy basin in the Late Baia - Early Babate period with the Western European and East European waters are explained by very close facies conditions, as well as the general position of these normally saline basins in the northern part of Tethys.

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**ФАУНІСТИЧНІ ЗВ'ЯЗКИ ПЕРЕДДОБРУДЗЬКОГО БАСЕЙНУ  
В ПІЗНЬБАЙОСЬКИЙ-РАННЬОБАДЕНСЬКИЙ ЧАС ІЗ  
ЗАХІДНОЄВРОПЕЙСЬКОЮ ТА СХІДНОЄВРОПЕЙСЬКОЮ АКВАТОРІЄЮ**

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Під час вивчення видового різноманіття групи дрібномірних молюсків (*Bivalvia* і *Gastropoda*) з верхньобайоських відкладів Дністровсько-Прутського межиріччя виникло питання про фауністичні зв'язки дрібномірної фауни юри Переддобрудзького прогину з західно- та східно-європейськими акваторіями.

На початку пізнього байосу відбувається перебудова палеографічного середовища, зумовлена великою трансгресією і супроводжується міграцією фауни. Подібність комплексів фауни Дніпровсько-Донецької западини, Донбасу і Переддобрудзького прогину пояснюють однаковими екологічними умовами цих басейнів і дуже близькими фаціальними умовами.

*Ключові слова:* дрібномірна фауна, верхній байос, бат, двустулкові і гастроподи, Переддобрудзький басейн, Дністровсько-Прутське межиріччя, Дніпровсько-Донецька западина, фаціальні умови.

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