

## A new species, genus, and family of gastropods from the Upper Oxfordian (Jurassic) of European Russia

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**ABSTRACT.** A gastropod with unusual morphology was found in the Upper Jurassic of Central European Russia. It is assigned to a new family **Berendinellidae** fam. nov., as **Berendinella rossica** gen. et sp. nov. This family is preliminarily referred to the superfamily Cerithiopsoidae.

In Oxfordian (Moscow Region) and Kimmeridgian (Kostroma Region) clays, a new species of snails was found, which differs strongly from other known groups of Mesozoic gastropod mollusks. In characters of protoconch this gastropod is similar to the order Epitoniiformes. As in many nystiellids and janthinids, it has the protoconch whorls covered with a collabral sculpture. However, the morphology of its postlarval shell strongly differs from that of teleoconchs of the Epitoniiformes representatives. Our species has a paucispiral low-spined shell with gradate whorls bearing a sharp keel in the upper part. No one species of Epitoniiformes has such teleoconch. Janthinoidea have a multispiral teleoconch but possess a strongly different sculpture. Besides, our species has a siphonostomatous aperture with a well developed basal projection, whereas in Epitoniiformes the aperture is rounded in the basal part, and the aperture is holostomatous.

There is still the superfamily Cerithiopsoidae in which some representatives have the protoconchs covered with collabral sculpture or with sculpture composed of spiral and collabral elements. These are families Eumetulidae and Cerithiopsidae. Besides, they, as well as our species, are characterized by a siphonostomatous aperture. However, teleoconchs of Eumetulidae and Cerithiopsidae are multispiral and their shells vary from high-spined to very high-spined, and the shell sculpture strongly differs from that in our species. Also it is necessary to note the distinction in the character of siphonostomy between the Jurassic species and comparable cerithiopsids: in the former the basal part of aperture forms a triangular flattened projection, whereas in the latter there is a short projection looking like a semiclosed channel. That is why I believe that it is

more correct to place the Jurassic species in the new genus **Berendinella**, as **B. rossica** Guzhov, sp. nov., and to create a family **Berendinellidae** Guzhov, fam. nov. This family is suggested to be temporarily placed in the superfamily Cerithiopsoidae, based on the similarity in morphology of protoconchs and because of primitive character of the shell siphonostomy.

### Superfamily Cerithiopsoidae Family **Berendinellidae** Guzhov, fam. nov.

**Diagnosis.** Small paucispiral shells with collabrally sculptured protoconch. Teleoconch covered by collabral and spiral sculpture. Spiral sculpture represented by ribs and rows of microscopical tubercles. Aperture siphonostomatous, having thin lips, which are weakly expanded outside in basal and basopalatal parts of aperture. Columella protruding anteriorly as small curved triangular projection.

[**Диагноз.** Малооборотные небольшие раковины с коллабрально скульптурированным протоконхом. Телеоконх покрыт коллабральной и спиральной скульптурой. Последняя представлена ребрами и рядами микроскопических бугорков. Устье сифоностомное, с тонкими губами, которые в базальной и базально-палатальной части немного отвернуты. Столбик продолжается в виде небольшого изогнутого треугольного выроста.]

**Composition.** **Berendinella** gen. nov.

Genus **Berendinella** Guzhov, gen. nov.

Type species – **B. rossica** sp. nov.

**Diagnosis.** Shell small, paucispiral, low-spined. Protoconch of several whorls with collabral sculpture. Teleoconch consists of convex gradate whorls divided by deep suture. Spiral sculpture of ribs and rows of microscopical tubercles, collabral sculpture consisting of threads. Body whorl very high. Base convex, covered with same sculpture as whorl side. Aperture oval. Outer lip in basal and basopalatal parts weakly extended outside. Aperture with a tri-