

On the species of molluscs from Russian waters described by Valenciennes in little known publications in 1858

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ABSTRACT. Valenciennes has described 10 species of molluscs from the northern Japan Sea. Two of the names are valid (*Fusus arthriticus* and *Fusus bulbaceus*), one is *nomen dubium* (*Fusus lamniger*), 4 are junior synonyms (*Pecten dominicanus*, *Mytilus unguiculatus*, *Fusus dominovae*, *Tritonellum barthi*) one is a *nomen nudum* (*Buccinum luteolum*), one was suppressed by ICZN (*Maetra sibyllae*), and one was erroneously attributed to the Japan Sea fauna (*Ranella ampullacea*). Type specimens of 7 species preserved in the Muséum national d'histoire naturelle, Paris, are illustrated.

Professor Achille Valenciennes (1794-1865) was a famous French zoologist, closely associated with Muséum national d'histoire naturelle, Paris. He started working here in 1814, initially as an assistant to Lamarck, helping him to arrange the collection of invertebrates. Then he collaborated with Cuvier, professor of comparative anatomy in the Museum. Valenciennes started his own researches on fish in 1827. Several years later he was appointed as professor of Malacology in the Museum, although proceeded working in Ichthyology department. He is well known as a co-author of "Natural History of Fishes" ("L'histoire naturelle des Poissons"), a fundamental publication (1828-1850), in which 4055 species (2311 new) were described.

Nevertheless, Valenciennes published a number of works in malacology, among them the descriptions of the molluscs, collected in the circumglobe expedition of the frigate *Venus* (1836-1839) under the commandship of captain A.A. Dupetit-Thouars.

Detailed biography of A. Valenciennes was published recently [Bauchot, Daget, Bouchot, 1990].

In April 1858 A. Valenciennes published a short note on the molluscs collected by surgeon Barthe on board of the frigate *La Sybille* in the northern Japan Sea [Valenciennes, 1858a]. The same year he published a slightly longer paper [Valenciennes, 1858b], containing descriptions of the same species. No species were, however, illustrated. It is not possible to trace exactly the day of publication of the

latter one, but it was probably published after April, 1858. We were not been able to find any details about the cruise of *La Sybille* or about Barthe himself.

These publications are very poorly known and rarely cited, even omitted by Ruhoff [1980], although most of these species of Valenciennes were cited by Schrenck [1867]. Our attention to them was attracted by Dr. Philippe Bouchet (Muséum national d'histoire naturelle, Paris). The works are pertinent to the molluscan fauna of Russia, and we regarded it necessary to investigate the possible application of Valenciennes' names to species currently known from Russian seas. The types of most of the species described by Valenciennes in mentioned publications are present in the type collection of the MNHN. Their examination allowed to clarify their taxonomic position and revealed some nomenclatural problems, that are discussed below.

The following species were described by Valenciennes:

Pecten dominicanus — 1858a: 144; 1858b: 760. No type survived, locality was not given in 1858a, but specified in 1858b as "bassin de l'empereur Nicolas" (= Imperatorskaya Gavan', presently Sovetskaya Gavan', at southern entrance to the Tatar Strait, northern Japan Sea). This name seems to have been never used after, while the very brief description does not permit to identify it with certainty. However, most probably it is a new synonym of *Mizuhopecten yessoensis* (Jay, 1856) (H. Dijkstra, personal communication).

Mytilus unguiculatus — 1858a: 144; 1858b: 760. One specimen is present in the type collection (Fig. 1F). Type locality — Sangar Strait. According to the original note "cette espèce bonne à manger" (this species is edible), Valenciennes could have several specimens, and therefore we consider the specimen as a syntype. It is without any doubt a junior synonym of *Crenomytilus grayanus* (Dunker, 1853).

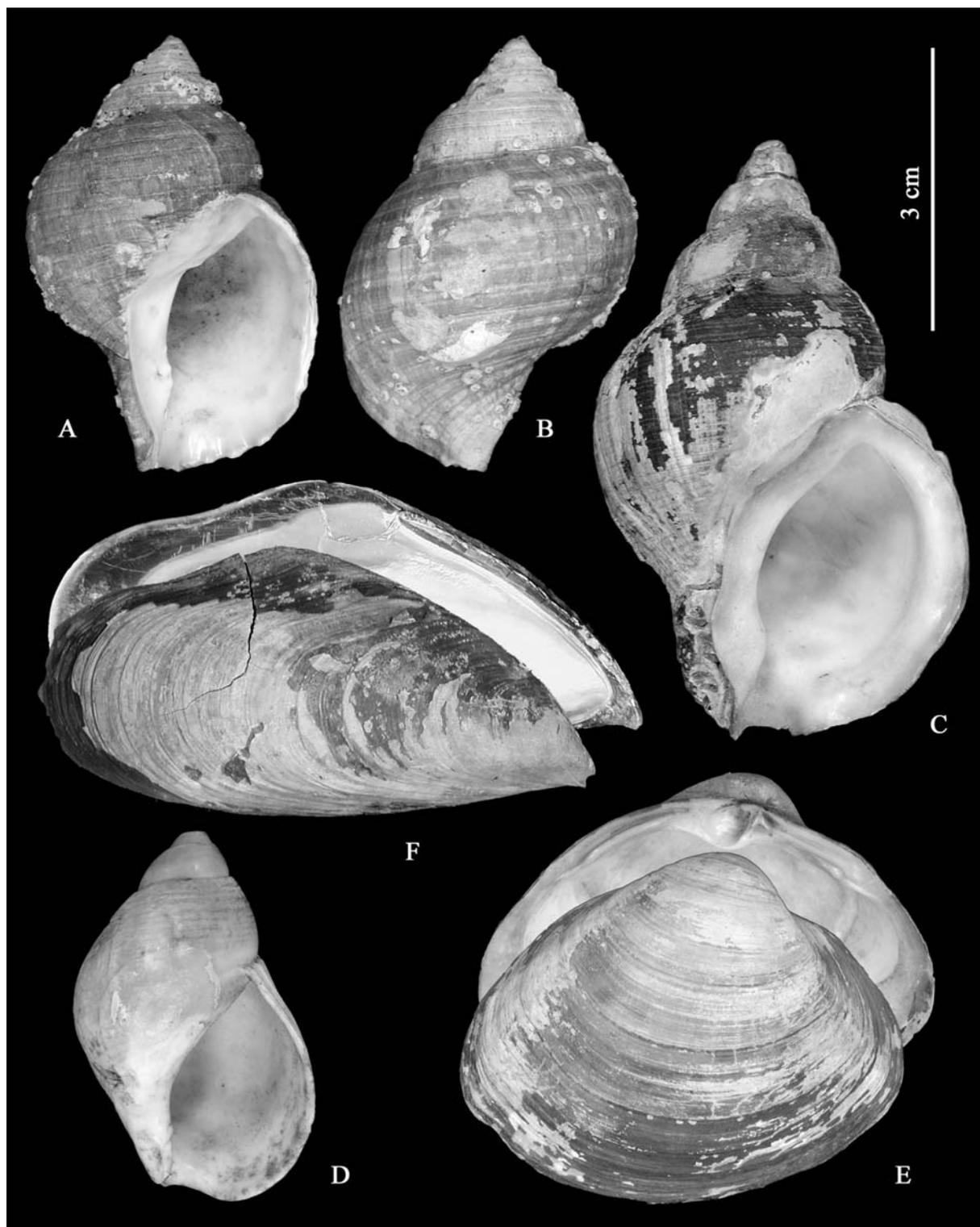


FIG. 1. A, B — *Ranella ampullacea*, syntype, 46.2 mm; C — *Tritonellum barthii*, syntype 63.8 mm; D — *Buccinum luteolum*, syntype, 39.5 mm; E — *Mytilus unguiculatus*, syntype, 117 mm; F — *Macta sibyllae*, syntype, 107 mm. All gastropods shells figured at the same scale.

РИС. 1. А, В — *Ranella ampullacea*, синтип, 46,2 мм; С — *Tritonellum barthii*, синтип, 63,8 мм; D — *Buccinum luteolum*, синтип, 39,5 мм; E — *Mytilus unguiculatus*, синтип, 117 мм; F — *Macta sibyllae*, синтип, 107 мм. Все раковины брюхоногих изображены в одном масштабе.

Mactra sibyllae — 1858a: 144; 1858b: 760. 3 syntypes present (Fig. 1E), two of which from Hakodate Bay [Japan] and one from “Tartarie” [Tatar Strait]. This is a senior synonym of well-known species *Spisula sachalinensis* (Schrenck, 1862). The name was suppressed by ICZN, opinion 1366. The taxonomic position of the species was discussed by Habe [1978], who also published a photograph of one syntype.

Fusus bulbaceus — 1858a: 144; 1858b: 761. 1 syntype preserved (Fig. 2C). Type locality — “bassin de l’empereur Nicolas”. This species is what is well known as *Neptunea bulbacea* Bernardi, 1858. Bernardi [1858b] described and well illustrated (pl. 7, fig. 1) the species in the *Journal de Conchyliologie*. One syntype of Bernardi (Fig. 2E) is present in MNHN and there is no doubt about the conspecificity of both nominal species. Moreover, he mentioned in his description that “this species was mentioned, although without description, by M. Valenciennes” (p. 183-184). This is actually incorrect, since a brief description and comparison were provided by Valenciennes. Moreover, from the title of the paper (Descriptions d’espèces **nouvelles**) it is obvious, that Bernardi did not intend to make the name of Valenciennes valid, but described it as new. Therefore, the name *Fusus bulbaceus* Bernardi, 1858 appeared to be both junior homonym and synonym of *Fusus bulbaceus* Valenciennes, 1858.

Fusus dominovae — 1858a: 144; 1858b: 761. One syntype present (Fig. 2D). Type locality — “Manche de Tartarie” (Tatar Strait). It is conspecific with *Fusus bulbacea* Valenciennes, and acting as first revisers, we consider it as a junior synonym of *Neptunea bulbacea*.

Fusus lamniger — 1858a: 144; 1858b: 761. No type specimens present in the collection. Type locality “bassin de l’empereur Nicolas”. According to the very brief description, this should be some *Neptunea* species. We consider the name as *nomen dubium*.

Fusus arthriticus — 1858a: 144; 1858b: 761. Type locality — Sangar Strait. This species is what is well known as *Neptunea arthritica* Bernardi, “1857”. Bernardi published the description in *Journal de Conchyliologie*. The date of publication is marked as December 1857. Nevertheless, Bernardi refers to the note of Valenciennes [1858b]: “M. Valenciennes (*Comptes-rendus*, 19 avril 1858, p. 761) a donné le nom de *Fusus arthriticus* à l’espèce que nous venons de décrire, et nous avons cru devoir le conserver” [Valenciennes gave the name *Fusus arthriticus* to the species which I have described, though it appropriate to keep it]. Thus Bernardi actually attributed the authorship to Valenciennes,

and since Valenciennes description preceded that of Bernardi, he should be considered as the author of *Fusus arthriticus*. The date of publication of the relevant issue of the *Journal de Conchyliologie* is accordingly 1858, not 1857 as it is usually cited [Winckworth, 1936]; probably it was printed between April (when Valenciennes presented his communication) and October (the nominal date of publication of the next issue of the journal).

One syntype of Bernardi (Fig. 2 A-B) is present in MNHN. There is an old label, accompanying the specimen, which says “*Fusus arthriticus* Valenciennes”. There is no indication that the specimen illustrated by Bernardi (pl. XII, fig. 3) was used by Valenciennes, neither that it was collected by Barthe. The single syntype of *Fusus arthriticus* Bernardi, preserved in the type collection, does not correspond well to the drawing or to the dimensions given by Bernardi (10 cm vs 7.5 cm). We can consider it as possible syntype of the Valenciennes species.

Ranella ampullacea — 1858b: 761. A single specimen is preserved in the MNHN type collection (Fig. 1 A-B). No type locality was given in the description. On the accompanying label the locality is also not specified, although it says that the specimen was collected by Barthe and therefore probably came from the Japan Sea, as is obvious from Valenciennes [1858b]. On the later collection label the locality is given as “Tartarie”. It is not clear, whether Valenciennes had a single specimen and therefore we consider it as a syntype. Shell height 46.2 mm. This is *Argobuccinum pustulosum* (Lightfoot, 1786), South American form *vexillum* Sowerby, 1835 (A. Beu, personal communication). The Tatar Strait origin of the specimen is obviously erroneous.

Tritonellium barthi — 1858a: 144; 1858b: 762. Two syntypes present (Fig. 1C — 63.8 mm). Type locality — “bassin de l’empereur Nicolas”. This is a junior synonym of *Buccinum ochotense ochotense* (Middendorff, 1848).

Buccinum luteolum — 1858a: 144; 1858b: 762. Five syntypes present (Fig. 1 D). Type locality — Kuriles. Since no diagnoses is provided, the name should be considered *nomen nudum* and thus unavailable. The shells belong to *Buccinum baerii* (Middendorff, 1848).

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FIG. 2. A-B — *Fusus arthriticus* “Bernardi”, syntype of *F. arthriticus* Bernardi and possible syntype of *Fusus arthriticus* Valenciennes, 75.7 mm; C — *Fusus bulbaceus* Valenciennes, syntype, 124 mm; D — *Fusus dominovae*, syntype, 109.2 mm; E — *Fusus bulbaceus* Bernardi, syntype, 101.7 mm.

FIG. 2. A-B — *Fusus arthriticus* “Bernardi”, синтип *F. arthriticus* Bernardi и вероятный синтип *Fusus arthriticus* Valenciennes, 75,7 мм; C — *Fusus bulbaceus* Valenciennes, синтип, 124 мм; D — *Fusus dominovae*, синтип, 109,2 мм; E — *Fusus bulbaceus* Bernardi, синтип, 101,7 мм.

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- О видах моллюсков, описанных Валансьенном из вод России в малоизвестных публикациях в 1858 г.
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- РЕЗЮМЕ. А. Валансьенн в 1858 г. описал 10 видов моллюсков из северной части Японского моря. Два вида являются валидными (*Fusus arthriticus* и *Fusus bulbaceus*), одно название оказывается *nomen dubium* (*Fusus lamniger*), 4 — младшими синонимами (*Pecten dominicanus*, *Mytilus unguiculatus*, *Fusus dominovae*, *Tritonellum barthi*) и одно *nomen nudum* (*Buccinum luteolum*). Одно название было отвергнуто МКЗН (*Mastra sibyllae*), а один из видов был ошибочно отнесен к фауне Японского моря (*Ranel-la ampullacea*). Изображены типовые экземпляры 7 видов, хранящиеся в Muséum national d'histoire naturelle, Париж.

