On the genus *Gurjanovella* Uschakov, 1926 (Nemertea: Enopla)

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A detailed diagnosis of the genus *Gurjanovella* is given. *G. littoralis* Uschakov, 1926 and *G. murmanica* Uschakov, 1926, stat. n. (upgraded from varietal rank) are briefly redescribed.

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Uschakov (1926) described the genus and species *Gurjanovella littoralis*. The specimens from the White Sea and Barents Sea were referred to separate subspecies or varieties, *marisalbi* and *murmanicum*, respectively (Uschakov, 1926, 1928). No further information has been published on the genus *Gurjanovella*. This paper presents new data on the morphology and taxonomy of this poorly known genus. The following abbreviations are used: E – thickness of epithelium, D – thickness of dermis, C – thickness of circular muscular layer, L – thickness of longitudinal muscular layer. All type specimens are kept in the Zoological Institute of the Russian Academy of Sciences, St.Petersburg.

Family **AMPHIPORIDAE**

Genus **Gurjanovella** Uschakov, 1926

Type species *Gurjanovella littoralis* Uschakov, 1926.

Diagnosis. Rhynchocoel reaches posterior end of body, with short dorsal appendix above dorsal commissure of brain. Wall of rhynchocoel with two muscle layers. Body wall with diagonal layer; longitudinal muscles not divided anteriorly. Dorsoventral muscles well-developed. Precerebral septum closed. Cerebral organs situated in front of the brain, open laterally. Lateral nerve cords without accessory nerves. Eyes numerous or absent. Cephalic glands well-developed. Foregut divisible into oesophagus, stomach and pylorus. Intestinal caecum with anterior and lateral pouches. Blood system with cephalic loop and longitudinal vessels, without valves. Mid-dorsal vessel with vascular plug. Excretory system well-developed, with 3-5 dorsolateral nephridiopores on either side. Sexes separate, testes bilobed.

Included species. Type species and *Gurjanovella murmanica* Uschakov, 1926, stat. n.

Comparison. The genus *Gurjanovella* belongs to the group of genera characterized by bilobed testes: *Amphiporella* Friedrich, 1940, *Communoporus* Friedrich, 1955, *Arctonemertes* Friedrich, 1957, *Elcania* Moretto, 1970 and *Cyanophthalma* Norenburg, 1986. From all genera of this group, *Gurjanovella* differs in the presence of dorsal rhynchocoel appendix.

Gurjanovella littoralis Uschakov, 1926 (Figs 1, 2)

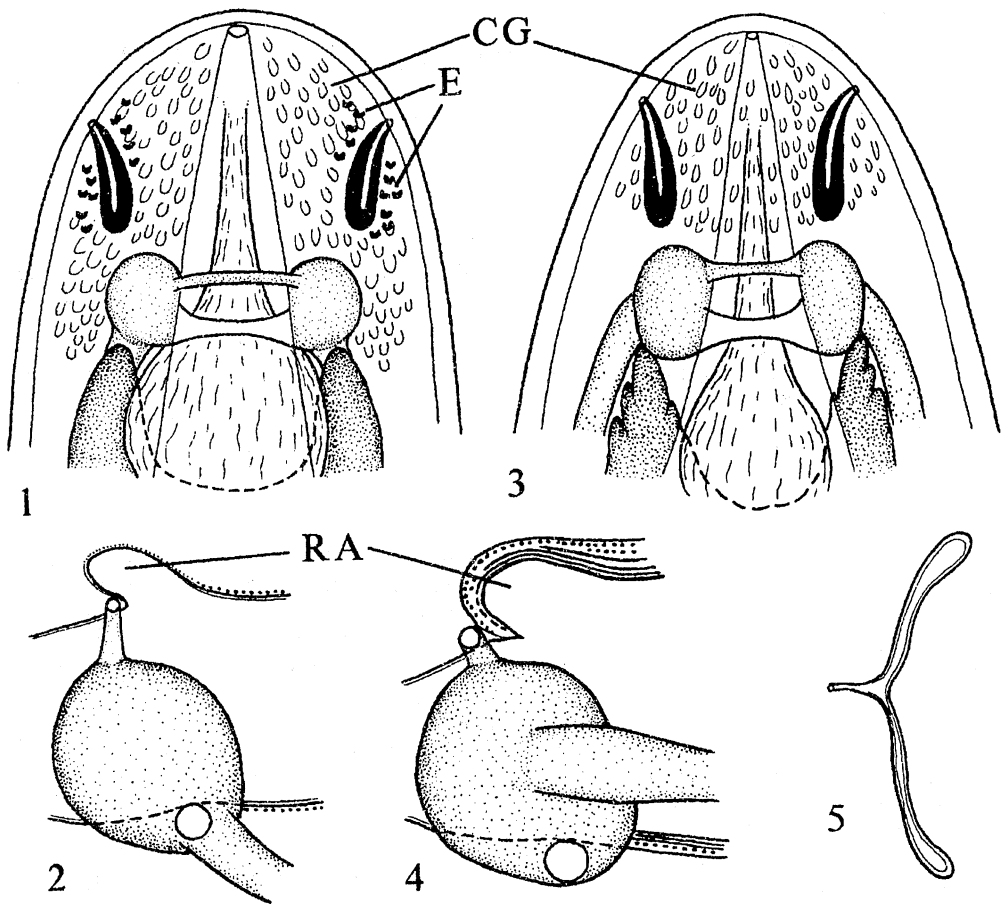
Gurjanovella littoralis Uschakov, 1926: 60-62; 1928: 413-415.

Gurjanovella littoralis maris-albi Uschakov, 1926: 60-62, Table 2, Figs 11, 12.

Gurjanovella littoralis var. *maris-albi* Uschakov, 1928: 413-415, Textfig. 6, 7, Taf. 4, Fig. 10.

Material. Lectotype of *G. littoralis* and *G. marisalbi* (designated here): No. 161, White Sea, Kovdeskiy Bay, depth 10-15 m, mud, 1923 (K. Sent-Hilair), series of transverse sections.

Description. Body wall: E = 126-273 μm, D = 50-105 μm, C = 42-63 μm, L = 84-294 μm. Diagonal layer very thin. Cephalic glands best developed in the precerebral region, reaching back ventrolaterally, penetrating precerebral septum and ending close beyond brain. Structure of proboscis not ex-



Figs 1-5. **1**, **2**, *Gurjanovella littoralis* Uschakov; **3-5**, *G. murmanica* Uschakov. **1**, **3**, graphic reconstructions of the anterior part (*CG*, cephalic glands; *E*, eyes); **2**, **4**, graphic reconstructions of the brain showing the position of the rhynchocoel appendix (*RA*, rhynchocoel appendix); **5**, testes.

amined. Thickness of rhynchocoel wall 21-25 μm; thickness of wall of appendix 8-10 μm. Rhynchocoel appendix narrow, 85 μm wide. Oesophagus long, maximum diameter 410 μm; dorsal epithelium neither ciliate nor glandular, but ventral epithelium thick, folded, glandular and ciliate. Oesophagus and stomach without blind sacs. Simple anterior pouches of intestinal caecum extend towards the brain. Thickness of dorsal commissure of brain 42 μm, thickness of ventral commissure 84 μm. Neurochord cells not found. Lateral nerve cords have posterior rather than lateral origin from ventral cerebral lobes. Lateral nerves with a few myofibrillae. Cerebral organs with maximum diameter 200 μm. Each side of head with 10-11 eyes. Cephalic vessels pass close to cerebral organs and have very small and indistinct extra-vascular pouches. Excretory tubules extend from alongside anterior brain regions to the end of foregut.

Gurjanovella murmanica Uschakov, 1926, stat. n.
(Figs 3-5)

Gurjanovella littoralis murmanicum Uschakov, 1926: 60-61.
Gurjanovella littoralis var. *murmanicum* Uschakov, 1928: 413-415, Textfigs 4, 5, Taf. 4, Figs 8, 9, 11.

Material. Lectotype (designated here): No. 161, Barents Sea, Kol'skiy Bay, intertidal, 1923 (P. Uschakov), series of transverse sections.

Description. Body wall: E = 82-168 μm, D = 25-50 μm, C = 25-35 μm, L = 76-294 μm. Thickness of diagonal layer 6-8 μm at the stomach level. Cephalic glands not reaching beyond precerebral septum. Thickness of rhynchocoel wall 67-84 μm. Rhynchocoel appendix 578 μm wide, thickness of its wall up to 189 μm. Proboscis with three muscle layers and 10 nerves. Oesophagus long, with maximum diameter 210 μm, neither ciliate nor glandular. Stomach with short ventral blind sac under junction between stomach and pylorus. Lobed anterior pouches of intestinal caecum extend towards the brain. Pylorus 1.2 times as long as stomach. Thickness of dorsal commissure of brain 71 μm; thickness of ventral commissure 130 μm. Neurochord cells not found. Lateral nerve cords have lateral origin from ventral cerebral lobes, with 2 large and 4-6 small myofibrillae. Cerebral organs with maximum diameter 210 μm. Eyes missing. Cephalic vessels pass close to cerebral organs, without extra-vascular pouches. Excretory tubules extend from alongside anterior brain regions to the end of foregut. Nephridiopores dorsolateral. Testes open laterally.

Comparison. This species differs from *G. littoralis* in the absence of eyes and in the shorter cephalic glands.

References

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