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A new trematode, Orthosplanchnus sudarikovi nov. sp. (Campulidae) from the beluga

by V.V. Treshchev Crimean State Pedagogical Institute

During June—July 1965, an expedition organized by the Department of Zoology of the Crimean Pedagogical Institute and the Northern Department of the Polar Scientific Research Institute of Fisheries and Oceanography conducted investigations on the coast of the Kanin Peninsula. Thirty-nine belugas (*Delphinaptarus leucas* Pallas) were studied. In one of these belugas, the rectum was found to contain, in addition to others species of worms, a trematode belonging to the genus *Orthosplanchnus* Odhner, 1905 (family Campulidae Odhner, 1926, subfamily Campulinae Stenkard et Alvey, 1929). It was established that this trematode was a new species, and we named it in honour of Dr. V.Ye. Sudarikov.

Orthosplanchnus sudarikovi nov. sp. (Fig. 1)

Host: beluga (Delphinaptarus leucas Pallas). Localization: rectum. Place of occurrence: USSR (White Sea). Description of species: Body 17.251 mm long, width at level of ventral sucker 1.185 mm. Oral sucker subterminal, sturdy, 0.998x1.268 mm. Ventral sucker 0.832x0.915 mm, located in first quarter of body, 0.936 mm from lower margin of oral sucker. Prepharynx 0.124 mm long. Pharynx 0.665 mm long and 0.478 mm wide. Anterior region of intestine forms three diverticula on each side, two directed anteriorly and one posteriorly. Diverticula directed anteriorly differ in length. Long diverticulum up to 0.707x0.145 mm, short one 0.249x0.104 mm. Diverticulum directed toward posterior end of body 0.499x0.083 mm. Intestinal trunks 0.083-0.208 mm in width extend along body and end blindly 0.062-0.104 mm from posterior end. They form neither lateral, nor median processes. Excretory pore terminal.

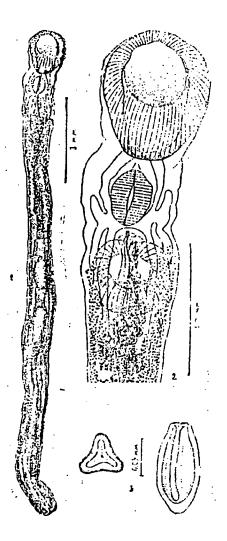


Fig. 1. Orthosplanchnus sudarikovi nov. sp.: 1 - marita, 2 - anterior end of body, 3 - egg

Genital pore occupies median position, opens onto ventral surface in front of ventral sucker. Testes elongate-oval, entire, arranged one behind the other. Anterior testis 1.289 mm long with width of 0.520 mm, and lies 0.644 mm from posterior margin of ovary. Posterior testis 1.622 mm long with width of 0.561 mm. Genital bursa 1.123 mm long with maximum width of 0.270 mm, overlaps boundary of posterior margin of ventral sucker by 0.728 mm. Cirrus 0.707 mm long, bears multi-tude of minute spinules 0.008 mm in length. Ovary entire, oval, located in front of anterior testis, 0.353 mm long with width of 0.291 mm. Mehlis gland 0.312 mm in diameter, lies immediately behind anterior margin of ovary.

Well-developed ovaries extend from level of anterior margin of ventral sucker to posterior end of body, represented by densely distributed follicles 0.020-0.041 mm in diameter. Yolk sac 0.124 mm in diameter. Uterus long, slightly contorted, packed with numerous eggs, 0.092 mm long, 0.055 mm wide. Eggs with operculum, triangular in cross-sectiion.

Differential diagnosis. As we know, the genus Orthosplanchnus Odhner, 1905 combines three species, namely O. arcticus Odhner, 1905, O. elongatus Ozaki, 1935, and O. fraterculus Odhner, 1905 (K.I. Skryabin, 1948; S.L. Delamure, 1955; Yamaguti, 1958), from which the described species is distinguished by the absence of spines on the cuticle, oral suckers that are twice as long, the presence of six instead of two intestinal diverticula, alobate testes, and by a different host.

In addition to this, the new species is differentiated from *O. arcticus* and *O. fraterculus* by a larger body (twice as large as in the first species, and 4 times larger than in the second one), a pharynx that is twice as large, and by its localization in the host; it is distinguished from *O. elongatus* by a prepharynx and eggs that are twice as large.

References

1. Skryabin K.I. Trematodes of Animals and Humans, vol. 2. USSR Acad. Sci. Publ., 1948, 600 p.

2. Delamure S.L. The Helminth Fauna of Sea Mammals in the Light of Their Ecology and Phylogeny. USSR Acad. Sci. Publ., 1955, 517 p.

3. Delamure S.L., Skryabin A.S. Compendium "Sea Mammals". USSR Acad. Sci. Publ., 1964, p. 302-310.

4. Yamaguti S. Systema helminthum. V. 1. The digenetic trematodes of vertebrates, 1958. Pt. 1-2. N.Y.—London, 1575 p.