



## First record of *Pontaralia beklemichevi* Mack-Fira, 1968 (Platyhelminthes: Rhabdocoela: Kalyptorhynchia) from the Russian Federation

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This is the first record of *Pontaralia beklemichevi* Mack-Fira, 1968 since its original description from Romania. Found in Lake Middle Kaban (Kazan, the Middle Volga basin), this species is new for Russian fauna. It is a relict of Ponto-Aral-Caspian that has recently invaded the Middle Volga basin. In the morphology of the male reproductive system, larger cirrus spines were noted in comparison with the original description.

### Family: Koinocystididae Meixner, 1924

### Genus: *Pontaralia* Mack-Fira, 1968

*Pontaralia beklemichevi* Mack-Fira, 1968

Mack-Fira 1968: 333–341, pl. I–V; Mack-Fira 1974: 249, 271, 282, 285; Evdonin 1977: 213–215, pic.53 3, 100 A, B; Ax 2008: 466–468, abb.223A

**Material.** Eight specimens have been studied. Five whole specimens were embedded in gum-chloral liquid (Faure-Berleze's Fluid); three specimens were fixed in 70% ethanol.

**Locality.** The samples were collected on October 20 and 29, 2009 from the littoral zone of Lake Middle Kaban (55°44'29"N, 49°09'38"E) city of Kazan, Russian Federation. Both times, worms were found in thickets of reedmace (*Typha angustifolia*), at underwater snags covered with dense populations of *Dreissena polymorpha* (Pallas).

**Distribution.** Republic of Romania, Lake Snagov (near Bucharest) and in the Razelm-Sinoë lagoon complex, Lake Golovitza (Mack-Fira 1968, 1974).

**Description.** Length of the animal in motion was 1.4–1.5 mm, and about 1 mm in a contracted motionless state. Live specimens were colorless and transparent. The animals were elongated, with a narrow anterior part and a rounded caudal end (Fig. 1A).

The cirrus, which reaches 200–250 µm in length, forms the distal part (about two-thirds) of the male copulatory organ. The cirrus is provided with numerous spines (Fig. 1C), which might be separated into four groups based on their size and location.

In the first group, there are small and numerous spines located along the entire length of cirrus. These spines are 3–8 µm long, and the length increases from the proximal part to the distal part of cirrus. In the second group, there are four spines of 18–33 µm in length, located at the dorsal wall of the distal part of the cirrus. In the third group, the spines (numbering one to three) are located in the same place and have the size of 12–16 µm. In the fourth group, there are two very large spines of 58–75 µm in length, situated separately at the distal fold of cirrus.

The cocoon is oval-shaped with solid smooth surface of yellow-brown color. It is 175x240 µm in size, with a stalk 10 µm long (Fig. 1B).

Basically, the external and internal structure of worms from Lake Middle Kaban (Fig. 1D) fits the description of worms from Lake Snagov as provided by Mack-Fira (Mack-Fira 1968). However, comparative analysis of internal morphological structures revealed substantial differences in the sizes of cirrus spines (Table 1). We have found that spines in the cirrus are larger in worms from Middle Kaban Lake than those in the Romanian worms.

**Discussion.** According to the recent data (Korgina 2005) the turbellarian fauna of the Volga basin includes 116 species, belonging to 7 orders and 16 families, but only one species of Koinocystididae Meixner, 1924 - *Koinocystis neocomensis* (Fuhrmann) - has been found here. *P. beklemichevi* is a relict of the Ponto-Aral-Caspian basin (Mack-Fira