

# *Hypsibius iskandarovi* sp. n., a new species of Tardigrada from fresh waters of North-West Russia (Tardigrada: Hypsibiidae)

D.V. Tumanov

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A new species of *Hypsibius* belonging to the "dujardini group" is described.

D.V. Tumanov, Zoological Institute, Russian Academy of Sciences, Universitetskaya nab. 1, St. Petersburg 199034, Russia.

North-West Russia is a region extremely rich in freshwater basins of different types, but the Tardigrade fauna has been investigated only in Lake Ladoga (Biserov, 1989). In this paper, a new species of *Hypsibius* from the suburbs of St.Petersburg is described.

***Hypsibius iskandarovi* sp. n.**  
(Figs 1-4)

*Holotype.* Slide No. 155(7) (sex indeterminable), Russia, Leningrad Prov., little pond near Pushkin city, fallen leaves near the shore, 16.IV.1995, D.V.Tumanov.

*Paratypes.* Slides No. 155(2), 155(5), 155(8), from the same sample.

*Other material.* 10 adult animals from the same locality.

All the material is kept in the Zoological Institute, St.Petersburg.

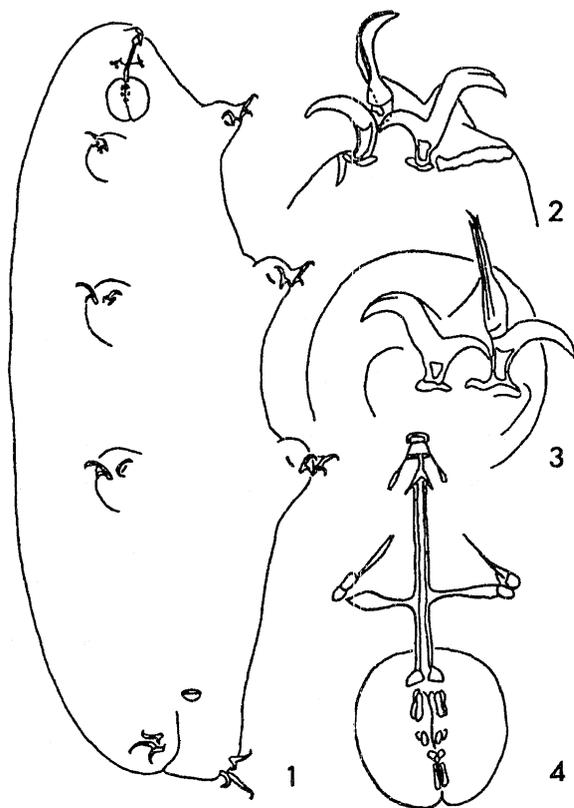
*Description.* Length of adult animals 300.3-432.3  $\mu\text{m}$  (in holotype, 392.2  $\mu\text{m}$ ). Body white; yellow-brown material in the mid-gut often present. Eye spots present in most specimens. Cuticle smooth.

Bucco-pharyngeal apparatus of *Hypsibius* type, with apophyses for insertion of stylet muscles in the shape of a "semilunar hook".

**Table.** Measurements of *Hypsibius iskandarovi* (in  $\mu\text{m}$ , except ratios; N = 14)

Measurements	Holotype	Average (Range)	Standard error
btl	28.6	26.0 (24.0-30.0)	0.48
ssi	19.1	16.9 (15.0-20.0)	0.43
Ptss (in %)	66.8	65.0 (57.7-70.4)	0.83
btd	1	1	-
prl	8.0	7.4 (6.8-8.9)	0.19
fpl	4.2	3.7 (3.1-4.6)	0.13
spl	3.0	2.6 (2.0-3.1)	0.08
u1e	19.0	16.8 (13.2-19.8)	0.51
u1i	11.9	10.7 (9.0-12.9)	0.35
u4e	24.0	21.4 (18.1-26.6)	0.64
u4i	15.0	12.7 (11.0-15.8)	0.64
PtU4e (in %)	83.9	82.2 (75.4-95.3)	1.44

*Abbreviations:* btl, buccal tube length; ssi, distance from cephalic end of buccal tube to stylet supports; Ptss, ratio ssi/btl; btd, inner buccal tube diameter; prl, length of the row of macroplacoids; fpl, spl, length of 1st and 2nd macroplacoids; u1e, height of external claws of 1st pair of legs; u1i, height of internal claws of 1st pair of legs; u4e, height of external claws of 4th pair of legs; u4i, height of internal claws of 4th pair of legs; PtU4e, ratio u4e/btl.



**Figs 1-4.** *Hysibius iskandarovi* sp. n.: 1, habitus (ventral view); 2, claws of 2nd pair of legs; 3, claws of 4th pair of legs; 4, bucco-pharyngeal apparatus.

Pharyngeal bulb nearly spherical, with large apophyses, two macroplacoids, septulum and pseudoseptulum similar to those described for *Diphascon mirabile* (Dastyh, 1984). First macroplacoid distinctly longer than second, strongly constricted in middle (for dimensions see Table).

Legs with relatively large, massive claws of *Hysibius* type. Claws of legs of 1st-3rd pairs with lunules (sometimes poorly visible on outer claws); inner claws with wide cuticular bars near their bases. Inner claws of 4th pair of legs with well-developed lunules; outer

claw bases with appendage directed to inner claw and in some specimens with indistinct, rudimentary lunules.

**Remarks.** *H. iskandarovi* undoubtedly belongs to the "dujardini group" including the colourless *Hysibius* with smooth cuticle and two rod-shaped macroplacoids (Maucci, 1996). In its massive claws, it is most similar to *H. pachyunguis* Maucci, 1996, but can be easily distinguished from all species of this group by the presence of cuticular bars near the claws of 1st-3rd pairs of legs. It differs clearly from all species possessing this structure (*H. marcelli* and *H. morikawai*) by the absence of cuticular sculpture. This species possesses a unique feature within *Hysibius* – pseudoseptulum, which was previously known only in two species of *Diphascon*.

**Etymology.** The species is named for my friend V. Iskandarov, who helped me in collecting the material.

## References

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