

## A new species of free-living nematode *Glauxinema przhiboroi* sp. n. (Nematoda: Rhabditida) from Tuva

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*Glauxinema przhiboroi* sp. n. is described from Tuva Republic.

**Key words:** free-living nematodes, new species, *Glauxinema*

### *Glauxinema przhiboroi* sp. n. (Figs 1-4)

**Holotype.** Zoological Institute, Russian Academy of Sciences, St. Petersburg, microscope slide № A-5974; male; **Russia**, Tuva Republic, Tere-Khol Lake, littoral, 2%, silt; 22 June 2006; coll. A. Przhiboro.

**Paratypes.** 2 males, 4 females, Tere-Khol Lake, 22 June 2006; coll. A. Przhiboro.

**Description.** Holotype (male): L=631 µm, a=35, b=6, c=3, c'=15, spic. 28 µm.

Paratypes (males, n=2): L=716-722 µm, a=28-36, b=5.9-6.3, c=3.3, c'=12-14, spic. 24-25 µm; (females, n=4): L=886-1039 (925) µm, a=33-39 (35), b=6.4-7.6 (7.2), c=2.7-3.3 (3), V=37-42 (40) %, c'=16-27 (21); (males, n=3): L''\*=422-506 (475) µm, a''=19-25 (23), b''=4-4.4 (4.2); (females, n=4): L''=522-679 (639) µm, a''=21-26 (24), b''=4.4-4.8 (4.6), V''=57-60 (58) %.

Cuticle thin, marked with fine transverse striae, about 1 µm thick, with 18-22 longitudinal ridges. Head only slightly set off from the body contour, front end of head slightly rounded. Head width in females 12-16 (14) µm, in males 10-12 µm. Depth of stoma 11-13 µm, cheilosoma with 12 cuticularized curved ribs. Dorsal tooth large, 3-4 µm; subventral tooth smaller, triangular. Total length of oesophagus 104-222 (113) µm in males and 118-143 (132) µm in females. Medial bulb 14-16 µm. Distance from vulva to anus only 0.7-0.9 of tail length. Q<sub>1</sub>=105

109 µm, Q<sub>2</sub>=91-159 µm; testis single, bent, 260-340 µm. Length of tail 209-218 (214) µm in male and 230-380 (313) µm in female. Tail in each sex very long, filiform. Spicula 24-28 (26) µm, gubernaculum 10-13 (12) µm.

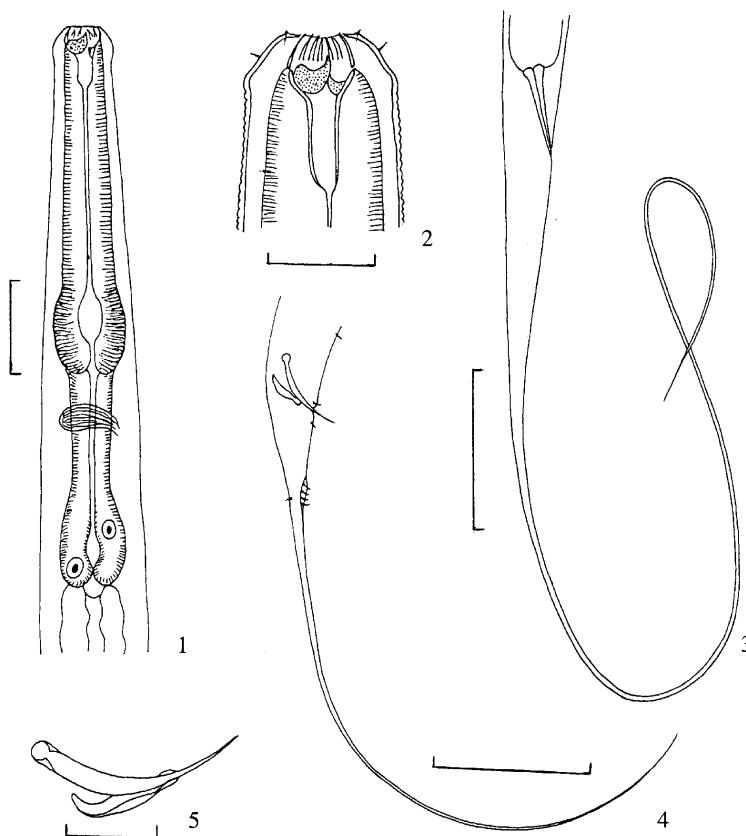
**Diagnosis.** The new species is most similar to *G. flagellicaudatum* (Andrássy, 1958), but differs from it in the length of spicula (24-28 µm vs. 32-35 µm) and more massive subventral tooth.

**Habitat.** Shallow “lagoon” of Tere-Khol Lake with organic pollution; water salinity about 2%.

**Comments.** The status of the genus *Glauxinema* (Allgen, 1947) has been revised repeatedly. Apart from being reduced to a synonym of such genera as *Mononchooides* Rahm, 1928, *Eudiplogaster* Paramonov, 1952 or *Prosodontus* Paramonov & Sobolev, 1954 (Abolafia, 2006; Andrássy, 1984; Sudhaus & Liven, 2003), *Glauxinema* was regarded also as a genus inquirenda (Goodey, 1963). The genus *Glauxinema* includes the following species: *G. americanum* (Steiner, 1930), *G. andrassyi* (Timm, 1961), *G. afodii* (Boven, 1937), *G. armatum* (Hofmaenner, 1913), *G. filicaudatum* Allgen, 1947, *G. flagellicaudatum* (Andrássy, 1962), *G. schwemmelei* (Sachs, 1950), *G. splendidum* (Koerner, 1954), and *G. trichuris* (Cobb, 1893).

The members of the genus *Glauxinema* occur in soil, compost, dung and in other saprobic habitats, and are distributed all over the World except Antarctica. The discovery of the genus *Glauxinema* and other

\* Without tail.



**Figs 1-4.** *Glauxinema przhiboroi* sp. n. 1, oesophagus; 2, head; 3, tail of female; 4, tail of male; 5, spicula. Scale bars: 1, 2, 5 – 10  $\mu\text{m}$ ; 3, 4 – 50  $\mu\text{m}$ .

diplogasterids or rhabditids in fresh and brackish waters suggests organic pollution of the waters. Thus, diplogasterids may be regarded as good indicators of the water quality, a fact that was pointed out by the author for the first time long ago (Tsalo-likhin, 1976).

#### ACKNOWLEDGEMENTS

I am very grateful to Andrey A. Przhiboro for benevolence to free-living nematodes and collecting interesting material from Tuva.

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Received 10 February 2009 / Revised 15 April 2009 / Accepted 12 May 2009