

## *Aporcelaimellus saprophilus* sp. n., a new freshwater nematode from Central Russia (Nematoda: Dorylaimida: Aporcelaimidae)

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*Aporcelaimellus saprophilus* sp. n. from Lachost River (Yaroslavl Prov., Central Russia) is described and illustrated. It differs from *A. cylindricus* Ahmad, 1995 in the thicker body, longer odontostyle and spicules and larger number of supplements in males; from *A. simus* (Andrássy, 1958), it differs in the thicker body, distinctive shape of the lip region, longer odontostyle and spicules, larger number of supplements in males.

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### ***Aporcelaimellus saprophilus* sp. n.** (Figs 1-7)

*Holotype*. ♂, Russia, Yaroslavl Prov., near City of Yaroslavl, Lachost River, tributary of Kotorosl River, depth of 1.5 m, sand with detritus, 18.V.1997, slide No. 21/1, Institute of Inland Waters Biology, Russian Academy of Sciences, Borok, Yaroslavl Prov.

*Paratypes*. 2 ♂, 2 ♀, collected with the holotype.

*Mearusements*. See Table.

*Description*. Body straight or slightly curved ventrally in fixed specimens. Cuticle and subcuticle smooth, without longitudinal ridges and transverse striae. Thickness of cuticle varying along the body: 3.0-4.0 µm at head, 2.0-2.5 µm at mid-body, 6.0-7.0 µm at tail. One pair of lateral pores at head region. Lateral chord 21-27 µm wide, about 1/3-1/4 the body diameter. Lip region high and angular, offset from adjacent body by a deep constriction; 2.5-3.0 times as wide as high. Labial and cephalic papillae large, distinct. Amphid opening at level of the cephalic depression and occupying about half of the corresponding body width. Odontostyle straight, 5.5-6.0 times as long as wide, its length 1.1-1.2 times the lip region diameter; aperture occupying 45-50% of its length. Odontophore rod-like, 1.3-1.5 times as long as odontostyle. Guiding ring double. Oesophagus muscular, expanded portion occupying 47-50% of its total length. Nuclei of oesophageal glands distinct. DS 62-63%, K 66-

68%, AS1 28-31%, AS2 40-44%, PS1 62-63%, PS2 65-67%. Cardia short conoid. Cardial disc present.

*Female*. Genital tubes paired, outstretched. Vulva lips not protruding outside the body contour. Ovaries relatively short, not reaching the oviduct-uterus junction. Oocytes numerous, anteriorly in two rows, then in a single row. Oviduct joining the ovary subterminally and consisting of a slender part with prismatic cells and a usually well developed *pars dilatata*. Junction between oviduct and uterus without a distinct muscular sphincter. Uterus 2-3 times as long as the corresponding body width, usually shorter than oviduct, often with spindle-shaped spermatozoa 10-11 µm long. Vagina 40-43 µm and extending inwards to 40-43% of the corresponding body diameter; *pars proximalis vaginae* 34-37 µm long; *pars refrigens vaginae* consists of two well developed triangular sclerotizations; *pars distalis vaginae* practically absent. Vulva a transverse slit. Prerectum 2.0-2.8 times and rectum 1.0-1.1 times as long as anal body width. Tail short conoid, with straight subdigitate tip; 2 pairs of subdorsal papillae on each side of tail.

*Male*. Testes paired, opposed. Spicules dorylaimoid, comparatively slender, 1.3-1.4 times as long as cloacal body width. Lateral guiding pieces about 7.0 µm long. One adanal supplement and 16-17 regularly spaced ventromedian supple-

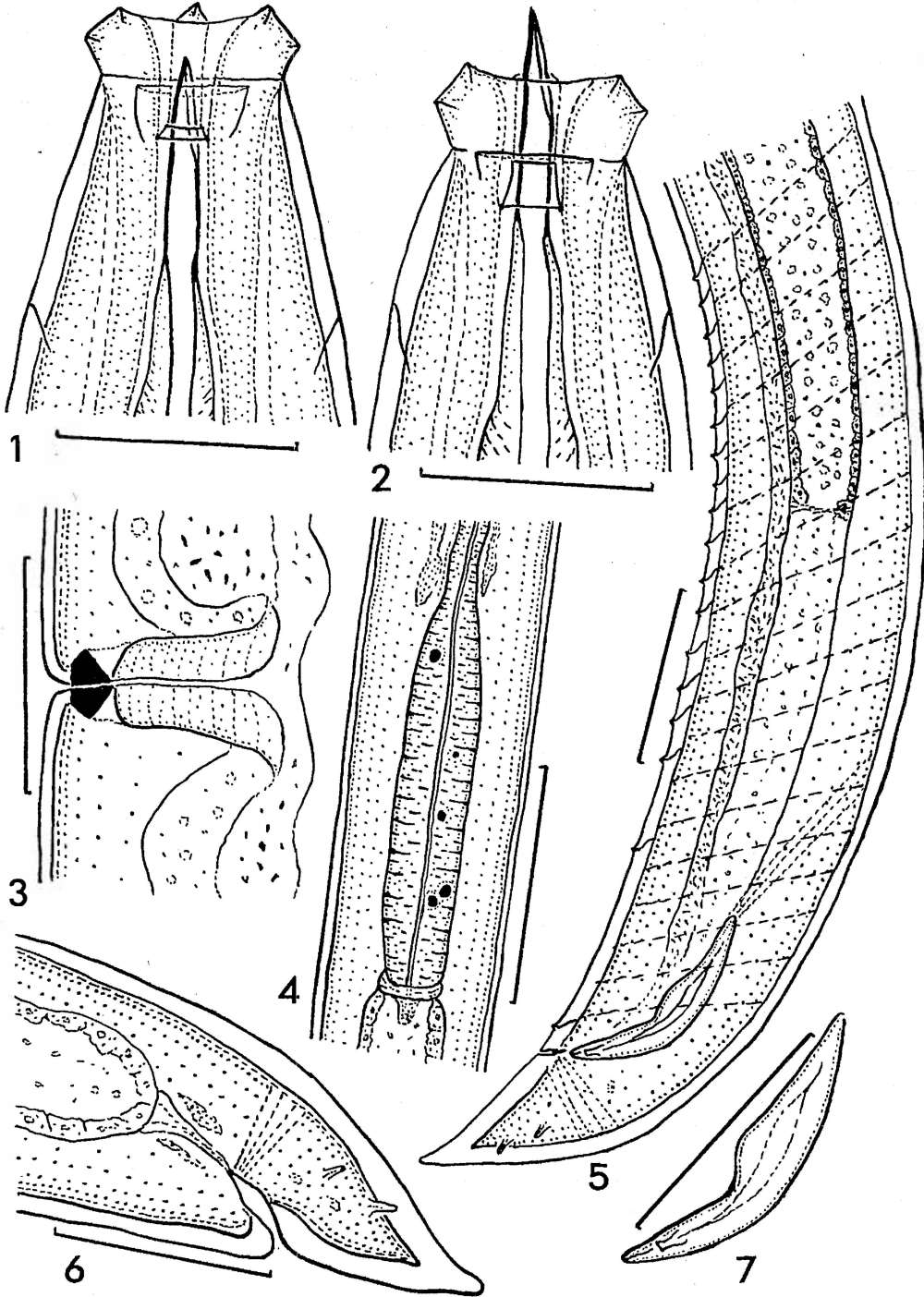
**Table.** Measurements of *Aporcelaimellus saprophilus* sp. n.

Characters	Holotype male	Paratypes	
		2 females	2 males
Body length, $\mu\text{m}$	1703	1598, 1652	1564, 1775
Labial region width, $\mu\text{m}$	19	18, 19	18
Odontostyle length, $\mu\text{m}$	21	22	21
Odontophore length, $\mu\text{m}$	31	29, 28	28, 30
Oesophagus length, $\mu\text{m}$	388	311, 368	367, 385
Posterior end of oesophagus–vulva, $\mu\text{m}$	–	504, 553	–
Vulva–anus, $\mu\text{m}$	–	735, 686	–
Posterior end of oesophagus–cloaca, $\mu\text{m}$	1267	–	1158, 1348
Anterior genital branch of female, $\mu\text{m}$	–	660, 576	–
Anterior ovary, $\mu\text{m}$	–	301, 198	–
Posterior genital branch of female, $\mu\text{m}$	–	712, 558	–
Posterior ovary, $\mu\text{m}$	–	291, 223	–
Prerectum length, $\mu\text{m}$	126	57, 84	104, 128
Rectum length, $\mu\text{m}$	–	42, 43	–
Tail length, $\mu\text{m}$	48	48, 45	40, 42
A	20	17, 18	18, 22
B	4.4	5.1, 4.5	4.3, 4.6
c	35	33, 37	40, 42
c'	1.0	1.1, 1.1	0.9, 0.9
V	–	51.0, 55.8	–
Spicule length, $\mu\text{m}$	62	–	59, 61
Ventral supplements	18	–	17, 18

ments. Distance from adanal supplement to series of ventromedian supplements 56–63  $\mu\text{m}$ . Series of ventromedian supplements 155–164  $\mu\text{m}$  long. All supplements in the form of small papillae. Prerectum 2.5–2.8 times as long as body width, beginning at distance 67–75  $\mu\text{m}$  from the anterior ventromedian supplement. Tail short conoid, with curved ventrally subdigitate tip. Two pairs of subdorsal papillae on each side of tail.

*Comparison.* In the body size and tail shape, the new species closely resembles *A. cylindricus*

Ahmad, 1995 and *A. simus* (Andrássy, 1958). It differs from the first species in the thicker body (in *A. cylindricus*,  $a = 39\text{--}42$ ), longer odontostyle and odontophore (in *A. cylindricus*, odontostyle 14  $\mu\text{m}$  long, odontophore 22–23  $\mu\text{m}$  long), longer spicules (in male of *A. cylindricus*, spicules 41–42  $\mu\text{m}$  long) and larger number of supplements (in male of *A. cylindricus*, one preanal supplement and a series of 5 spaced ventromedian supplements) (Ahmad, 1995). From the second species, it differs in the shape of the lip region (in *A. simus*,



Figs 1-7. *Aporcelaimellus saprophilus* sp.n. 1, head of male; 2, head of female; 3, vulva region; 4, posterior end of oesophagus; 5, posterior end of male; 6, tail of female; 7, spicules. Scales: 20  $\mu$ m (1, 2), 50  $\mu$ m (3, 5-7), 100  $\mu$ m (4).

lip region only slightly offset from the adjoining body part, lips round, labial and cephalic papillae small), thicker body (in *A. simus*, a = 38.0-43.9), longer odontostyle (in *A. simus*, odontostyle 17.4  $\mu\text{m}$  long) and larger number of supplements (in males of *A. simus*, one preanal supplement and series of 5 spaced ventromedian supplements) (Andrássy, 1958).

*Etymology.* The species name means “lover of saprobic biocenosis”.

## References

- Ahmad, W. 1995. Studies on the genus *Aporcelaimellus* Heyns, 1965 (Dorylaimida: Aporcelamidae) from India. *Fundam. Appl. Nematol.*, **18**(3): 219-225.
- Andrássy, I. 1958. Erd- und Süßwassernematoden aus Bulgarien. *Acta Zool. Acad. Sci. Hung.*, **4**(1/2): 1-88.

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