

Baikal nematodes of the genus *Ethmolaimus* (Nematoda: Chromadorida: Ethmolaimidae)

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Descriptions of four species of Baikal nematodes of the genus *Ethmolaimus* de Man, 1880 are given. Three species are new. *E. derisorius* sp. n. differs from all species of the genus in the extremely high position of the excretory duct of the renette. *E. pilosus* sp. n. differs from all species of the genus in the extremely long somatic setae. *E. lanatus* sp. n. differs from *E. pilosus* sp. n. in the longer cephalic setae, finer punctation and smaller size of spicules. *E. revaliensis* (G. Schneider, 1906) Steiner, 1913 is recorded for the first time from Baikal.

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This article continues the series of publications on nematodes collected by the author on littoral of Southern Baikal in 1986-1987. Till now only one species of the genus *Ethmolaimus* de Man, 1880 has been recorded from Baikal: *E. pratensis* de Man, 1880 from the littoral of Southern Baikal (Tsallikhin, 1980).

Ethmolaimus derisorius sp. n. (Figs 1-6)

Holotype. ♂, Russia, Baikal Lake, Peschanaya Bay, depth 3-4 m, very fine, slightly silted sand, 17.VII.1987 (Shoshin), microscope slide No. A-6333, Zoological Institute, St. Petersburg.

Paratypes. 2 ♀ and 1 ♂ from the same locality.

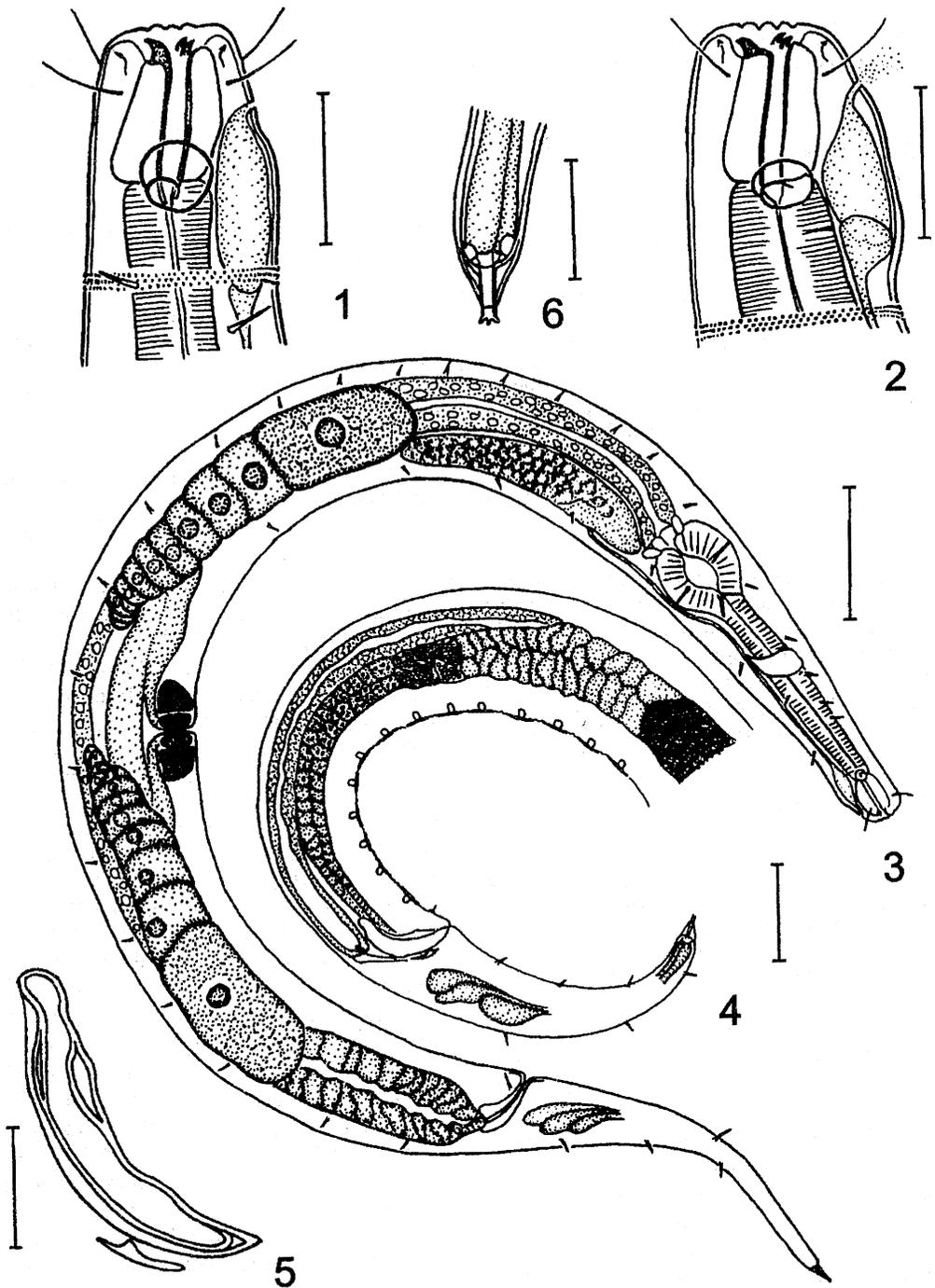
Description of holotype. L = 795 µm, a = 20.9, b = 6.3, c = 8.8, c' = 4.5. Cuticle punctation fine, homonomous. Head 15 µm wide. Cephalic setae 7 µm long. Excretory duct of renette opens at level of middle of stoma; ampulla of renette very large, that brings to deformation of head. Depth of stoma 18 µm, width 2 µm; dorsal tooth appreciably larger than subventral teeth. Amphid 7 µm in diameter, located at distance 10 µm from anterior end. Oesophagus 127 µm long. Oesophageal bulbus 30 × 25 µm. Renette very large, 120 µm long. NR = 54%. Diameter of body 38 µm. Spicules 40 µm long, bent, with vague proximal capitulum; gubernaculum 12

µm long. Supplements 12; length of supplemental line 150 µm; precloacal seta 3 µm long. Tail 90 µm long.

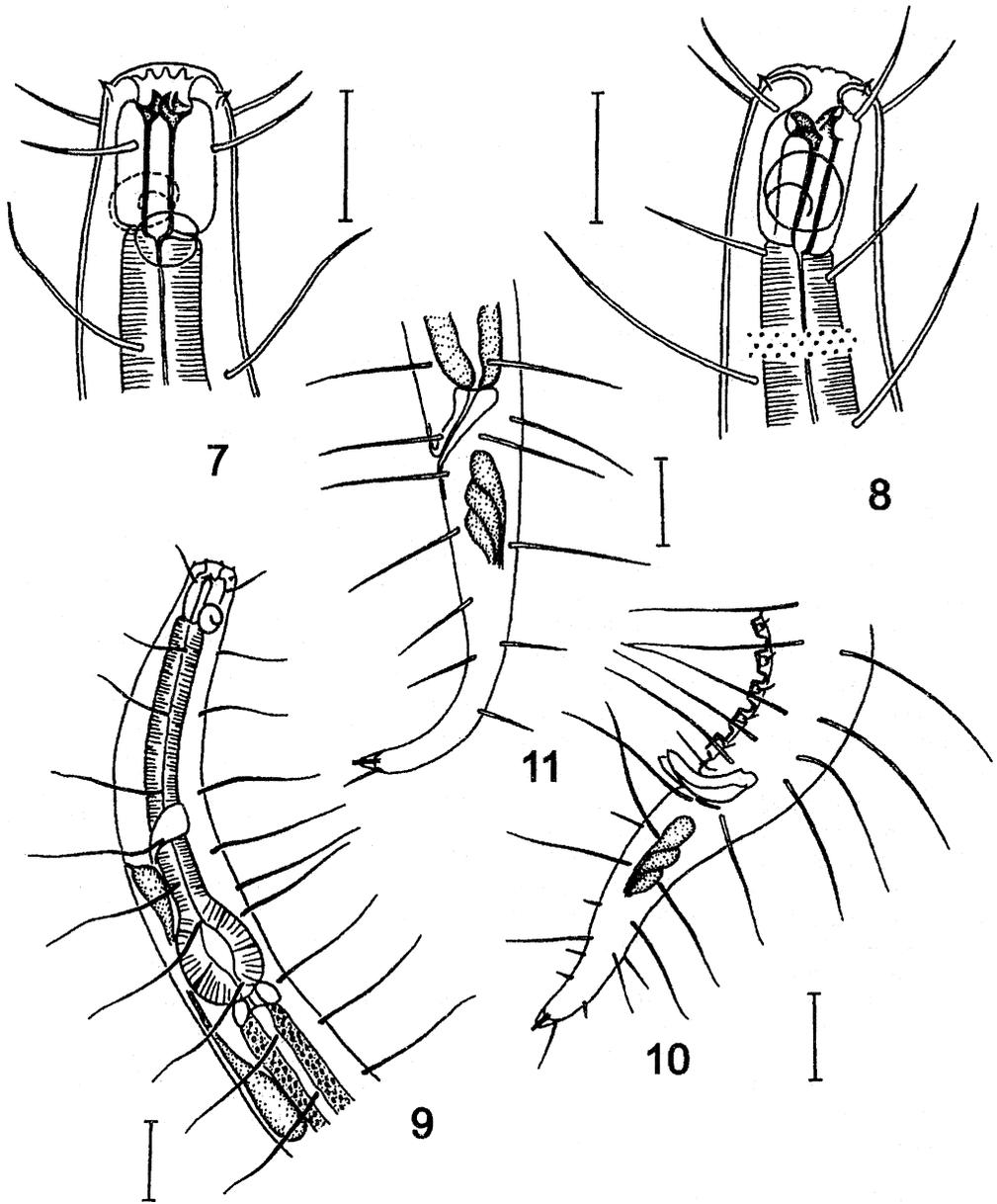
Description of paratypes. ♀ (n=2): L = 710-800 (755) µm, a = 15.8-17.4 (16.6), b = 5.7-5.8, c = 5.5-6.7 (6.1), c' = 5.2-5.4, V = 53.5-55.0 (54.3)%. Cuticle punctation fine, homonomous. Somatic setae 4-5 µm long. Head 15 µm wide. Cephalic setae 7 µm long. Excretory duct of renette opens at level of middle of stoma; ampulla of renette very large, that brings to deformation of head. Depth of stoma 17-18 µm; dorsal tooth appreciably larger than subventral teeth. Amphid oval, coiled in 1.5 spirals, 6 µm in diameter, located at distance 13-14 µm from anterior end. Oesophagus 125-138 µm long. NP = 52-54%, Oesophageal bulbus 30-35 × 28-29 µm wide. Renette very large, 100-120 µm long. Diameter of body 45-46 µm. Tail 120-130 µm long; subterminal seta absent.

♂: L = 740 µm, a = 17.6, b = 6.7, c = 8.2, c' = 3.5. Head 13 µm wide. Diameter of amphid 6 µm. Oesophagus 110 µm long. NR = 57%. Oesophageal bulbus 25 × 25 µm. Spicules 38 µm long; gubernaculum 12 µm long. Supplements 14; length of supplemental line 160 µm. Tail 90 µm long.

Comparison. *E. derisorius* differs from all species of the genus in the extremely high position of the excretory duct of the renette.



Figs 1-6. *Ethmolaimus derisorius* sp. n.: 1, head of male (holotype); 2, head of female; 3, female; 4, tail of male (holotype); 5, spicule; 6, spinnereta. Scales: Figs 1, 2, 5, 6 – 15 μ m; Figs 3, 4 – 40 μ m.



Figs 7-11. *Ethmolaimus pilosus* sp. n.: 7, head of female; 8, head of male (holotype); 9, oesophagus (holotype); 10, tail of male (holotype); 11, tail of female. Scales: Figs 7, 8 – 15 μ m; Figs 9-11 – 25 μ m.

Etymology. From Latin "derisorius" (ridiculous, amusing), because of appreciable deformation of head by the ampulla of the renette.

***Ethmolaimus pilosus* sp. n.**
(Figs 7-11)

Holotype. ♂, Russia, Baikal Lake, Peschanaya Bay, depth 3-4 m, very fine, slightly silted sand, 17.VII.1987 (Shoshin), microscope slide No. A-6334, Zoological Institute, St. Petersburg.

Paratypes. 3 ♀ and 2 ♂ from the same locality, from depths 3-4 and 5-6 m, from fine sand.

Description of holotype. L = 720 μm, a = 18.9, b = 5.5, c = 8.0, c' = 3.8. Cuticle punctation large, homonomous. Somatic setae numerous, extremely long. Their length at level of first half of oesophagus 22-30 μm, then growing up to 38-50 μm and on tail decreasing from 32 to 15-20 μm. At all levels of body, length of somatic setae exceeds the diameter of body. Head 15 μm wide; cephalic setae 15 μm long; depth of stoma 21 μm; all teeth of equal sizes. Amphid 11 μm in diameter, located at distance 10 μm from anterior end. Oesophagus 132 μm long; bulbus of oesophagus 30 × 25 μm. NR = 55%. Diameter of body 38 μm. Supplements 14. Spicules wide, 37 μm long, bent; gubernaculum 8 μm long. Preloacal seta 10 μm long. Tail 90 μm long. Subterminal seta present.

Description of paratypes. ♀ (n = 3): L = 900-1070 (1000) μm, a = 18.5-21.4 (19.5), b = 6.5-7.0 (6.8), c = 8.3-9.7 (8.8), c' = 4.4-5.4 (5.0), V = 50.1-53.9 (51.8)%. Punctuation large, homonomous. Somatic setae numerous, extremely long. At all levels of body, length of somatic setae exceeds the diameter of body. Head 15-17 μm wide; length of cephalic setae equal to diameter of head. Depth of stoma 19-24 μm. Amphid 8 μm in diameter, located at distance 11-15 μm from anterior end. Oesophagus 138-153 (147) μm long; oesophageal bulbus 32-35 μm long (not more than 23% of length of oesophagus). NR = 51-53%. Diameter of body 48-55 μm. Tail 108-120 (113) μm long. Subterminal seta present.

♂ (n = 2): L = 820-870 μm, a = 22.9-23.3, b = 6.5-6.7, c = 10.9, c' = 3.4-3.8. Punctuation large, homonomous. Somatic setae numerous, extremely long. At all levels of body, length of somatic setae exceeds the diameter of body. Head 15 μm wide; depth of stoma 20-21 μm.

Amphid appreciably larger than in females, its diameter 11 μm. Oesophagus 125-132 (130) μm long. Diameter of body 35-38 μm. Spicules 32-34 μm long; gubernaculum 8 μm long. Supplements 12-14; length of supplemental line 120-160 μm. Preloacal seta 10 μm long. Tail 75-90 (82) μm long.

Comparison. *E. pilosus* differs from all species of the genus in the extremely long somatic setae.

Etymology. From the Latin "pilosus" (shaggy, hairy), for numerous long setae covering the body.

***Ethmolaimus lanatus* sp. n.**
(Figs 12-14)

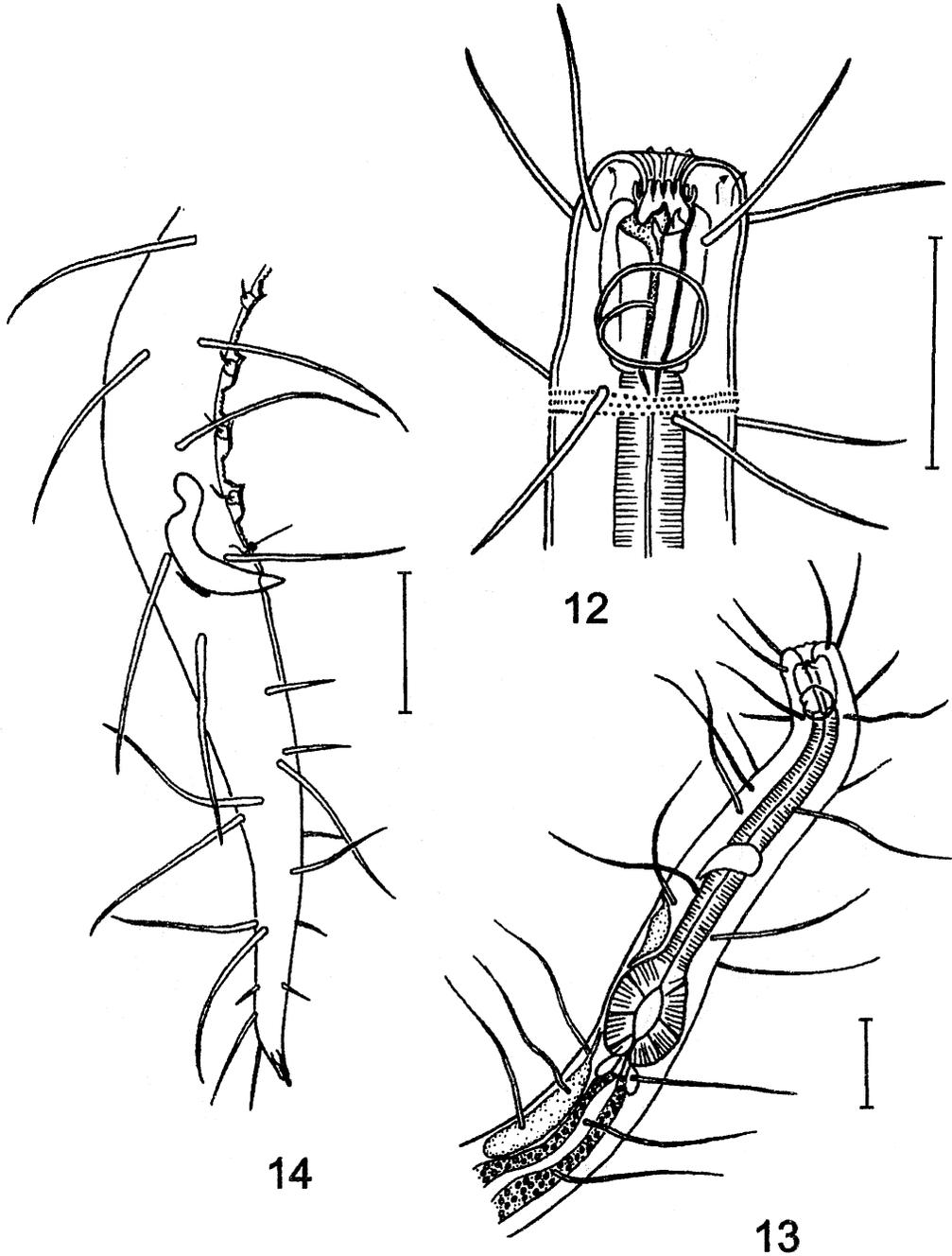
Holotype. ♂, Russia, Baikal Lake, Peschanaya Bay, depth 3-4 m, very fine, slightly silted sand, 17.VII.1987 (Shoshin), microscope slide No. A-6335, Zoological Institute, St. Petersburg.

Paratypes. 5 ♂ from the same locality, from depths 3-4 and 5-6 m, from fine sand.

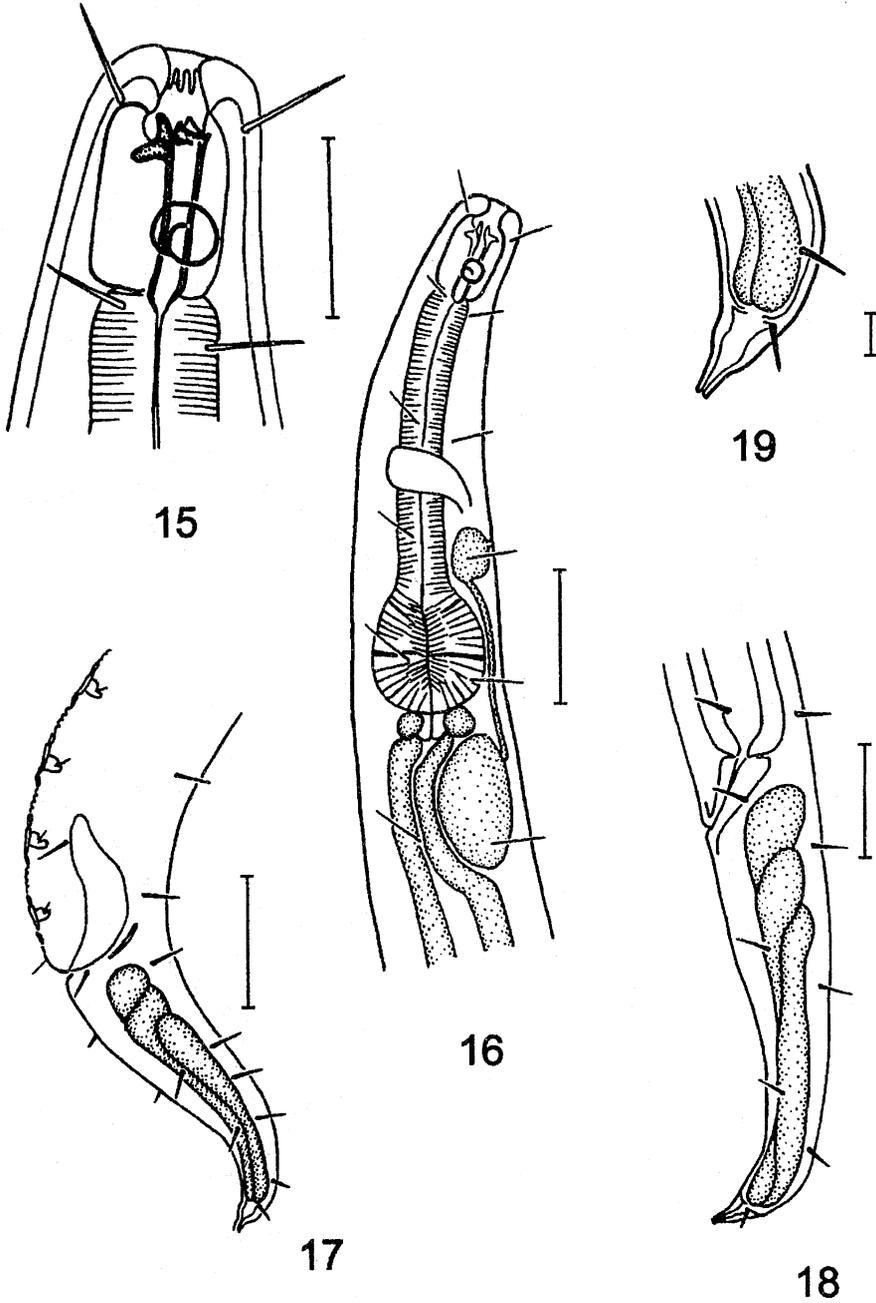
Description of holotype. L = 920 μm, a = 40.0, b = 6.2, c = 10.2, c' = 4.5. Punctuation homonomous, fine. Somatic setae numerous, extremely long, their length on anterior end of body 25 μm, further increasing up to 33-35 μm and on tail decreasing to 24-28 μm. At all levels of body, length of somatic setae exceeds the diameter of body. Head 16 μm wide; cephalic setae 25 μm long. Depth of stoma 23 μm; dorsal tooth appreciably larger than subventral teeth. Amphid 11 μm in diameter, located at distance 11 μm from anterior end. Oesophagus 148 μm long. NR = 53%. Diameter of body 23 μm. Supplements 14; length of supplemental line 215 μm. Preloacal seta 7 μm long. Spicules 28 μm long, strongly bent, with proximal capitulum; gubernaculum 8 μm long. Tail 90 μm long; subterminal seta present.

Description of paratypes. ♂ (n = 5): L = 680-1180 (920) μm, a = 28.8-35.8 (32.3), b = 5.7-7.3 (6.5), c = 9.7-11.8 (10.7), c' = 4.0-4.4 (4.3). Head 15-16 μm wide; cephalic setae 23-25 μm long. Depth of stoma 20-23 μm. Diameter of amphid 9-11 μm. Oesophagus 120-163 (143) μm. NR = 49-55 (53)%. Supplements 13-14; supplemental line 190-200 μm long. Spicules 25-30 (27) μm long; gubernaculum 7-8 μm long. Tail 70-100 (87) μm long. Subterminal seta present.

Females unknown.



Figs 12-14. *Ethmolaimus lanatus* sp. n. (holotype): 12, head of male; 13, oesophagus; 14, tail of male. Scales: 25 μ m.



Figs 15-19. *Ethmolaimus revaliensis* (G. Schneider): 15, head of male; 16, oesophagus; 17, tail of male; 18, tail of female; 19, spinnereta. Scales: Fig. 15 – 15 μ m; Figs 16-18 – 30 μ m; Fig. 19 – 5 μ m.

Comparison. The new species is most close to *E. pilosus* sp. n. from which it differs appreciably in the longer cephalic setae, finer punctation, finer and more bent spicules.

Etymology. From the Latin "lanatus" (disheveled), for numerous long somatic setae.

Ethmolaimus revaliensis (G. Schneider, 1906)
Steiner, 1913
(Figs 15-19)

Material. 1 ♀, 3 ♂, Russia, Baikal Lake, Peschanaya Bay, depths 0.5-1, 7.0 and 8.0 m, from large stones, 11 and 14.VIII.1986 (Shoshin).

Description. ♀: L = 770 μm, a = 17.4, b = 6.4, c = 7.0, c' = 3.9, V = 47.7%. Punctation large, homonomous. Somatic setae numerous, 7-12 μm long. Head 17 μm wide; cephalic setae 7 μm long. Depth of stoma 20

μm. Diameter of amphid 6 μm. Oesophagus 120 μm long. NR = 50%. Tail 110 μm long. Subterminal seta present.

♂ (n = 3): L = 700-780 (740) μm, a = 13.9-19.9 (15.6), b = 6.0-6.2 (6.1), c = 8.7-9.8 (9.2), c' = 2.4-3.0. Head 15-17 μm; cephalic setae 8-13 μm long. Depth of stoma 23-25 μm. Diameter of amphid 6-7 μm. Oesophagus 115-125 μm long. Supplements 14-15. Spicules 36-45 (42) μm long; gubernaculum 13-15 μm long. Tail 75-90 μm long.

References

Tsalolikhin, S.J. 1980. *Svobodnozhivushchie nematody Baikala* [Freeliving nematodes of Baikal]. 119 p. Novosibirsk, Nauka. (In Russian).

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