

# Record of *Epitobrilus parvipapillatus* (Kreis, 1932) from Japan with a key to species of *Epitobrilus* (Nematoda, Enoplida: Tobrilidae)

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*Epitobrilus parvipapillatus* is recorded for the second time, about 70 years after the original description. Seven females were found in Biwa Lake, Japan. Description of the species and a key to species of *Epitobrilus* Tsalolikhin, 1981 are given.

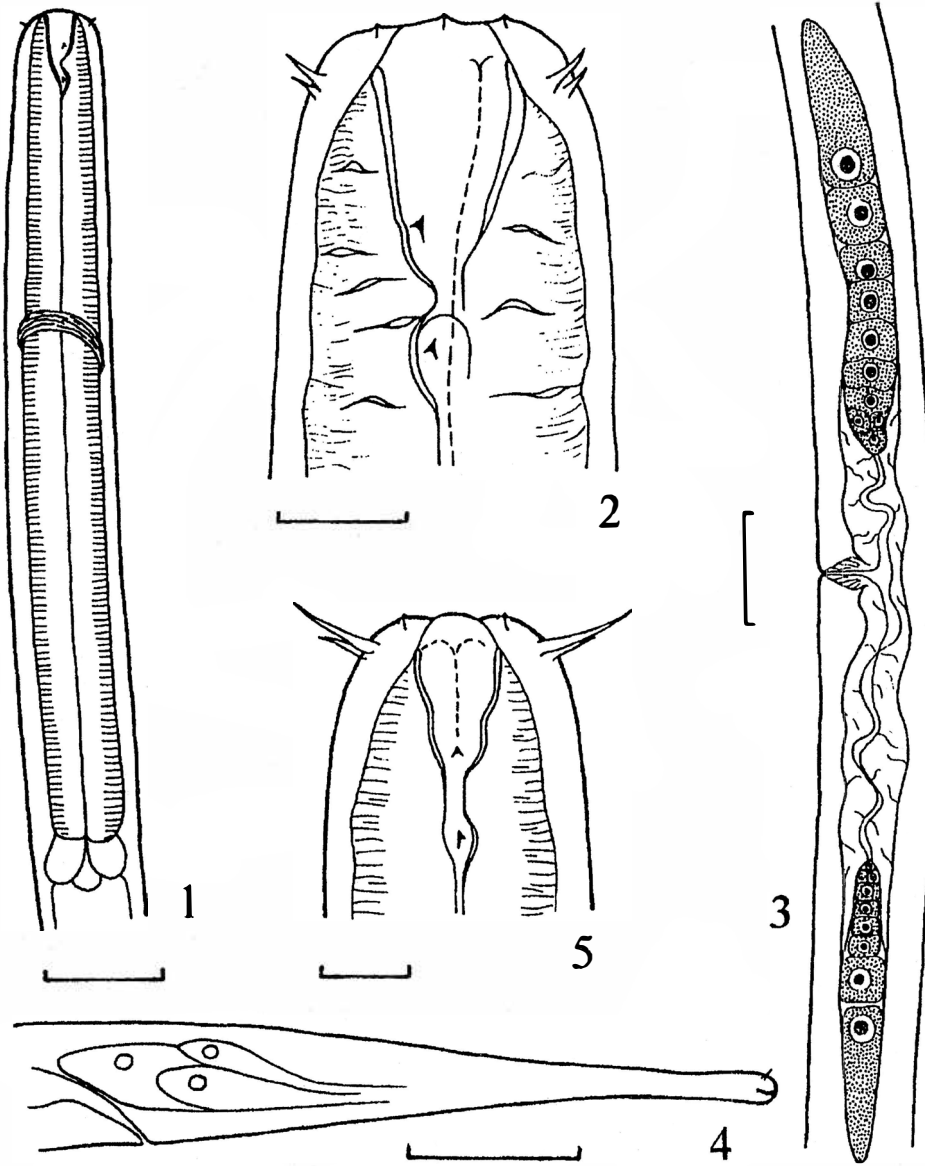
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*Epitobrilus parvipapillatus* was described (Kreis, 1932) in the genus *Tobrilus* from 13 specimens (5 ♀, 1 ♂, 7 juv.) collected in swamps of the western part of the basin of the Paraguay and Parana rivers (the Paraguayan Chaco). No further records were published. Quite unexpectedly, this species (Figs 1-4) was found in samples collected by Dr. O.A. Timoshkin, in July 1996 on sand littoral (0.5 and 2 m) of Biwa Lake, Japan. Dimensional characteristics and structure of taxonomically significant section of the body give ground to identify the 7 females from Biwa Lake as *E. parvipapillatus*: L = 1314-1585 (1444 ± 34) μm, a = 28.6-43.4 (35.8), b = 4.8-5.6 (5.2), c = 9.5-11.2 (10.4), V = 42-46 (44)%, c' = 6. Cuticle smooth. Head 17-19 μm wide; longer cephalic setae 4-5 μm long. Total depth of stoma (buccal cavity + pockets) 24-29 (26) μm; width of buccal cavity 9-10 μm; distance between apices of teeth 8-10 μm. Amphid indistinguishable. Oesophagus 254-330 (281 ± 9) μm long. NR = 39-41%. Reproductive system didelphic: Q<sub>1</sub> = 180-250 μm; Q<sub>2</sub> = 165-215 μm; depth of vagina 15-19 (17) μm. Rectum 23-24 μm long. Tail 126-160 (143 ± 5) μm long; subterminal seta reduced, scarcely visible. *E. parvipapillatus* differs from other species of the genus in the short cephalic setae and position of the nervous ring (39-41% vs. 30-35% pro norma).

The record of *E. parvipapillatus* from Japan complicates the zoogeographic pattern of tobrilids, which is inexplicable for the present. In the same sample from Biwa Lake, 2 juveniles and 1 female (without eggs) of *E. allophysis* (Steiner, 1919) were found (Fig. 5): L = 1757 μm, a = 46, b = 5.2, c = 8.1, NR = 35%, head 19 μm wide, longer cephalic setae 10 μm long. This species was found in Central Asia (Tsalolikhin, 1985, 1998).

## Key to species of the genus *Epitobrilus* Tsalolikhin, 1981 (females)

- 1(2). Tail 1/4 of body length or longer ..... *E. flagellatus* (Andrássy, 1963)
- 2(1). Tail 1/5 of body length or shorter.
- 3(4). Cephalic setae 6 μm or shorter ..... *E. parvipapillatus* (Kreis, 1932)
- 4(3). Cephalic setae 10 μm or longer.
- 5(6). Buccal cavity very broad; anterior tooth situated in the middle of the buccal cavity ..... *E. meyli* Tsalolikhin, 1981
- 6(5). Buccal cavity funnel-shaped (or broad); anterior tooth situated below the middle of the buccal cavity.
- 7(8). Body shorter than 2 mm ..... *E. allophysis* (Steiner, 1919)
- 8(7). Body longer than 2 mm.
- 9(12). Subterminal seta absent.
- 10(11). Head 40 μm wide or broader (males with 7 supplements) ..... *E. sablensis* (Ebsary, 1982)
- 11(10). Head 35 μm wide or narrower (males with 6 supplements) ..... *E. setosus* (Altherr, 1963)
- 12(9). Subterminal seta present (males with 5 supplements) ..... *E. medius* (G. Schneider, 1916)



Figs 1-5. 1-4, *Epitobrilus parvipapillatus*: 1, oesophagus; 2, head; 3, gonads; 4, tail. 5, *E. allophysis*, head. Scales: 10  $\mu$ m (Figs 2, 5); 40  $\mu$ m (Figs 1, 3, 4).

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