

Research Note

Presence of *Syphacia vandenbrueli* Bernard, 1961
(Nematoda: Oxyuridae) in Japan

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A species of the genus *Syphacia* (Nematoda: Oxyuridae) was collected from the harvest mice, *Micromys minutus japonicus* (Thomas, 1905), in Fukuoka Prefecture, Japan, and a close study revealed that this species was *S. vandenbrueli* Bernard, 1961. The worms were characterized by the elliptical cephalic end with laterally-grouped submedian papillae and amphid in apical view, and well-developed lateral alae in the cervical region pushing the cephalic vesicle anteriorly in lateral sides. Similar characteristics were also described in *S. frederici* Roman, 1945, but the present worms were readily distinguishable from this species in having wider lateral alae, larger body in female and longer tail in both sexes (Bernard, 1966; Quentin, 1971).

In the original description of *S. vandenbrueli*, the males were in poor condition and only the morphometric data were given (Bernard, 1966). This species was later redescribed by Tenora and Mészáros (1975) but based only on females, and there has been no detailed description of the male.

The following description and measurements are based on 2 males and 7 gravid females from *M. minutus japonicus* collected in Fukuoka City and Hisayama Town on March 16 to 18, 1981.

Male (Fig. 1): Body minute, 0.99–1.28 mm long by 90–93 μ m wide at anterior to posterior

mamelon. Posterior body bent ventrad. Lateral alae commencing from just behind cephalic end and ending in precloacal region, and 8 μ m wide at cervical region. Nerve ring 63–80 μ m and excretory pore 203–240 μ m from cephalic end. Cylindrical portion of esophagus 103–135 μ m long by 23–26 μ m wide; esophageal bulb 48–55 μ m long by 38–49 μ m wide. Three mamelons with conspicuous annulae present on ventral side: anterior mamelon 28–29 μ m, middle 25–28 μ m, posterior 31–33 μ m long and their anterior edges 348–457 μ m, 432–546 μ m and 529–635 μ m from cephalic end. Spicule simple, slightly narrowed at middle, pointed distally and 60–70 μ m long; gubernaculum 25–28 μ m long; terminal hook 8–10 μ m long. Three pairs of papillae, one precloacal, one adcloacal and largest one postcloacal, present. Body tapered suddenly behind postcloacal papillae in ventral view forming a long tail process. Tail including process 223–242 μ m long.

Female: Body 4.70–5.06 mm long by 0.21–0.23 mm wide at midbody; lateral alae 25–28 μ m wide at cervical region; nerve ring 110–125 μ m, excretory pore 0.38–0.44 mm and vulva 0.68–0.82 mm from cephalic end; cylindrical portion of esophagus 243–267 μ m long by 56–65 μ m wide; esophageal bulb 83–100 μ m long by 83–93 μ m wide; tail 0.81–0.97 mm; eggs 105–110 by 35–40 μ m.

Syphacia vandenbrueli was first described from the European harvest mouse, *Micromys minutus*, in Belgium (Bernard, 1961, 1966). Since then, this species has been reported from

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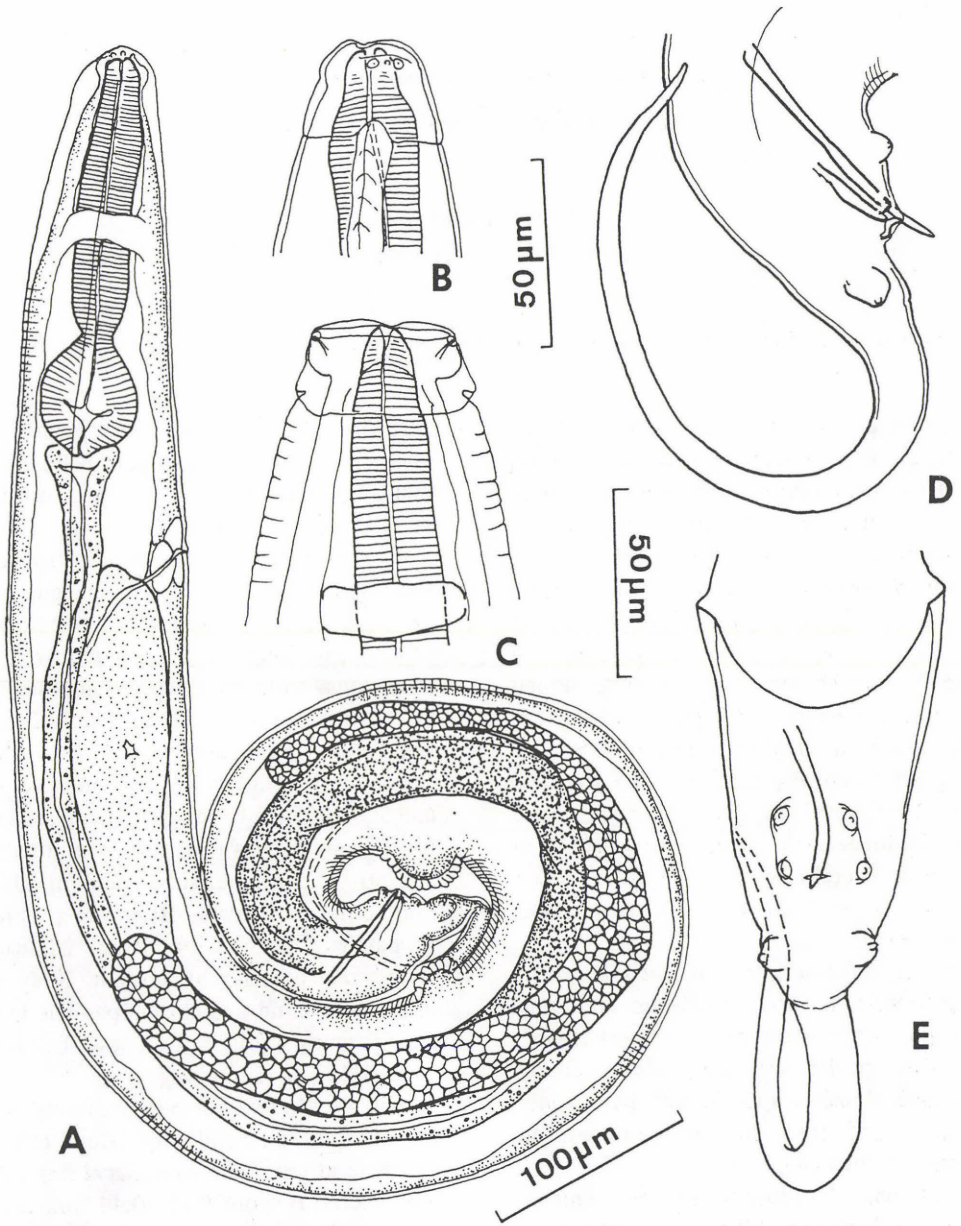


Fig. 1 Male of *Syphacia vandenbruei* Bernard, 1961 from *Micromys minutus japonicus* of Kyushu, Japan. A. Entire worm, lateral view; B, C. Cephalic end, lateral (B) and ventral (C) views; D, E. Posterior part, lateral (D) and ventral (E) views.

the same host species in Czechoslovakia, Hungary and Ukraine (Tenora and Mészáros, 1975; Sharpilo and Gritsaĭ, 1975). However, there has been no report on *S. vandenbruei* from the Far East, and this is the first record

from this region.

Micromys minutus is distributed widely from Europe to the Far East, and classified into nine subspecies (Corbet, 1978). The chromosomal studies revealed the close simi-

larities among European, Siberian and Japanese subspecies of *M. minutus*, suggesting the conservative nature of this rodent (e.g. Jüdes, 1981; Okura *et al.*, 1984). In this connection, it is considered to be natural that the harvest mice in Europe, Russia and Japan harbor the same *Syphacia* species.

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Syphacia vandenbrueli Bernard, 1961 (Nematoda: Oxyuridae) の日本における存在

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福岡県で捕獲されたカヤネズミ *Micromys minutus japonicus* の盲腸に *Syphacia vandenbrueli* Bernard, 1961を検出した。本種が日本を含む極東地域から報告

されるのはこれが最初である。また本種は雄の記載が不十分なので、その形態を記述・図示した。