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A Taxonomical Note on *Longistriata wolgaensis* sensu YAMAGUTI, 1954 (Nematoda: Heligmonellidae: Nippostrongylinae) from *Clethrionomys smithii*

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Longistriata wolgaensis SCHULZ, 1926[12] was originally described from *Arvicola amphibius* of U. S. S. R.. This species was subsequently synonymized with *Carolinensis minutus* (DUJARDIN, 1845)[6] which is widely distributed in the Palaearctic Region and parasitic in rodents of the genera *Arvicola*, *Pytymys* and *Microtus* (Durette-Desset).[7~9] Yamaguti[15] reported *Longistriata wolgaensis* SCHULZ, 1926[12] from *Clethrionomys smithii* (=*Eothenomys smithi*), *Apodemus speciosus speciosus* and *Microtus montebelli* collected on May 2, 1942, in Miure, Kiso (Central Japan). However, it is doubtful that his related species, *Heligmonoides speciosus* (KONNO, 1958)[11] and *Yatinema japonicum* ASAKAWA & OHBAYASHI, 1986,[2] have been recorded from *A. speciosus* and *E. smithi*, respectively, in various parts of Japan. Recently, the authors had a opportunity to re-examine Yamaguti's[15] specimens labelled *L. wolgaensis* from *E. smithi*. The specimens used by the authors are preserved as Yamaguti's collection in the Meguro Parasitological Museum, Tokyo, and the registered number is MPM Coll. No. 22566. This report deals with the morphology of the materials and taxonomical discussion on *L. wolgaensis* sensu YAMAGUTI, 1954.[15]

Morphology Male: 1 specimen. Body length 2.9 mm, width 0.06 mm. Nerve ring at 0.10 mm and excretory pore at 0.21 mm from head end, respectively. Esophagus 0.31 mm in length. Number of ridges at mid-body 16. Spicules equal, 0.31 mm in length. Bursa, remarkably asymmetrical; right lobe larger than left (Figs. 1 & 2). Female: 3 specimens. Body length 2.4 mm~3.2 mm, width 0.07 mm. Vulva at 0.13 mm and anus at 0.08 mm from tail end, respectively. Eggs 0.07 mm~0.08 mm×0.05 mm in size.

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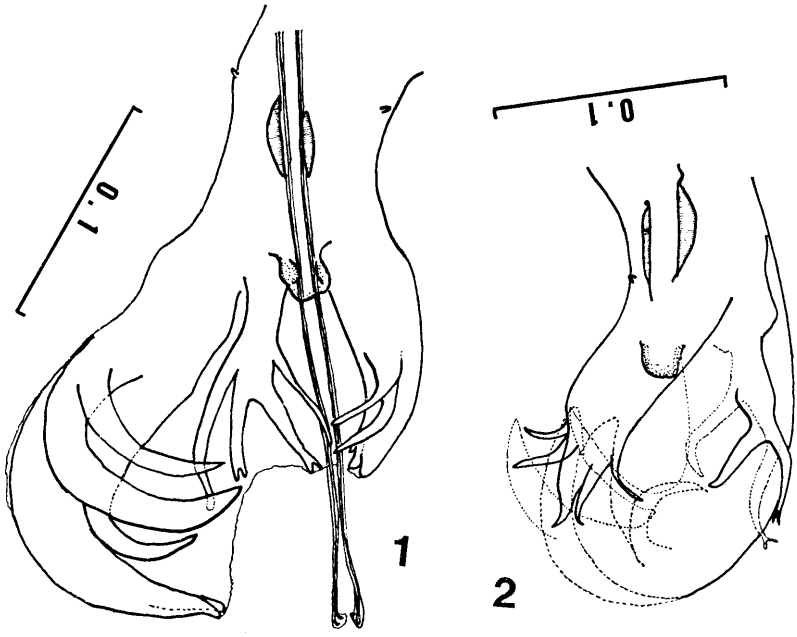

Figures 1 & 2. Posterior extremity of male of *Yatinema japonicum* (Based on Yamaguti's[15] specimens reported as *Longistriata wolgaensis* and deposited in Meguro Parasitological Museum, MPM Coll. No. 22566).

Fig. 1. Ventral view (scale in mm).

Fig. 2. Left-lateral view (scale in mm).

Discussion The morphological characteristics and measurements of Yamaguti's[15] specimens are identical with those of *Yatinema japonicum* ASAKAWA & OHBAYASHI, 1986[2] which resembles *Carolinensis minutus* closely in measurements, but is readily distinguished in having asymmetrical bursa (Asakawa & Ohbayashi.)[2] It is thus concluded that *L. wolgaensis* sensu YAMAGUTI, 1954[15] from *E. smithi* is a synonym of *Y. japonicum*. In the description, Yamaguti[15] stated that the bursa was symmetrical, differing from the present findings. It is strongly suggested that Yamaguti[15] overlooked the difference among the specimens from different rodent species.

Unfortunately, the specimens from *M. montebelli* and *A. speciosus* collected by Yamaguti[15] are not available for study. However, it is supposed that the heligmonellid from *M montebelli* might belong to the genus *Carolinensis* since Yamaguti's[15] description largely agrees with that of *Carolinensis minutus* in having 16 ridges of synlophe and the symmetrical bursa.[8,9] Moreover, Asakawa,[11] one of the present authors, has obtained *C. minutus* from *M. montebelli* captured in various localities of Japan. It is also suggested that Yamaguti's[15] heligmonellid from *A. speciosus* could be *Helig-*

monoides speciosus (KONNO, 1958)[11] which is commonly found in *Apodemus* spp. of various parts of Japan (Hokkaido,[3,5] Honshu,[3,10] Shikoku[3] and Kyushu[13,14]). Although *H. speciosus* has more ridges of synlophe, it is easily mistaken for *Carolinensis minutus* or *Yatinema japonicum* under low magnification. Nevertheless, the final identification on *L. wolgaensis* sensu YAMAGUTI, 1954[15] from these two rodent species should be withheld until the re-examination of Yamaguti's materials or re-collection at the same locality becomes available.

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Key words: *Longistriata wolgaensis* (=*Carolinensis minutus*), *Yatinema japonicum*, *Eothenomys smithi*, Japan

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要　　旨

Yamaguti (1954) は，御嶽山にて採集したスミスネズミ *Eothenomys smithi*，アカネズミ *Apodemus speciosus* およびハタネズミ *Microtus montebelli* から得た線虫を *Longistriata wolgaensis* SCHULZ, 1926 として報告した。しかし，このうちスミスネズミからの標本（目黒寄生虫館 MPM Coll. No. 22566）を再検討したところ，日本産 *Eothenomys* 属に寄生する *Yatinema japonicum* ASAKAWA & OHBAYASHI, 1986 であることが判明した。