
BRIEF COMMUNICATION

PSEUDOPARASITISM OF SYPHARISTA KAMEGAI QUENTIN, 1971, FOUND IN JAPANESE MARTENS

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(Received for publication, August 27, 1976)

The authors had a chance to examine the parasite of Martes melampus Wagner, captured at Nakakubiki district, Niigata Prefecture, December 16, 1975. From 2 out of 4 refrigerated martens, an extensive number of oxyurid nematodes, Sypharista kamegaii Quentin, 1971, was collected from the large intestine. This species was reported for the first time in the flying squirrel, Petaurista leucogenys nikkonis Thomas, captured at the Kanto area, central Japan. Since the original description of Quentin (1971) is excellent, the authors will add nothing to his description. The morphology and the measurements of the nematode, treated in lactophenol solution, are as follows (measurement in mm):—Male (5 specimens): Cuticle with fine, transversal striations on whole body surface. Lateral alae obvious at anterior portion. Body length 1.26–1.51, width 0.039–0.055 at level of bulb. Bulb oval, 0.039–0.052 × 0.020–0.033 in size. Length of esophagus 0.235–0.303. Excretory pore 0.658–0.867 from cephalic end. Length of spicule 0.052–0.082. Big gubernaculum club-shaped, well chitinized, with 2 small horn-like projections at distal end, length 0.033–0.055. Length of tail 0.124–0.163, curved ventrally, abruptly tapered behind papillae being at 0.042–0.068 from cloaca. Female (5 specimens): Cuticular striations very distinct at esophageal region at intervals of 0.029. Lateral alae recognizable at esophageal

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Figure Sypharista kamegaii Quentin, 1971

1 Posterior extremity of male, lateral view
2 Anterior portion of female, lateral view
portion. Body length 5.88~7.90, width 0.277~0.342 at level of vulva. Nerve
ring, excretory pore and genital pore 0.189~0.215, 1.270~1.690 and 1.456~1.882,
respectively, from cephalic end. Length of muscular esophagus with bulb 0.715
~0.754. Ovijector well developed, muscular. Portion of genital pore, yellowish,
esomewhat sclerotized. Length of tail 0.910~1.625. Eggs asymmetrical, with
weakly developed operculum, 0.075~0.078×0.020~0.023 in size.

All species of the genus Syphacia are the parasites of sciurine animals
belonging to Petauristinae in Asia. On the other hand, the marten is mainly
an arboreal animal and catches the sciurine animal for food. Furthermore,
carnivores usually swallow their game without chewing; therefore, it can be
supposed that this nematode survives for some time in the foreign environment
of the predatory marten. It is reasonable, then, for the authors to consider
this case to be one of pseudoparasitism, not one of obligate parasitism.

There are a few pseudoparasitism cases suspected as obligate parasitism.
Some of those cases are as follows: —Passalurus nonannulatus Skinker, 1931,
parasite of hares, found in coyote, Canis lestes Merriam (Skrbabin et al., 1960),
Syphacia sp. in the dog (Gupta, 1962) and Syphacia obvelata (Rudolf, 1802),
Nippostrongylus brasiliensis (Travassos, 1914), Heligmosomum kobayashii
Ishigaki, 1974, parasites of voles, in the weasel, Mustela sibirica Pallais
(Shogaki et al., 1976). Macchioni (1974) also indicates by data from literature
that the dog is not parasitized obligately by oxyurid nematodes. Consequently,
the phenomenon of pseudoparasitism must be taken into consideration, especially
at the survey of helminths of carnivores. Furthermore, the authors suppose that
this phenomenon must play a role in the dispersion of helminths among wildlife.

The authors wish to express their gratitude to Prof. M. Ohbayashi of this
Department and to Prof. M. Otsubu, Department of Medical Zoology, Niigata
University School of Medicine, Niigata, for their kind direction and review.
Further thanks are due to Mr. K. Yamada, head of the Meat Inspection Office
of Niigata Prefecture and Dr. M. Machida, Department of Zoology, National
Science Museum, Tokyo, for providing, respectively, the martens examined and
the specimens of S. kamegaii from P. leucogenys nikkonis for comparative study
of morphology.

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