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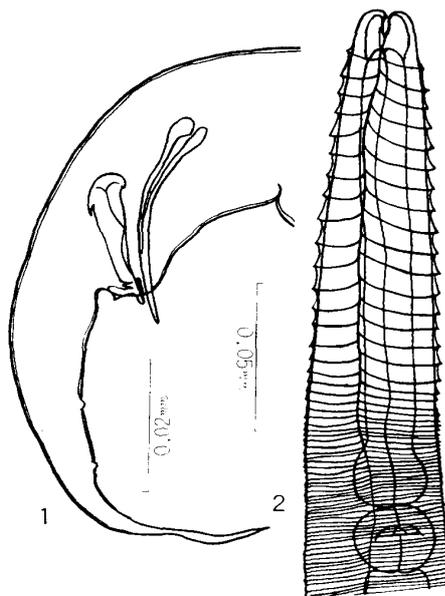
PSEUDOPARASITISM OF *SYPHARISTA*
KAMEGAI QUENTIN, 1971, FOUND
IN JAPANESE MARTENS

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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 kamegai* 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 chitinous, 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

FIGURE *Sypharista kamegai*
QUENTIN, 1971



- 1 Posterior extremity of male, lateral view
- 2 Anterior portion of female, lateral view

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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, somewhat sclerotized. Length of tail 0.910~1.625. Eggs asymmetrical, with weakly developed operculum, $0.075\sim 0.078\times 0.020\sim 0.023$ in size.

All species of the genus *Sypharista* 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 (SKRJABIN et al., 1960), *Syphacia* sp. in the dog (GUPTA, 1962) and *Syphacia obvelata* (RUDOLPHI, 1802), *Nippostrongylus brasiliensis* (TRAVASSOS, 1914), *Heligmosomum kobayashii* ISHIMOTO, 1974, parasites of voles, in the weasel, *Mustela sibirica* PALLAS (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.

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