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***Porrocaecum azarasi* n. sp. (Nematoda)**
from the Japanese Seal

By

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With 1 Text-figure

Two gravid and two immature females and four mature males of this worm were collected by Prof. INUKAI in the stomach of *Histiophoca fasciata* (ZIMM.) GILL from Saghalien, and two additional females from another kind of the seal caught in Kusiro were submitted to the senior author for examination through the courtesy of Mr. K. ASANUMA of the Akkeshi Marine Biological Station, Hokkaido Imperial University. They were found to represent a new species of the genus *Porrocaecum*, for which the name *Porrocaecum azarasi* is proposed. The specific name is the Japanese name for the host.

Description

Female. Body tapering anteriorly in esophageal region, 72-114 × 1.5-2.2 mm (two examples 45 mm and 53 mm long respectively are still immature). Head 0.4-5.6 mm in diameter. Cuticle very finely striated transversely. Nerve ring and cervical papillae 0.5-0.95 mm and 0.6-1.2 mm respectively from anterior extremity. Excretory pore between bases of two subventral lips. Lips divided by lateral constriction into a two-lobed anterior portion bearing a dentigerous ridge along its anterior inner margin and a swollen base with two papillae, of which one is single and the other double in the subventral lips, but both are double in the dorsal lip. The single papilla of the subventral lip lies anterodorsal to the double one, but the two double papillae of the dorsal lip are exactly symmetrical. Esophagus muscular, 3.5-5.9 mm long, narrowest at nerve ring, whence it gradually widens posteriorly to attain a maximum diameter of 0.4-0.55 mm, and then narrows a little to be continued into a small, muscular, bulbous swelling, whose lumen widens abruptly at the posterior end. Glandular ventriculus 1.2-3.0 mm long by 0.3-0.42 mm broad, only slightly narrower

anteriorly. Intestinal cecum digitiform, 1.3-2.42 mm long, 0.3-0.55 mm broad at base, reaching to a point 3.6-6.5 mm from head end. Tail conical, 0.25-0.39 mm long, with a papilliform or button-shaped projection at its dorsoterminal depression. The latter may be covered with minute, granular, apparently spiniform structures. Vulva 29-38 mm from anterior extremity, dividing body length in ratio of 1:1.35-1.6. Vagina 3.8-4.5 mm long by 0.15-0.21 mm wide in the specimens 72-87 mm long, provided with a layer of circular muscle decreasing gradually in thickness toward the unpaired uterus, from which it is not sharply marked off. Unpaired uterus 12-16 mm long in the specimens mentioned above, tapering anteriorly but uniformly wide posteriorly. Paired uteri parallel to each other at their distal portion which is distended with eggs and 8-14 mm long in the examples referred to.

In a specimen 87 mm long the anterior ovary, arising near the bifurcation of the uterus, forms five longitudinal loops in the vulvar region and its vicinity, the middle loop reaching as far forward as 15 mm in front of the vulva, while the posterior ovary, originating a little behind the vulva, describes behind the distended paired uteri several longitudinal loops, of which two extend forward to the unpaired uterus and one reaches to a point 8 mm from the tail end. Eggs subglobular, $45-59 \times 39-51 \mu$; contained ovum in morula stage.

Male. Body tapering anteriorly, $45-80 \times 1.0-1.5$ mm; posterior extremity rolled up ventrally. Cuticle inflated on each side of cloacal aperture and vicinity, but not forming distinct alae, which were observed in *Porrocaecum decipiens* KRABBE. Head 0.26-0.46 mm broad. Lips 0.1-0.24 mm long. Nerve ring and cervical papillae 0.6-0.8 mm and 0.75-1.1 mm respectively from head end. Esophagus $2.2-4.3 \times 0.26-0.53$ mm. Ventriculus $1.0-2.3 \times 0.2-0.44$ mm. Intestinal cecum 1.0-2.1 mm long, reaching to a point 2.7-4.7 mm from head end. Tail 0.2-0.38 mm long, conical, curved ventrally, with a terminal knob usually covered with rudimentary spines. Spicules equal or subequal, 1.1-2.43 mm long, hollow, provided at its tip with a notched wing, slightly expanded at proximal end. On the anterior border of the cloacal aperture is a papilliform cuticular protuberance at the middle, and on the posterior border are three arcuate transverse ridges, each of which is armed with a row of pointed or truncated teeth. There are on each side 100-130 anal papillae; these are placed in a regular row from immediately behind the cloacal aperture to a short distance in front of it (for about 20 papillae), but their arrangement becomes more irregular and confused on passing forwards, though regular again most anteriorly. The anterior most papilla lies 7-24 mm from the tip of the tail. The somewhat larger papilla lying on a level with the posterior end of the posterior dentigerous ridge mentioned above has a double ending. If this papilla be

regarded as the first postanal, there should be 6 pairs of postanals altogether. The second and fifth postanals are in line with the adanals, but the third and fourth lie a little outside of this line and the smallest sixth is exactly lateral in position and presents a minute depression of the cuticle at its tip.

Habitat. Stomach of *Histiophoca fasciata* (ZIMM.) GILL.

Locality. Saghalien.

Specimens. Entire specimens (3 mature males and 1 immature female) preserved in lactophenol and deposited in YAMAGUTI Helminthological Collection, others dissected.

This species differs from the most closely related *Porrocaecum decipiens* (KRABBE, 1878) in the absence of definite caudal alae, in the number and arrangement of the anal papillae.

Literature

BAYLIS, H. A. Some ascarids in the British Museum (Natural History) Parasit., 8 (3), 1916, 365-368.

Explanation of Illustrations

Fig. 1-5. *Porrocaecum azarasi* n. sp.

Fig. 1. Head of female, end-on view.

Fig. 2. Anterior extremity of female, dorsal view.

Fig. 3. Esophagus, ventriculus and intestine, lateral view.

Fig. 4. Posterior extremity of male, ventral view. Spicules not shown.

Fig. 5. Female genitalia, lateral view.

Abbreviations used in Figures

AO	anterior ovary	N	nerve ring
CA	cloacal aperture	P	papilla
CP	cervical papilla	PO	posterior ovary
DL	dorsal lip	PU	posterior uterus
DR	dentigerous ridge	SL	subventral lip
E	esophagus	UU	unpaired uterus
EP	excretory pore	V	vulva
I	intestine	VG	vagina

