

Synonchus alisonae sp. nov.

(Fig. 10)

MATERIAL STUDIED. 3 ♂♂ and 2 ♀♀ (Syntypes); B.M. (N.H.), Reg. Nos. 1972 : 421-425. Additional material: 1 ♂ and 9 juveniles, one of which is beheaded for an *en-face* preparation; B.M. (N.H.), Reg. Nos. 1972 : 426-435.

REPRESENTATION. Station 5021.

DE MAN'S RATIOS.

	a	b	c	V %	Body length (mm)
Males	58·50	7·18	27·86	-	11·70
	47·68	6·28	15·43	-	10·49
	50·15	7·38	13·74	-	10·03
Females	51·60	7·27	14·54	47·67	10·32
	54·26	7·01	13·22	46·07	10·31

MEASUREMENTS (in mm in order of body lengths). Males: Body breadth: 0·20; 0·22; 0·20. Oesophagus length: 1·63; 1·67; 1·36. Head diameter: 0·043; 0·054; 0·052. Length of cephalic setae: 0·016 + 0·014; 0·018 + 0·017; 0·018 + 0·014. Amphid width: 0·015; 0·014; ?. Tail length: 0·42; 0·68; 0·73. Cloacal diameter: 0·13; 0·13; 0·11. Spicule length: 0·175; 0·181; 0·168. Gubernaculum length: 0·095; 0·078; 0·081. Distance of pre-cloacal supplement from cloaca: 0·134; 0·112; 0·103.

Females: Body breadth: 0·20; 0·19. Oesophagus length: 1·42; 1·47. Distance of nerve-ring from anterior: 0·39; ?. Head diameter: 0·056; 0·054. Length of cephalic setae: 0·017 + 0·013; 0·017 + 0·014. Amphid width: 0·016; 0·015. Tail length: 0·71; 0·78. Anal diameter: 0·10; 0·11. Distance of vulva from anterior: 4·92; 4·75. Egg length × breadth: 0·42 × 0·16; -.

DESCRIPTION. The cuticle is marked with very fine transverse striations. The mouth is bounded by three rounded lips each bearing a pair of small conical labial papillae. Internally the cuticle of each lip is modified into a small transverse bar from which radiate a series of longitudinal striations, becoming progressively shorter towards the interlabial positions (Figs. 10b, c and d). These are similar to the semi-lunar striations (terminology of Inglis, 1964) found in many members of the Enoplidae. There are ten cephalic setae, the submedian pairs being only

slightly subequal in length. The cephalic capsule is relatively narrow and its posterior border is roundly lobed between the cephalic setae. The amphids are pocket-like with oval openings. They are displaced slightly dorsally. There are two or three short post-amphidal setae and a few other short setae scattered posteriorly to about the level of the nerve-ring. The buccal cavity varies in appearance depending on the angle from which it is viewed. It is basically conical and contains a large solid dorsal tooth with a rounded tip. There are no subventral teeth visible. There is no sexual dimorphism shown in the head. The oesophagus is

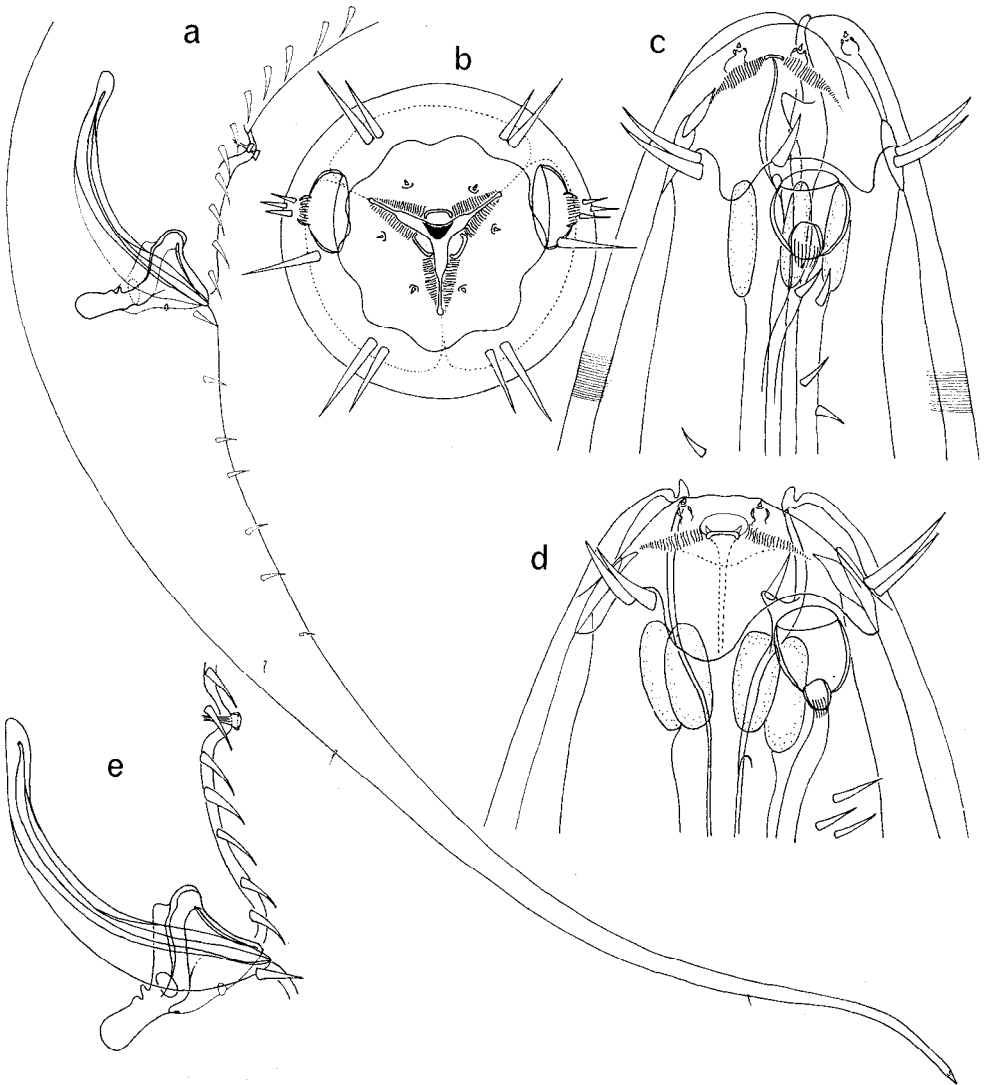


FIG. 10. *Synonchus alisonae* sp. nov. a, Male tail. b, *En-face* view of head. c and d, Heads of two malcs. c, Lateral view of spicules, gubernaculum and supplements.

cylindrical. The tail in both sexes is filiform with a pointed tip, but varies from 3.2 to 7.1 cloacal or anal diameters in length.

Male. The spicules are paired, equal and arcuate, with no marked proximal cephalization. The gubernaculum is of a complex structure. From the lateral view it has a triangular outline, and bears a solid rounded dorsal apophysis (Fig. 10e). There is a pair of ventral mamilliform supplements a short distance in front of the cloaca. Rows of subventral setae extend anteriorly from the cloaca about four times the supplement-cloaca distance, and posteriorly for some way down the length of the tail (Fig. 10a).

Female. The ovaries are paired, symmetrical and reflexed. The eggs are relatively elongate.

DISCUSSION. This species is characterized by the combination of a long filiform tail and relatively long cephalic setae. It appears to be closest to *S. filicaudatus* (Ditlevsen, 1926), another deep-water species. In Ditlevsen's species, however, the tail and cephalic setae are much shorter, and the gubernacular apophysis is triangular in shape.

TABLE I

Positions and other details of sampling stations

Date	Station no.	Position	Depth (m)	Sediment type	Sieve size
29.6.63	5021	14°55'N-53°55.4'E	2480	Greenish-grey mud	0.5 mm
30.6.63	5025	16°41'N-54°01.8'E	1030	Greenish fine sand	0.5 mm
5.7.63	5034	17°57.2'N-56°43.5'E	49	Fine sand	0.5 mm
10.7.63	5047	19°09.8'N-57°55.1'E	48	Fine muddy sand	0.5 mm
10.7.63	5048	19°03'N-58°02.8'E	120	Muddy sand	0.5 mm
10.7.63	5050	18°50'N-58°18.3'E	3147	Fine greyish-green mud	295 μ
15.7.63	5059	20°29.5'N-59°09.5'E	660	Greenish mud	295 μ
15.7.63	5060	21°03.5'N-59°04.1'E	50	Fine shelly sand	0.5 mm
16.7.63	5065	20°32.9'N-59°55.5'E	3500	Grey-green clay	295 μ
19.7.63	5071	22°12.9'N-59°54.3'E	1305	Greenish mud	295 μ
22.7.63	5074	23°57.0'N-66°08.0'E	182	Muddy sand with shells and some clay	0.5 mm