

*Graphonema amokuræ* (Ditlevsen 1921)  
 Fig. 1 1-o; Fig. 5 a-f; Fig. 7 a-c.

SAMPLES: Ria Deseado, Punta Cavendish. 19/1/75.  
 Slide 877(♂1) LHM, on *Cladophora* sp.; 891 (♀1) MHM, on  
*Enteromorpha* sp.; 838 (♀2) MHM, on *Polysiphonia* sp.;  
 894(♀3) LHM, on *Corallina officinalis*. La Pesquera.  
 16/6/75. Slide 878 (♂2); 892 (♂3) MHM, on *Cladophora*  
 sp.. Col.: Author.

FILIPJEV'S FORMULAE

$$\begin{array}{r} \text{--} \quad 215 \quad \text{M} \quad 1320 \\ \delta 1 = \frac{\text{-----}}{18 \quad 33 \quad 50 \quad 38} \quad 1500 \mu\text{m} \end{array}$$

$$\begin{array}{r} \text{--} \quad 250 \quad 720 \quad 1300 \\ \text{♀} 1 = \frac{\text{-----}}{18 \quad 35 \quad 58 \quad 28} \quad 1500 \mu\text{m} \end{array}$$

# DE MAN'S RATIOS

	L (mm)	a	b	c	s ( $\mu$ m)	%V
♂1	1.50	30	7.0	8.3	56	--
♂2	1.10	34.4	6.0	6.9	58	--
♂3	1.40	35	6.7	7.4	56	--
♀1	1.50	25.8	6.0	7.5	--	48
♀2	1.44	25	6.5	8.1	--	48.6
♀3	1.40	25	6.1	7.4	--	49.3

GEOGRAPHIC DISTRIBUTION: Sea of Japan; California; Hawaii; Philippines; Gulf of Panama; Australia; New Zealand; Campbell Islands; Auckland Islands; South Georgia Island; Fuesuan Archipelago; Antarctic; Chile.

OBSERVATIONS: In frontal view six anterior and four posterior cephalic setae have been observed. The last four 3  $\mu$ m long.

Inside the buccal cavity there are one big pointed tooth, two lateral plates with serrated edges supporting small teeth and two subventral plates with one tooth on each. In front of these structures 12 cheilorabdians 2  $\mu$ m each have been observed.

The amphids are slit-like, 15  $\mu$ m long and 2  $\mu$ m wide, and very delicate. Two small papillae inside the amphid have been observed.

The cuticle has alternate hookings between rings all along the body. The rings are externally smooth and with crenate edges in the anterior part of the body, and the anterior and posterior processes form the ornamentation. In this species the ring axle takes a zigzag form, specially in the middle of the body. One pair of lateral bands with internal modification have been seen from the oesophageal bulb level to the cloacal level. These bands are small compared with *Euchromadora*-type but they are homologous in structure. Two subdorsal and two subventral longitudinal bands have been observed.

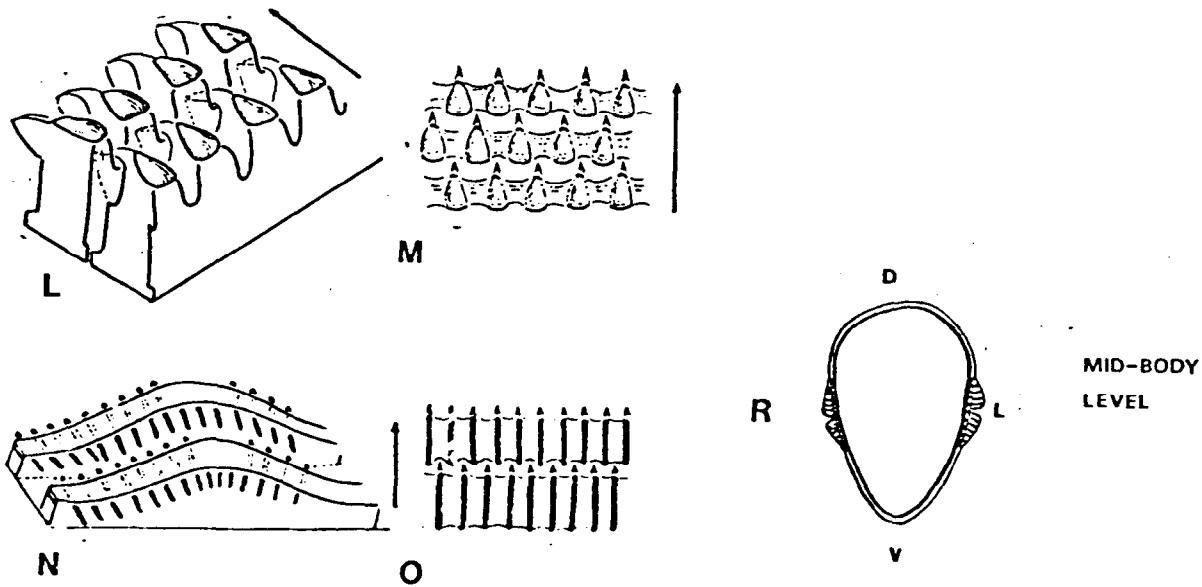
The females have two antidromously reflexed ovaries in anterior-right and posterior-left position to the intestine. The ovaries are elongated, and a triangular glandular zone with refringent granules has been observed on the oviduct end, which is separated from the uterus by a sphincter. The uterus has no valves. The vagina is elongated, with two muscular rings, between which, the openings of two glands have been seen. In young females 2-4 small cavities have been observed with the openings

towards the vagina. In adult females the same cavities appear full of amoebal granules, which we suppose to be spermatecae.

The males have an anterior testis right of the intestine. The male genital apparatus does not present special characteristics, except that on the deferent duct several zones of refringent granules have been seen.

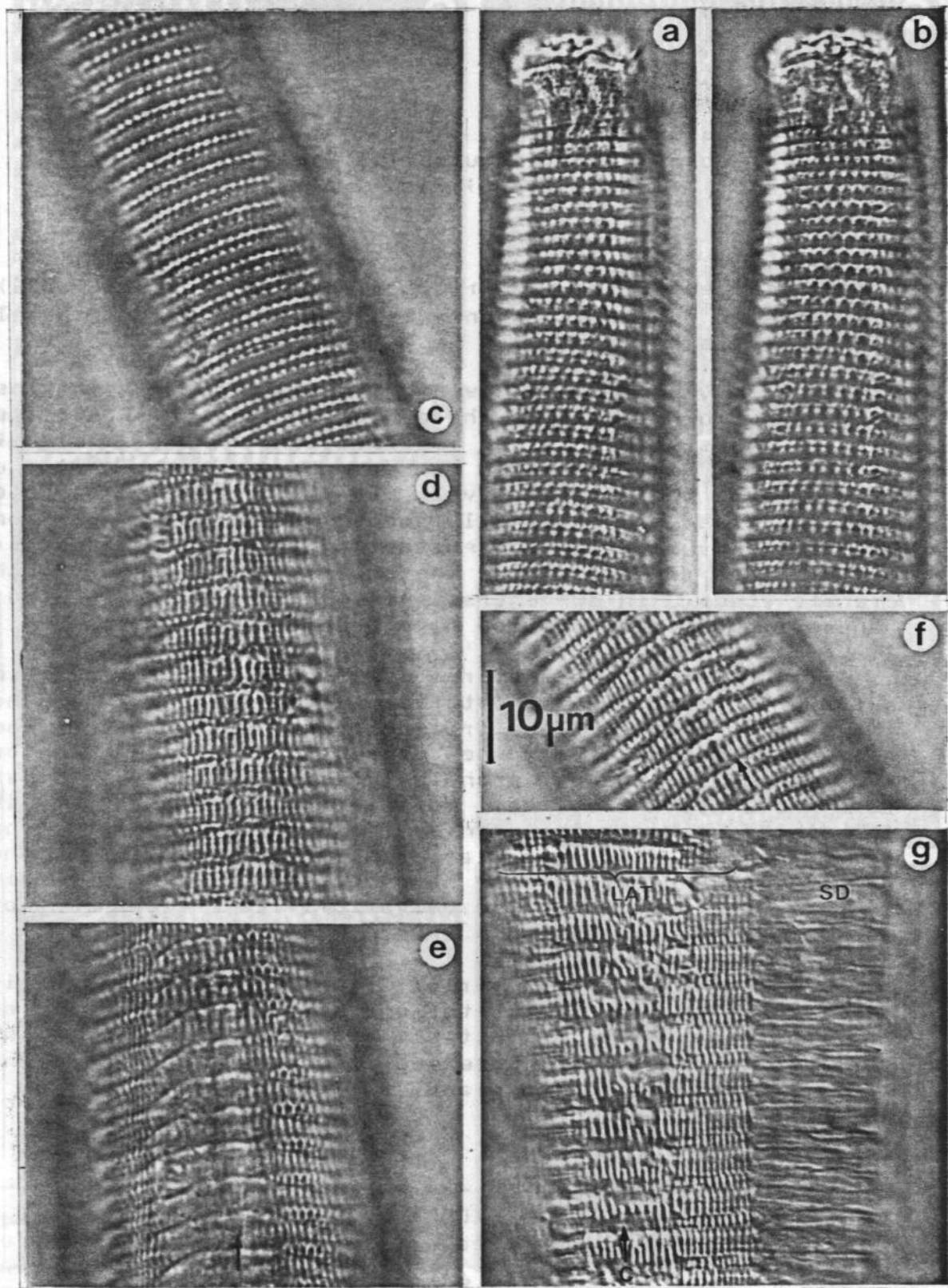
The spicular apparatus is formed by a double subneculum with two "L" shaped lateral guiding pieces, with serrated edges ( Fig. 7 c). The spicules are sclerotized and slightly arched with a cephalized end.

DISCUSSION: The specimens found agree completely with the original description given by Ditlevsen 1921.



*Graphonema amokurae* cuticle. L, M: on the head level; N, O: on the medium body level. F-R.- Transversal sections (at different levels) in *Euchromadora*, *Steineridora* and *Graphonema* genus. The arrows in the figure indicate the anterior end.

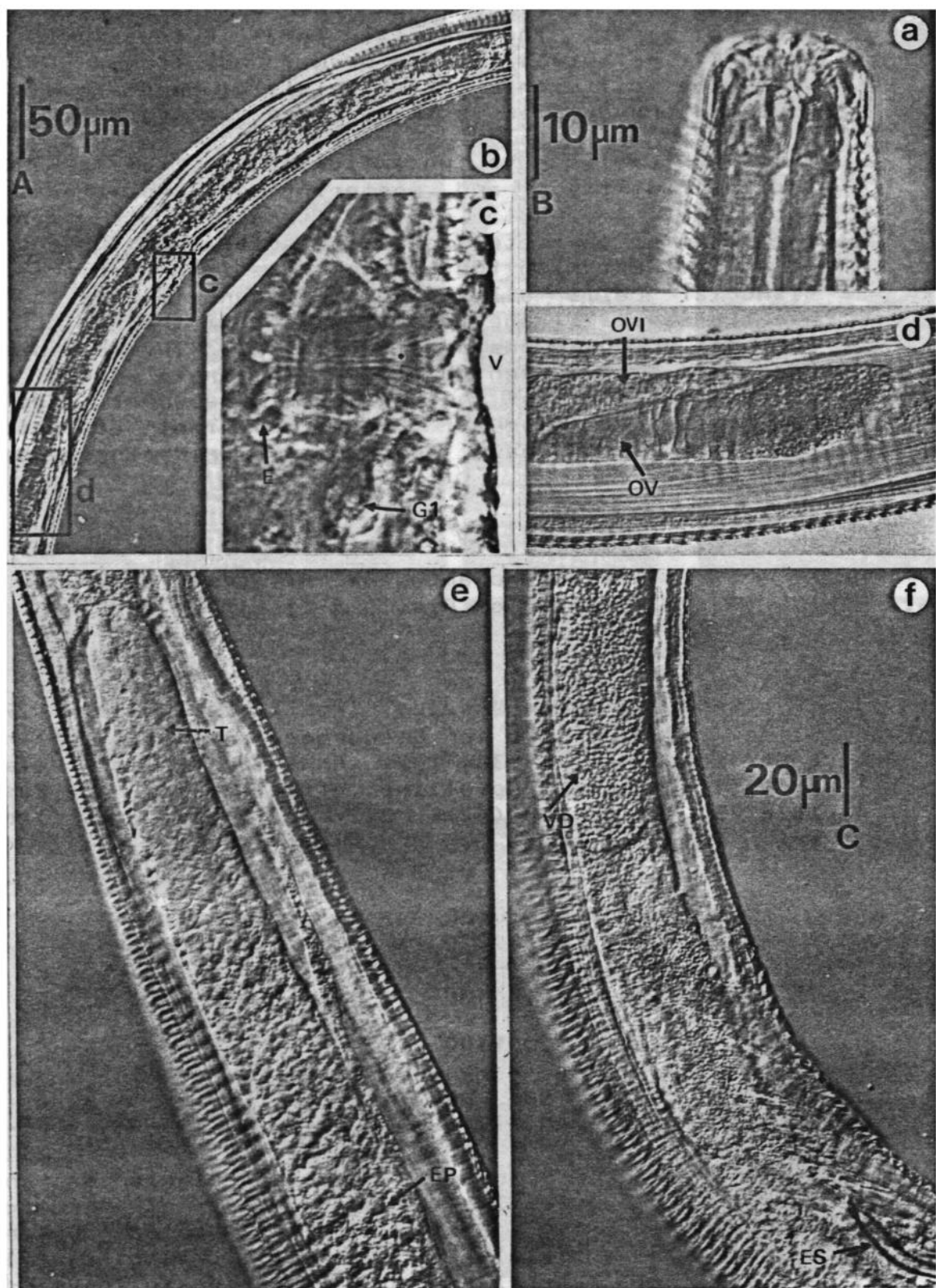
FIGURE 4



## FIGURE 4

a-g. *Graphonema amokurae*. a-b: cuticle on anterior  
 end (a: superficial, b: deep); c: cuticle on  
 oesophageal bulb; d-f: cuticle behind oesophageal  
 bulb (d: superficial, e: deep, f: beginning of lateral  
 plates); g: lateral band ornamentation in the middle of  
 the body. SCALES: A:b ; B:a,c ;  
 C:d,e,f. ABBREV. Lat=lateral; SI=subdorsal.

FIGURE 5



# FIGURE 5

a-f. - *Graphonema amokurae*. a: anterior end; b: female genital apparatus; c: ovary; e: testis; f: glandular zone on deferent duct. ABBREV. E=spermatocae; ES=spicule; EP=spermatids; GI=gland; OV=ovary; OVI=oviduct; V=vulva; VD=deferent duct; T=testis.