

(Fig. 10, a-c.)

Stations : 39, 40, 41 (OTL), 42, 88, 100, 103, 106, 107 (DRL, OTL).

The species was also present in dredged material collected by the Australian Antarctic Expedition of 1911-1914, and recently examined by Professor Johnston : from Commonwealth Bay, King George Land, at 28 fath., among Foraminifera, Polyzoa, pycnogonids and molluscs.

This nematode was present, usually in considerable numbers, in ten of the twelve stations from which nematodes were collected. It is readily recognizable by the helmet shape.

Males : L = 11.5-18.6 mm. ; α = 48-72 ; β = 5.5-6.4 ; γ = 90-110.

Females : L = 17-19.1 mm. ; α = 47-73 ; β = 6.1-7.4 ; γ = 113-125 ; V = 51-61%.

These worms are among the largest in the collection. The body is slender, widest in the third quarter, and tapering anteriorly from the midlength. The helmet is relatively long, the width of the body at the level of the posterior border of the helmet is 1.4-1.6 times the length of the helmet. Its posterior border almost always appears as a straight line, though it is sometimes slightly indented. The clefts between each lobe are narrow and long, and the lacunae through which the cephalic setae emerge are at the midlength of the helmet. Of other lacunae there are usually two in each lobe, though these may merge forming one elongate space. They do not lie near the posterior border, as in *T. antarcticum* and *T. anocellatum*, but at a level about midway, or just behind this, of the distance between the six large lacunae and the posterior border of the helmet. The buccal setae are short and conical, and are about 1/12 of the corresponding cephalic diameter. The buccal cavity is small, with one small dorsal tooth at its base. Around the triangular mouth are six cephalic papillae, and the 3 "lips", or edges of the mouth, bear on the dorsal edge one large bifid tooth, and on each subventral edge two small teeth, one near each corner. The larger tooth is quite obvious in side view, but the smaller ones are only clear in an en face view. Numerous specimens have been examined en face, and the only variation observed is a slight difference in the size of the teeth on the subventral lips.

The nuchal setae are short and conical ; they occur on the lateral and submedian lines, but are not as numerous as in many other species of the genus. The oesophagus widens slightly in its posterior third. The nerve ring is situated at about 1/3.3-3-1/4 of the oesophageal length from the head. The eyes are large, and are distant from the head 3.2-4 times the helmet length and 1/3.7-1/4.6 of the distance of the nerve ring from the head.

Male.—The tail is rather shorter than the anal breadth. The median preanal organ lies a tail's length, or rather less, in front of the anus, and the paired papillae, of which there are 5-6 on each side, commence an equal distance in front of the median organ. A row of setae extends on each side from the adanal region to the posterior-most paired papillae. The gubernaculum, 150-160 μ long, has a slightly enlarged head (proximal end) and a lateral anterior projection ; the spicules are 230-240 μ long, measured directly from distal to proximal ends.

Female.—There are up to 5 eggs in each uterus in the largest females—but the shells on these are not apparently formed, as the eggs are compressed end to end. In a female 19.1 mm. long the vulva is 10.8 mm. from head (59.1%), the anterior tube is 4.4 mm. and 2 mm. reflexed, the posterior 4.6 mm. and 2.4 mm.

This species differs from *C. antarcticum* chiefly in the structure of the helmet, which in all the numerous specimens is very constant.

COLLECTING STATIONS CONCERNED IN THIS REPORT

In Volume I., Pt. 1, of this series (Biological Organization and Station List) the type of fauna and the nature of the sea-floor at each station are not mentioned. The following amplifying notes deal with all stations south of the sixtieth degree of south latitude which yielded nematodes for examination. This information has been compiled from the Biological Log kept during the period concerned. An attempt was made to ascertain the names of the species of marine life recorded as most numerous at the various stations, but since many groups have not yet been reported on, this was not possible.

STATION 29 : 66° 28' S., 72° 41' E., T M L (Large Monagasque Trawl) : 1,266 m.

Good haul, large numbers of stones (erratics), some large. Animals suffered from milling of stones. No mention of predominant fauna. Forams and nematodes "many".

STATION 39 : 66° 10' S., 49° 41' E., T M L : 300 m.

Big haul characterized by silicious sponges with glass rope spicules. *Synapta*—like Holothurian common ; many Polyzoa of different species.

STATION 40 : 66° 12' S., 49° 37' E., T M L : 300 m.

Good clean haul ; Polyzoa and crinoids abundant.

STATION 41 : 65° 48' S., 53° 16' E., T M L : 193 m.

Large haul. Trawl full of sponges and sponge mud : glass rope sponge predominant. Much mud with very many molluscs : many ophiuroids. Later, operating at this station with the Large Otter Trawl (O.T.L.), the catch comprised a striking haul of alcyonarians, holothurians "many", compound ascidians "common".

STATION 42 : 65° 50' S., 54° 23' E., T M L : 220 m.

Haul essentially as at Station 41, T M L.

STATION 88 : 67° 008 S., 142° 36' E. At Commonwealth Bay, King George V. Land.

Collections ashore on rocks and in ice at Cape Denison, also dredging (DRS) from motor boat in Boat Harbour, and between the latter and the Mackellar Islets amongst kelp, 2-7 fathoms. Red and brown algae, nematodes in holdfast, &c. 3.5-4.5 m

STATION 90 : 66° 21' S., 138° 28' E., D R L : 640 m.

While being hauled, dredge following the sea-floor came suddenly into shallower water, so may contain specimens from various depths. Coralline bottom with small stones : small amount of grey sandy mud on lip of dredge.

STATION 100 : 65° 48' S., 89° 49' E., D R L : 393 m.

Representatives of most groups present. No note as to bottom, or predominance of any fauna.

STATION 103 : 67° 03' S., 74° 29' E., D R L : 437 m.

Mud bottom (ooze). All groups represented, none referred to as abundant.

STATION 105 : 67° 46' S., 67° 03' E., D R L : 163 m.

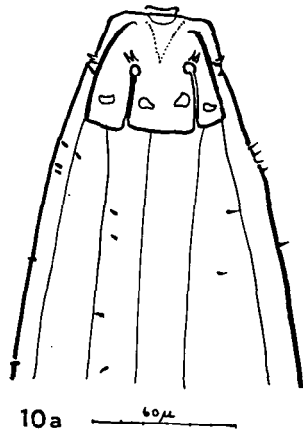
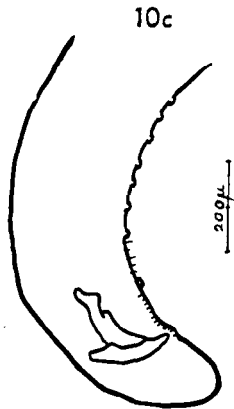
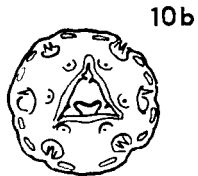
No mud, only a few small erratics. Dominant forms listed as :—(1) Large club-like compound ascidians ; (2) Large simple free ascidians with hairy test ; (3) Transparent ascidian-like *Clavellina* ; (4) Several spp. of sponges. Pycnogonids, asteroids, and ophiuroids abundant. Nematodes very abundant in test of a large ascidian.

STATION 106 : 67° 38' S., 64° 52' E., D R L : 210-17 m.

Very little taken as dredge struck rock bottom. Kelp, *Lithothamnion* ; nematodes in holdfasts, also polychaetes and nemertean.

STATION 107 : 66° 45' S., 62° 03' E., D R L : 219 m.

Dredging on an off-shore submarine bank. Fine grey mud. Ophiuroids and Polyzoa chief animals. Nematodes among sponge spicules. Later the Large Otter Trawl brought up a catch with Polyzoa as the dominant group : calcareous and chitinous species.



10. *T. angustifissulatum*: (a) and (b) ventral and *en face* views of head; (c) posterior end of male. All figures of heads to scale of 10a, and all figs. of tails to scale of 10c.