

VISCOSIA WEISERI n.sp.

(Fig. 36, a-e.)

Kerguelen Island : Stations 12, 15, 47, 51, 53, 54, 58, 64.

♀ (9x) : L = 2.1-3.2 mm.; $a = 31-45$ (70 in one); $\beta = 4.6-7.6$; $\gamma = 12.0-22.5$; V = 47-61%.

♂ (3x) : L = 1.6-2.9 mm.; $a = 29-46$; $\beta = 4.3-5.2$; $\gamma = 13.3-17.7$.

Macquarie Island : Station 83.

♀ (1x) : L = 2.3 mm.; $a = 29$; $\beta = 5.7$; $\gamma = 12.1$; V = 43%.

The species was also recorded from B.A.N.Z.A.R.E. Station 100 (Section 2, page 305).

It will be seen that the γ indices given above, and the tail shape, vary widely among the specimens assigned to this species, although there is a close agreement in the features of the head and the position of the nerve ring, and in the male accessory structures. The females are all young ones, and in these there is often greater variability; moreover, the extremes of variation for the two characters are found in different specimens.

The species is close to *V. abyssorum* (Allgen 1933) and *V. halstromi* Wieser 1953, the first of which is described from juveniles and females from the North Sea and Chile, the second from a male from Chile. It is separated from *V. abyssorum* by the width of the amphid and from *V. halstromi* by the size of the spicule. The shape of the stoma, used by Wieser to separate the two species, is so variable in that from Kerguelen Island as to be inconclusive.

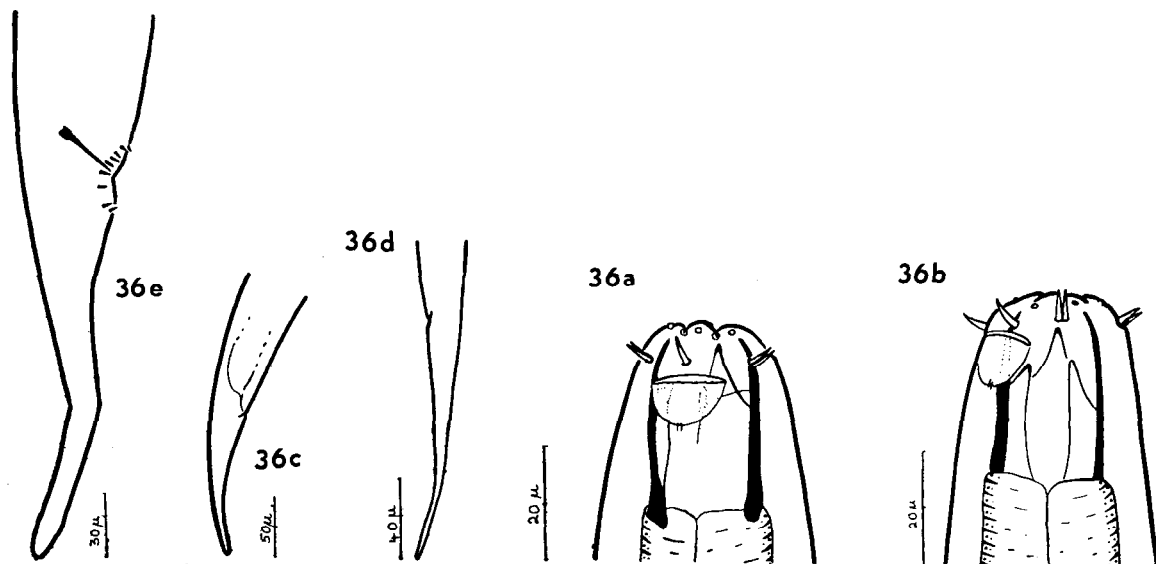
The head bears distinct lips, labial papillae, and cephalic setae, the last 5μ long, a quarter of the head diameter, in the male, and $7-8\mu$, a third of the head breadth, in the female. The amphid is a large structure with a slit-like opening 48-50% of the corresponding head breadth in both sexes. The buccal cavity is $28-30\mu$ long, $13-18\mu$ wide, or 1.7-2.1 times as long as wide. All teeth are pointed, the longest $25-28\mu$, the others $18-20\mu$, long. There is no special cuticularization of the base of the buccal capsule. The nerve ring is at 51-54% of the length of the oesophagus and the excretory pore immediately behind it.

The female tail is from 4.0-6.6 times as long as the anal breadth. It tapers most rapidly in the proximal half, the distal part being more or less cylindrical and ending in a rounded tip.

The male tail is 4.5 times as long as the anal breadth, is cylindrical in the distal two-thirds, and has no terminal swelling. There are twenty (ten pairs) of short stout perianal setae. The spicules are 42μ long, about two-thirds of the anal breadth.

STATION 100 : $65^{\circ} 48' S.$, $89^{\circ} 49' E.$, D R L : 393 M.

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



36. *V. wieseri* : a, head of male ; b, head of female ; c, and d, tail of two females ; e, tail of male.

KERGUELEN ISLANDS.

- STATION 5 : D.R.S., 20m. Off Jeanne d'Arc. Trawling made near belt of kelp ; brownish green mud and some weeds. Echinoids most numerous, other groups represented.
- STATION 9 : Shore collecting stations on islands in Bras Bossière. Nematodes from intertidal mussel bank.
- STATION 12 : D.R.S., 4-5m. ; off Grave Island, Island Harbour ; kelp and red algae common ; many organisms on kelp holdfasts. All groups represented in haul. Polyzoa and a colonial ascidian most numerous.
- STATION 15 : D.R.S., 55m. ; in channel between Hog Island and Blakeney Island. The striking character of the haul was presence of ascidians of several types ; many small invertebrates were found in a common globular silicious sponge.
- STATION 47 : 49° 50' S., 69° 33' E., off south coast of Kerguelen ; D.R.L., 150m. Small stones and gravel ; main features were red ophiuroids and white holothurians.
- STATION 48 : Swain's Bay, near Swain's Haulover. Shore collecting.
- STATION 49 : D.R.S., 2-20m. Western end of Long Island in a little, sheltered harbour with steeply shelving bottom. Dredge full of kelp and red and green algae, bottom of grey-green sand. Ophiuroids, echinoids, and asteroids common ; polychaetes and crustacea numerous.
- STATION 50 : D.R.S., 10m. Grotto Bay. Much kelp and other weed ; echinoids and polychaetes common.
- STATION 51 : D.R.S., 40-50m. Supply Bay. Polychaetes common, many small invertebrates in " roots of common globular silicious sponge ".
- STATION 52 : Bras Bolinder, near head of Greenland Harbour :
1. D.R.S., 20-30m., much kelp and large mussels ; many sponges, polychaetes and ascidians.
 2. Intertidal collections from beneath boulders.
- STATION 53 : D.R.S., 20-30m. Near mouth of Peace River. Calcareous worm tubes common, also silicious globular sponges, harbouring many invertebrates.
- STATION 54 : head of Greenland Harbour ; intertidal collections. A rich fauna.
- STATION 55A : D.R.S., 10-20m. Between Islets in Colbeck Passage, off N.W. end of Long Island. Some kelp, some stinking black mud ; fauna similar to that in other hauls at this depth.
- STATION 55B : D.R.S., 1-5m. Near head of Bras Enzensperger, Royal Sound. Much sand, kelp, and *Ulva* ; numerous small gastopods attached to weed.
- STATION 56A : Rivett Arm, intertidal collection. Very rich fauna in this area, extending down steeply shelving shore line.
- STATION 56B : D.R.L., 50m. ; near Green Island. Good haul, common globular sponge plentiful, with slimy dark green mud. Polychaetes, nematodes, ophiuroids, holothurians, and a large variety of simple ascidians were noted as common.
- STATION 58 : D.R.L., 50m. In Hydrography Channel, a short distance S.E. from Green Island. Good haul, with slimy dark green mud ; common globular sponge plentiful ; polychaetes nematodes, ophiuroids and holothurians, and a large simple ascidian noted as " common ".
- STATION 59 : O.T.L., 47m. Royal Sound, about a mile N.E. of Suhm Island. Large haul of invertebrates from good trawling bottom. Main feature was large numbers of a big translucent ascidian and a rich pink holothurian.
- STATION 60B : Shore collection from Suhm Island. Nematodes from " dripping rock 10 feet above sea level ".
- STATION 60C : Shore collection from small island in Navalo Harbour.
- STATION 61 : intertidal collection from southern part of Antares Island. Nematodes from rock pool.
- STATION 62 : Poincaré Peninsula opposite Murray Island ; shore collections ; nematodes from intertidal rock pools.

STATION 64 : 49° 32' S., 70° 33' E., 2.3.30, O.T.L., 91m.; off entrance to Royal Sound.

A "very good haul of invertebrates", including cidaroids, red ophiuroids, numerous lamellibranchs, and ascidians.

Collections 103, B100 : Jeanne d'Arc ; among algae on beach.

Collection B173 : Long Island, Royal Sound : Intertidal, under stones.

Collections 752, 753 : 15.2.30, Jeanne d'Arc. Low Spring Tide level, under stones.

Collection 755 : 15.2.30 ; Tarn at head of Greenland Harbour, in green slime.

Collections 771, 772 : 15.2.30 ; Jeanne d'Arc. From sponge washed up on beach.

Collection 788 : 15.2.30 ; Jeanne d'Arc. Low Spring Tide level, under stones, among coelenterates.

Collections 789, 790, 792 : 16.2.30 ; Jeanne d'Arc, intertidal.

Collection 855 : 23.2.30 ; Green Rock, near Island Harbour, Royal Sound. Semi-stagnant pool high up on beach.

Collection 865 : 23.2.30 ; off Murray Island, among kelp.

Collection 930 : 27.2.30 ; Antares Island, intertidal pool, with hydrozoa and crustacea.

HEARD ISLAND.

STATION 19 : 53° 05' 30" S., 73° 24' E., Shore collection along beach of Atlas Cove. Nematodes from algae washed up on shore.

CROZET GROUP.

Collection from American Bay, Possession Island ; nematodes from algae taken at 12m.

MACQUARIE ISLAND.

B.A.N.Z.A.R.E. COLLECTIONS.

Station 81B : 54° 29' S., 158° 58' E. ; ashore at Buckles Bay. "Great masses" of *Durvillea* growing here.

Station 83 : 54° 42' 30" S., 158° 54' 30" E. Off Lusitania Bay ; D.R.L., 69m. Dominant forms were pectens, Veneridae, *Waldheimia* (brachiopod). Most invertebrate phyla represented.

A.A.E. COLLECTIONS.

The following collections were made at Macquarie Island by the A.A. Expedition during 1912-1913. The reference letters under which they are listed here follow in alphabetical sequence with those given to A.A.E. Antarctic collections recorded in Section 2 of this Report :—

G. Littoral.

H. Among seaweeds, probably at the north end of the Island.

I. Shore collection.

J. Low tide.

K. Below low tide.

L. Rock scrapings from below low tide, mostly sponges.

M. West coast, among green algae and oligochaetes.

N. North end of island, scrapings from rocks below low tide level.

O. Towntnet off North-East Bay, 19.6.12, "mainly Copepods, some Radiolaria".