

Enoplolaimus virilis n. sp.

Locality: Stewart Island; Halfmoon Bay, 5—7 fms. Sand. November 19th, 1914.

Male: Length 4.4 mm. $\alpha = 25$. $\beta = 5$. $\gamma = 17$.

A single male was secured. The shape of the body is about the same as that of the above mentioned species, only inconsiderably more slender. It has its greatest width near the middle of the body and is then tapering towards both extremities. In the front end it begins to taper immediately in front of the base of the oesophagus whence it tapers evenly till about at the level of the base of the buccal cavity, from here it tapers rather quickly unto the front end. From the base of the oesophagus the body is of about uniform width until the region of the ano-genital opening. The tail is conical and seems to be of the same shape as that of the above mentioned species; it is impossible to describe with correctness its distal part as the tip is somewhat damaged.

The head has the shape of a blunt cone and has no neck-like constriction; the cephalic bristles are, as usual in the genus *Enoplolaimus*, arranged in two circlets the foremost of which has rather short, pointed

bristles with rather thick base. Those of the hindmost circlet are very long and slender. Also in this species tiny hairs are found behind the head, apparently only in this region.

The lateral organ is situated immediately behind the base of the bristles of the foremost circlet; it has the same shape as that of the above mentioned species and is plainly seen in fig. 11.

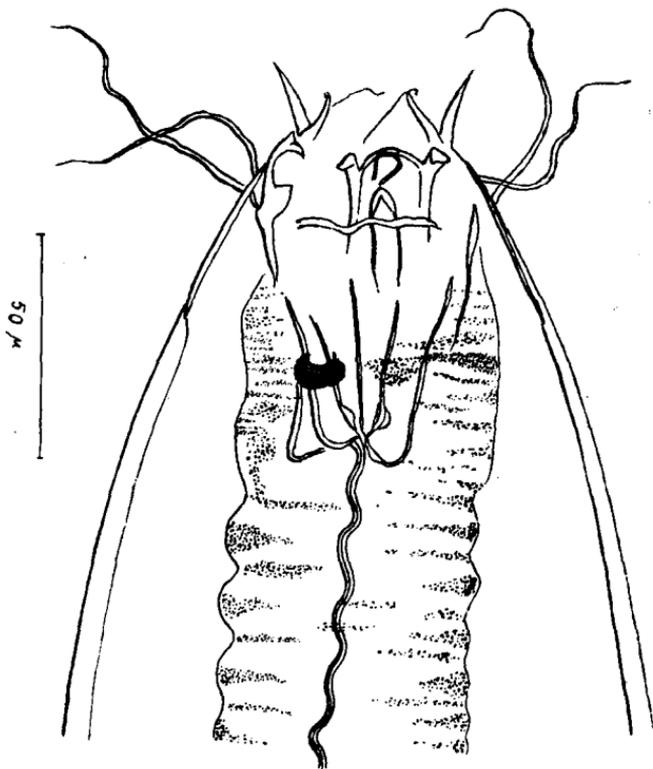


Fig. 11. Head of *Enoplolaimus virilis*.

Two lens-bearing eyes are situated at about the level of the middle of the hindmost half of the buccal cavity; the lens itself is missing but the shape of the pigment spot indicates that it has been present. Evidently the lens has been diluted by the preservation fluid, a case often met with in preparations of free-living Nematodes.

The buccal cavity has just the same shape as that of the foregoing species, as is easily seen when comparing the figures 9 and 11. Only the thickening lists in the hindmost part seem to be somewhat more slender in the species under consideration.

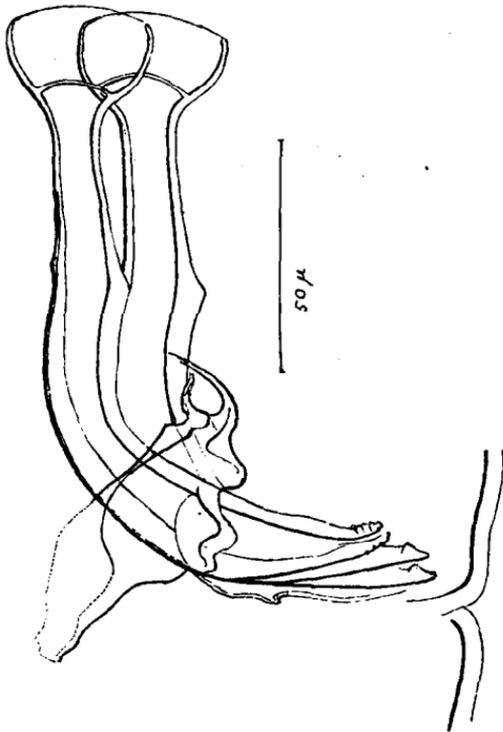


Fig. 12. Spicular apparatus of *Enplotaimus virilis*.

a length of 5.4 mm. while the specimen of the species in question only had a length of 4.4 mm.

As to the shape of the spicule in the species under consideration I shall point out that it has a relatively large "head" and is rather strongly bent so that the proximal half is forming a nearly right angle with the distal half of the spicule. The accessory piece, part of which is membranous, closely embraces the distal part of the spicule; it has a rod-like part which supports it caudadly and the tip of which is provided with a barb; it has a backwards pointing apophyse and another ventrally to the spicule.

A rather well developed supplementary organ is situated some distance cephalo to the spicular apparatus (fig. 13).

The oesophagus is of uniform width through most of its length; it increases inconsiderably towards its base. The nerve ring is found somewhat in front of the middle near the base of the first third of the oesophagus.

The spicular apparatus is — in spite of a rather striking likeness to that of the foregoing species — more complex and of relatively greater dimensions. The figure 10 shows a spicule of a specimen of the foregoing species and fig. 12 the spicular apparatus of the species under consideration; the two figures are drawn at the same magnification and the specimen of the species mentioned above had

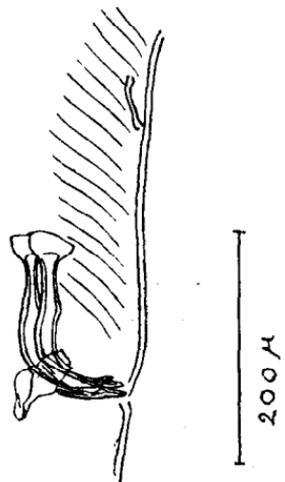


Fig. 13. The male apparatus of *Enplotaimus virilis*.

If we try to clear up the connection between the two species *E. infantilis* and *E. virilis* in a few words, I shall point out that, though in some respects differing not inconsiderably from one another, they agree rather well in all essential features. Thus, the buccal cavity has quite the same shape and structure, the jaws are differing inconsiderably as to the middle-tooth which is somewhat more prominent in *E. infantilis* than in *E. virilis*; on the other side the jaws are somewhat larger and more coarse in *E. virilis*. Although the structure of the spicular apparatus is mainly the same in the two forms it is more specifically developed in *E. virilis* than in *E. infantilis*, also relatively and absolutely larger in the former. The three proportions α , β and γ differ only inconsiderably or perhaps rather not at all in the two forms.

Unfortunately a comparison between the females of the two forms has been impossible on account of lack of material of *E. virilis*.

I shall add that Filipjev in his important paper from 1925: "Les Nématodes libres des mers septentrionales appartenant à la famille des Enoplidæ" has established a new subgenus, *Mesacanthion*, to which the two above described species from New Zealand as well as the species *E. oxygnathus*, described from Greenland, are to be referred. The spicules of these three species as well as of *E. audax* Ditlevsen and of *E. Ditlevseni* Filipjev, which two forms Filipjev also refers to the said subgenus, have a transverse streak over the proximal half of the spicule, presumably a thickening list.

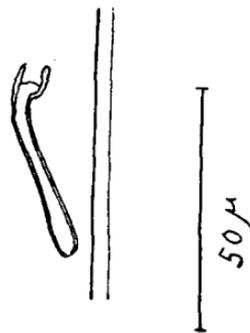


Fig. 14. Supplementary organ of *Enoplolaimus virilis*.