

MESACANTHION Filipjev 1925.

MESACANTHION INFANTILIS Ditlevsen 1930.

(Fig. 29, a-c.)

Enoplolaimus infantilis Ditlevsen 1930, 205, Stewart Is., New Zealand.

Mesacanthion infantilis (Ditl.) Wieser 1953, 76; Southern Chile.

Enoplolaimus mortenseni Allgen 1951, 332, Phillippine Islands.

Enoplolaimus philippinensis Allgen 1951, 323, Phillippine Islands.

Station : 105.

Juvenile (1) : L = 7.2 mm. ; α = 24 ; β = 4.8 ; γ = 28.8.

Juvenile (2) : L = 6.7 mm. ; α = 45 ; β = 4.8 ; γ = 24.8.

The worms are large and stout, the head is particularly muscular, and the oesophageal region, as far forward as the nerve ring, is the widest part of the body. The cuticle is lightly ringed and bears scattered fine short setae. The head has three low lips each with two 10μ long setiform papillae. Of the ten cephalic setae, in a ring 35μ from the anterior end, six are 40μ long, and the second submedian are about half this length; the cephalic diameter is 60μ . A small round amphid lies about 10μ behind each lateral seta. A pair of cephalic organs are present.

A long cephalic capsule is present, extending to about 30μ behind the bases of the cephalic setae. The cephalic ring is a narrow band lying just in front of the cephalic setae, and consists of three well chitinised bars subtending the jaws, connected by flattened trilobed plates (fig. 29 b) joining these and connecting the ring with the outer capsule. The jaws are delicate arched structures with small crochets. The teeth are equal.

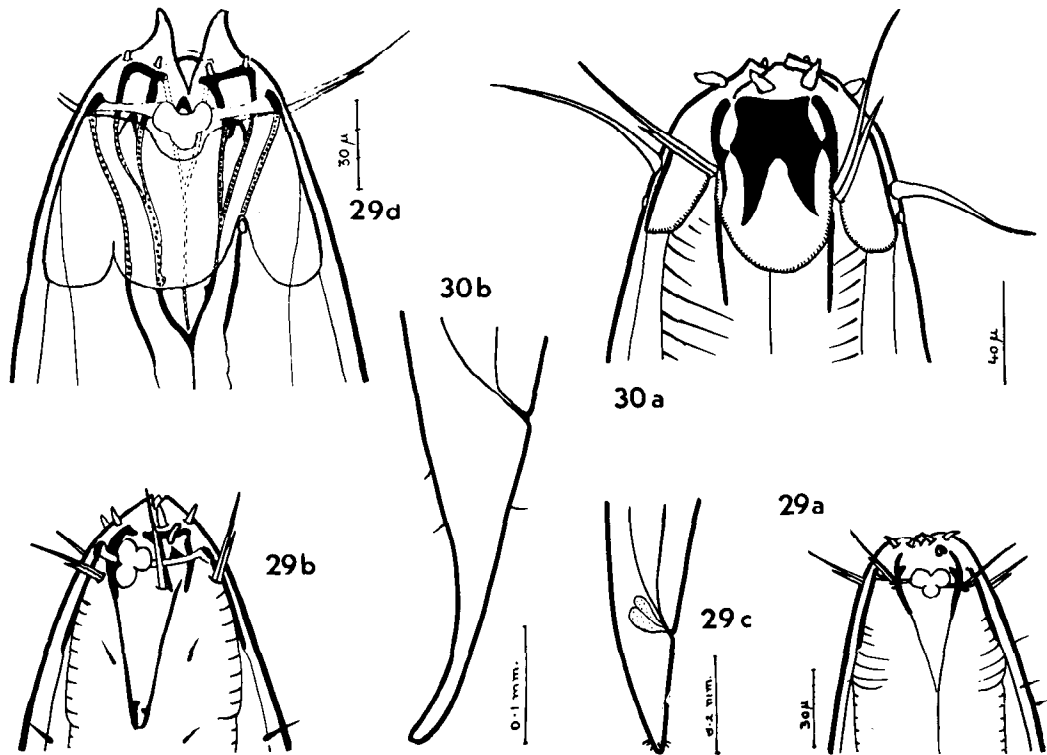
The upper part of the oesophagus to a distance of 56μ behind the cephalic ring (which marks the beginning of the oesophagus) is strongly muscular; the radiating muscle fibres are attached medially to the lining of the oesophagus which is in this region strongly chitinised and encloses a conical lumen, terminated posteriorly by three small but distinct teeth.

In one specimen (J. (1)) two irregular patches of pigment are present 60μ from the anterior end. This is not present in the other specimen, nor were the teeth in the oesophagus seen. In almost all other respects the two are exactly similar.

The tail is in the form of an elongate cone, with a circlet of setae near the tip. The tail length is from $2\frac{1}{2}$ to 3 times the anal diameter.

The tail is rather shorter in these juvenile specimens than that of the type specimens. The form of the cephalic ring is different from that described by Wieser but it must be borne in mind that this is sometimes difficult to see. A re-examination of Allgen's specimens of *Enoplolaimus*

mortenseni and *E. philippinensis*, through the kindness of the Zoological Museum of Copenhagen, shows that Wieser was quite right in placing the former as a synonym of *Mesacanthion infantilis*, and that the second of Allgen's species although flattened more than the former, belongs also to this species. A figure drawn from the type of *E. mortenseni* is given (fig. 29 d) showing the similarity in shape of the cephalic ring.



Figs. 29-30. 29. *Mesacanthion infantilis*: (a) head of juvenile, sublateral view with lips folded; (b) head of juvenile, lateral view with lips erected; (c) tail; (d) sublateral view of head, drawn from type specimen of *Enoplolaimus mortenseni* Allgen. Same scale for both (a) and (b). 30. *Mesacanthiodes wieseri*: (a) head; ventral view; (b) tail.

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.