

Molgolaimus n. g.

Small Anguillulidæ of a rather clumsy shape. The front end is tapering evenly to the head which is rounded and separated from the body by an inconspicuous constriction. The cuticle seems to be smooth, but possibly it is exceedingly finely striated transversally, a feature which I have not been able to ascertain. No setæ have been observed, not even in the front end. No eyes or lateral organs. Buccal cavity entirely lacking. As far as can be observed, the œsophagus is short and thin almost throughout its whole length; its first two thirds are, however, very indistinct; at its base it forms a conspicuous, globular bulb with a rather large cavity in its interior. It was not possible to ascertain whether another bulb was present in the middle of the œsophagus as might perhaps be expected. The nerve ring was not observed. Ventral gland seems to be lacking. The female organs are symmetrical, the ovaries reflexed. Vulva is situated somewhat cephalad to the middle. Spicules are exceedingly long and thin; they are fili-form and highly flexible. No accessory piece is seen. Supplementary organ is lacking. Two tiny preanal papillæ were observed.

Molgolaimus tenuispiculum n. sp.

Pl. I, fig. 13. Pl. II, fig. 11. Pl. III, fig. 11.

Locality: Auckland Islands. North-arm of Carnley harbour. Clay.

Length: Female, 0,79 mm. Male, 0,75 mm.

Female: $\alpha = 24,7$. $\beta = 9,0$. $\gamma = 7,6$.

Male: $\alpha = 23,5$. $\beta = 9,4$. $\gamma = 9,4$.

Four specimens were captured, three females and one male.

The shape of the body is rather clumsy. In the first third the front-end tapers rather evenly; about at the level of the middle of the œsophagus it begins to taper more quickly towards the head which is separated from the body by an inconspicuous constriction. The tail is conical in its proximal half; its distal half forms a digitate prolongation (fig. 2).

The cuticle is smooth or possibly provided with exceedingly delicate transverse striæ. Under high magnifying power (Apochr. 2 mm) it seemed to me as if such a striation was perceivable, but it is possible that this was due to the pigment granules in the subcuticular layer. With certainty I was not able to settle this question. Setæ seem to be entirely lacking, not only on the body but even on the head. Nor have I been able to see any lips or papillæ. Eyes and lateral organs likewise seem to lack. There is no buccal cavity; the entrance to the mouth is only like a prick of a needle. Regarding this feature and the structure of the œsophagus I consider it probable that the animal is feeding exclusively upon liquids.

The œsophagus is at its base provided with a conspicuous bulb of globular shape, the interior of which forms a rather spacious cavity. For the rest the œsophagus seems to be rather thin, but it is very indistinct in the distal two thirds so that

it has been impossible to me to ascertain whether another bulb is found near the middle or not. No nerve ring was observed. Ventral gland seems to be lacking.

The female organs are symmetrical and the ovaries reflexed. Only one shell-egg has been observed in each of the branches of the uterus. The vulva is found somewhat cephalad to the middle of the body. In a female the length of which makes 0,79 mm the vulva was situated 360 μ from the front end. The spicules are exceedingly long and filiform; they are highly flexible as is seen in fig. 11, Pl. III. There is no accessory piece nor supplementary organ. The length

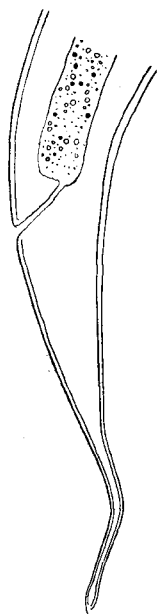


Fig. 2. *Molgolaimus tenuispiculum*; tail of female.

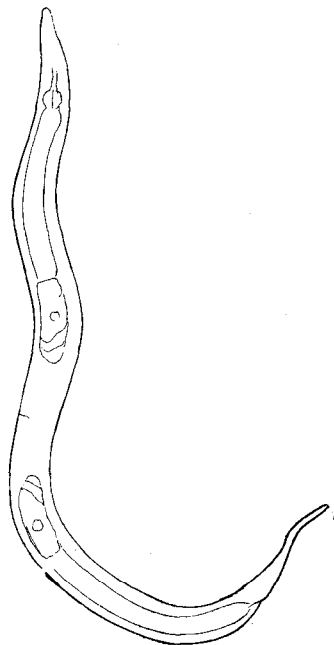


Fig. 1. *Molgolaimus tenuispiculum*, ♀.

of the spicules makes 163 μ . Cephalad to the anogenital aperture two tiny masculine papillæ are seen the most caudad of which is situated 9 μ from the anus, the other one 12 μ more cephalad. The hind-part of the body of the male is strongly curved; only the tail itself is almost straight, a feature not common among Nematodes.

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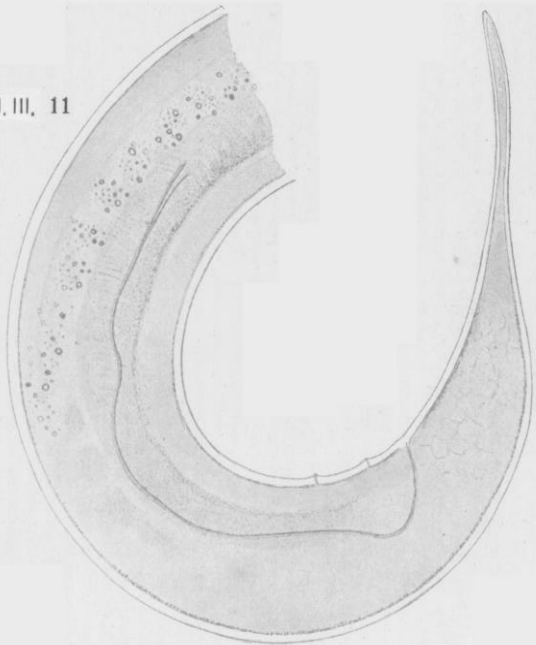
Pl. I.



Pl. II, 11



Pl. III, 11



Pl. I.

13. *Molgolaimus tenuispiculum* n. g. n. sp. Front end. Zeiss Apochr.
2 mm. Comp. Oc. 4.

Pl II.

11. *Molgolaimus tenuispiculum* n. g. n. sp. Ovarium. Zeiss Apochr. 3
mm. Comp. Oc. 4.

Pl. III.

11. *Molgolaimus tenuispiculum* n. g. n. sp. ♂ Tail. Winkel Homog. Imm.
2,2 mm. Comp. Oc. 4.