

Dorylaimopsis punctatus n. sp.

Pl. II, fig. 6; Pl. III, figs. 2, 3; Pl. IV, fig. 1.

The Sound; off Hellebæk. Shells and gravel.

Five specimens were taken, 2 females and 3 males. The length of the females is c. 3 mm; the males are somewhat smaller, c. 2,5 mm. The body is rather slender and tapers in front only gradually, except near the head where it tapers more quickly. In the posterior region it tapers very slightly; the tail is conical, provided with a slender tip which shows an extension with the excretory tube for the caudal gland (Pl. II, fig. 6). The head is provided with a single ring of short, stout setæ (Pl. III, fig. 2).

The cuticle is rather thick and proves to consist of at least two, possibly three layers. With low magnifying power is plainly seen a transverse striation; with high magnifying power are seen numerous rows of circular points occupying the entire surface. In the foremost part of the body the rows dissolve gradually and the points are here irregularly scattered. Something like this is known in several other marine genera e. g. *Chromadora*, *Cyatholaimus* and *Halichoanolaimus*. Another system of larger points forms double-rows running in the longitudinal axis of the body. These double-rows are four in number, arranged subdorsally and subventrally on each side. The distance between the two single-rows in each double-row attains 6 μ , the distance between the two points in a row is only about 1 μ .

On the head the cuticle is smooth, thin and forms a transparent cap.

The structure of the buccal cavity is very peculiar. With low power a spear like that of *Dorylaimus* is seen in the front end. In optical section and under high magnifying power is seen two parallelly running chitinous, rod-shaped thickenings, one somewhat longer than the other. The front ends of these two „rods“ are

united by means of a third chitinous „rod“ running obliquely forward; but as the last named rod does not touch the ends of the two others the junction is not complete. To each side of the spear thus formed are inserted strong protractor muscles plainly seen in fig. 2, Pl. III. In none of my specimens the spear is protruded but I must believe that it can be protruded. I have no clear understanding of how the buccal cavity and the „spear“ are to be interpreted; but I am convinced that the species in question is not related to *Dorylaimus* and that the likeness between the two genera perhaps is due to convergence. The length of the spear in *Dorylaimopsis* attains 27 μ .

The lateral organs are large and form a regular spiral. They are situated immediately behind the cephalic setæ.

The œsophagus increases gradually towards its base; near this it thickens more rapidly but a true bulb is not formed. A ventral gland is found at the level of the base of the œsophagus; the excretory pore is found about at the level of the middle of the œsophagus; an ampulla of the usual shape is found.

The vulva is situated somewhat in front of the middle of the body. Vaginal glands are present. The female organ is symmetrical; the ovaries are long but not reflexed.

The spicules are very peculiar. They are rather long and bent almost in a right angle somewhat above the apex. On the ventral side is found a hook-shaped prominence. Two accessory pieces appear to be present, one, very little, in front of the apex of the spicule, the other behind the spicule, large and provided with a backwardly projecting prominence (Pl. III, fig 3). Preanal papillæ are present in a number of c. 20; they are rather clavate in shape, very small and situated in the cuticle without projecting beyond it. Postanally rather long and densely situated setæ are arranged in two sublateral rows.

Female.

Length: 2,9 mm.

α = 29.

β = 8,2.

γ = 12,4.

Male.

2,6 mm.

α = 35.

β = 6,7.

γ = 12,3.

1. *Dorylaimopsis punctatus* n. g. n. sp. Region of the vulva. Obj. C. Comp. Oc. 4.
2. *Dorylaimopsis punctatus* n. g. n. sp. Anterior part of the body. Apochr. 2 mm Comp. Oc. 4.
3. *Dorylaimopsis punctatus* n. g. n. sp. Ano-genital region of a male. Obj. E. Comp. Oc. 4.
6. *Dorylaimopsis punctatus* n. g. n. sp. Posterior part of a male. Obj. C. Comp. Oc. 4.

Explanation of plates.

Zeiss' microscope was used; in some cases Winkel's Homog. Imm. 2,₂ mm was applied.

Most of the figures were outlined with an Abbe-Zeiss camera lucida, some of them with Winkel's drawing-eyepiece.

Reference letters for the figures.

- exc. Excretory duct for the ventral gland.
- int. Intestine.
- p. Pigment.
- v. Ventral gland.
- va. gl. Vaginal gland.
- vu. Vulva.