

*Neochromadora appiana* n. sp. (fig. 61a-d)

♂♂: L=1.45 a=20.0 b=8.0 c=8.3

♀♀: 1.22 24.5 7.0 7.0 Vu=49 per cent

Body: diameter at end of esophagus 42  $\mu$ . Cuticular ornamentation exactly as in the foregoing species. Cervical setae up to 25  $\mu$  long.

Head: diameter 23  $\mu$ . Cephalic setae 18  $\mu$  long.

Buccal cavity typical, with strong, S-shaped tooth.

Spicula 51  $\mu$  long. Gubernaculum 38  $\mu$  long, with a lateral knoblike projection in the middle. There are 9-10 minute, inconspicuous preanal papillae.

Tail 4.6-5 anal diameters long. Anal diameter 46  $\mu$ .

Occurrence: Alki Point, Richmond Beach; 7.5-4 feet.

Remarks: This species is distinguished from the foregoing one mainly by the structure of the male genital armature, particularly by the shape of the gubernaculum and the number and size of the preanal papillae. The cephalic setae seem to be slightly shorter than in *N. pugillator*.

### 1. *Richmond Beach*

Near the railway station. Most exposed locality. Flat, uninterrupted beach, without boulders.

Sample No.	Intertidal Height	Average Grain Size	Date
1	-2.5	200	5/13/57
2	0.5	269	4/23/57
3	3.0	294	3/17/57
4	5.0	270	6/17/57
5	6.0	254	4/7/57
6	7.5	384	5/5/57

### 3. *Alki Point*

Between W. Oregon and W. Genesee streets. Medium fine to coarse sand. From 3.5 feet upward, the beach is covered with boulders and rocks, overgrown with seaweeds, barnacles, *Mytilus*, etc. In this zone the samples are derived from patches of sand between the boulders. In the lower portion of the beach there occurs the polychaet *Telepsavus costarum*, apparently an indicator of silty and fine sand. There is dense algal growth (*Nereocystis*, *Laminaria*, etc.) below low water.

Sample No.	Intertidal Height	Average Grain Size	Date
16	-2.5	105	5/12/57
17	0	116	4/11/57
18	2.0	117	2/10/57
19	4.0	252	6/13/57
20	5.0	210	12/20/56
21	7.0	207	6/29/57

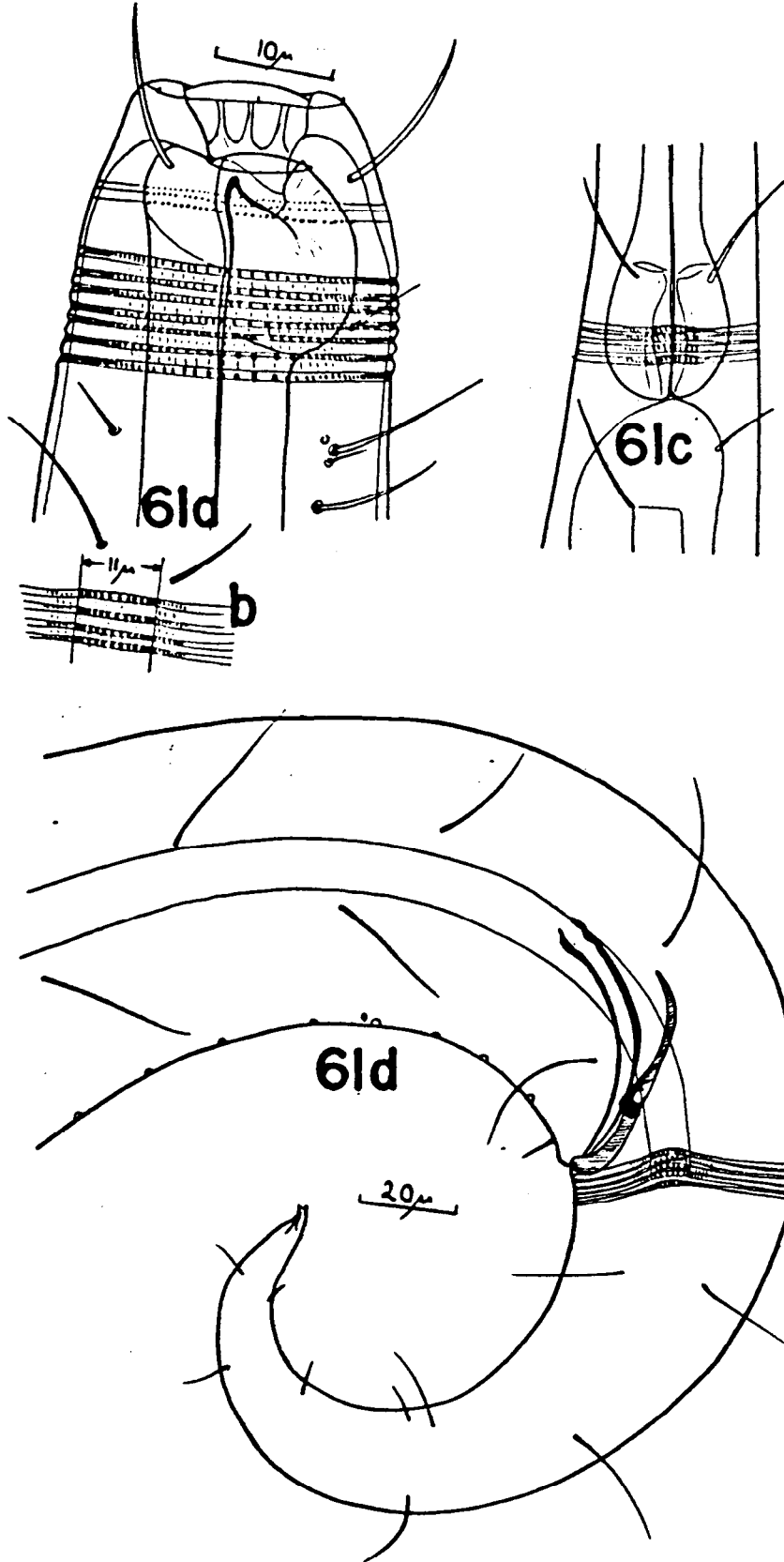


Fig. 61. *Neochromadora appiana*. a, anterior end of male; b, lateral cuticular differentiation in mid-body; c, bulbar region; d, posterior end of male.