

Neochromadora bilineata n. sp.

(Fig. 5)

Measurements

Males (Holotype and 4 paratypes): L=662; 567; 642; 696; 744, eso=101; 100; 109; 98; 108, hd=8; 9; 9; 8; 8, bd=20; 21; 19; 21; 21, ad=18; 18; 18; 17; 19, mbd=23; 22; 23; 24; 25, cs=6; 4; 5; 5; 5, nr=61; 57; -; 63; 66, vg=158; 145; 157; 149; 169, t=101; 89; 97; 92; 96, spic=26(22); 24(20); 23(17); 24(20); 26(22), gub=16; 15; 16; 15; 18.

Females (Allotype and 4 paratypes): L=773; 752; 765; 765; 852, eso=104; 107; 104; 108; 115, hd=9; 9; 8; 9; 9, bd=23; 23; 23; 23; 24, vd (=mbd)=36; 31; 28; 31; 33, ad=18; 17; 17; 17; 17, cs=4; -; 6; 6; 6, nr=67; -; 68; 66; -, vg=156; 154; 155; 161; -, t=137; 130; 124; 133; 148, v=336; 328; 352; 341; 383.

Male. Cuticle striated, complicated and heterogeneously differentiated; four transverse rows of small oval to rectangular markings present just posterior to cephalic setae, posterior two rows of markings larger than anterior ones (Fig. 5-2); following part of cuticle to 40% of esophagus length characteristically thicker than any other part (Fig. 5-1), two longitudinal rows of distinct markings laterally differentiated, transverse bands on the both sides of these two apart markings appeared to be fused structure of such markings; near esophagus end longitudinal markings enlarged, appeared semicircular, and transverse bands becoming rod-like form (Fig. 5-4); at middle body and near cloaca (Fig. 5-5, 6), lateral markings oval-shaped, and transverse bands apparently composed of narrowing two rows (horseshoe-like structure was observed under these lateral markings at middle part of body in paratype as shown in Fig. 5-7). Lateral membrane occurring from

posterior esophagus bulb, 3.8μ wide at middle body. Cervical and somatic setae arranged sublaterally, less than 7μ long.

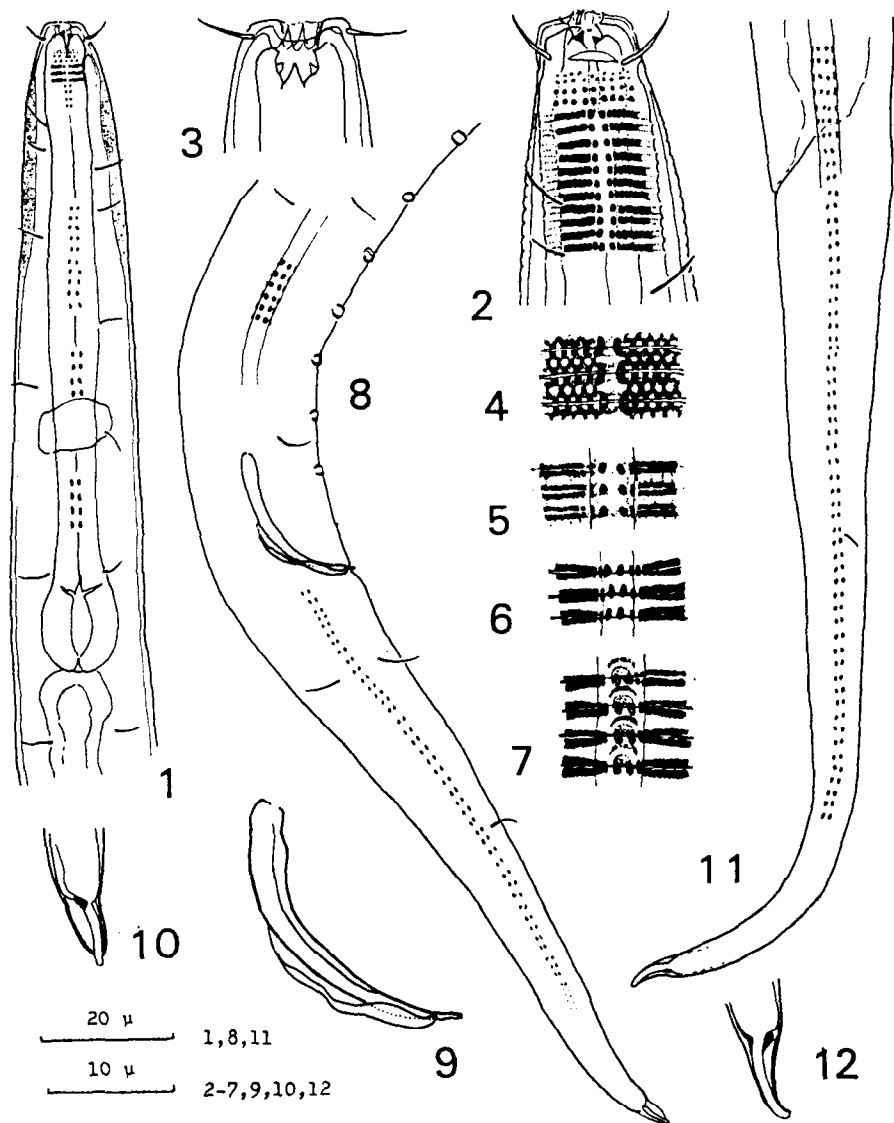


Fig. 5. *Neochromadora bilineata* n. sp. Male (Holotype; 3, 7, paratypes). 1. anterior end; 2-3, head, lateral and dorsal view; 4-7. lateral cuticular pattern, near esophagus end, at middle of body, near cloaca and at middle of body; 8. posterior end; 9. spicules and gubernaculum; 10. spinneret; Female (Allotype). 11. tail; 12. spinneret.

Head (Fig. 5-2, 3) truncated with six labial papillae and cephalic setae (6+4). Amphids crescent-like, 3.6μ wide. Buccal cavity shallow, ornamented with one dorsal, two subventral teeth, and other modifications; tooth-like processes at anterior subventral walls and minute denticles or ridges on lateral walls. Esophagus surrounded by nerve ring at about 60% of its length from anterior; esophagus bulb with an interruption. Excretory ampulla near anterior esophagus,

pore probably posterior to cephalic setae.

Reproductive system with a single, outstretched testis. Spicules (Fig. 5-9) slender, arcuate and gradually pointed. Gubernaculum distally dilated as supporting spicules, distal tip slightly bent upwards. Seven preanal supplements present, and minute seta in front of cloaca (Fig. 5-8); distance between the anteriormost, the posteriormost and cloaca, respectively 70 and 15 μ long (seven supplements and distance between the anteriormost and cloaca, 11-12% of body length are also constant in paratypes).

Tail long and gradually tapering; spinneret (Fig. 5-10) conspicuously plumped, tube slender, 5 μ long.

Female. Similar to male in most detail.

Reproductive system with paired, opposed and reflexed ovaries; the anterior 18.6 and the posterior 19.9% of body length, respectively (16.1-18.8 and 18.8-19.5, respectively in paratypes). Vulva situated anterior to middle of body. One egg in each uterus, 38-44 \times 26-28 μ in size (including paratypes).

Tail (Fig. 5-11) longer than of male; spinneret (Fig. 5-12) longer, not plumped, 7 μ long.

Remarks. Among the members of *Neochromadora* characterized by the heterogeneous cuticular pattern pronouncedly differentiated and the possession of about 7 preanal supplements, the present species closely resembles *N. complexa* Gerlach, 1953 in the body size (less than 1 mm long), lateral differentiation of the cuticle beginning from just anterior head, the shape of the spicules and gubernaculum, 7 preanal supplements and so on. This new species, however, is distinguishable from *N. complexa* by the following features, without comparing in the female because the female of the latter not founded; which are, the cuticle of anterior 40% of the esophagus is characteristically thickened and at this part cuticular markings except two lateral ones are fused becoming transverse bands, and that the preanal supplements are more weak and smaller.

Material studied. Five males and five females. Holotype ♂ (10-VIII-1973) and allotype (28-III-1974), paratypes; 1 ♂ (10-VIII-1973), 2 ♂♂ (7-IX-1973), 1 ♂ and 4 ♀♀ (28-III-1974): Oshoro, on *Sargassum confusum* Agardh in subtidal zone (K. Kito leg.).