Dichromadora gathuai sp.n. (Figure 2A–L)

Type material
Six males and six females on slide nos. RI532–RI533 and 10378–10386

Etymology
Name given after Dr. S.N. Gathua of Kenyatta Hospital, Kenya

Type locality
Males were from sts. 120 (1♂), 114 (3♂ including holotype), 514 (1♂) and 552 (1♂) and females were from sts. 103 (2♀), 121 ($♀_1$) and 114 (3♀)

Measurements

$$♂_1 \frac{- \quad 70 \quad 117 \quad M \quad 708}{10 \quad 20 \quad 20 \quad 25 \quad 19} \quad 817$$

a: 32.7; b: 7.0; c: 7.5; c′: 5.7; spic: 33

$$♀_1 \frac{- \quad 64 \quad 106 \quad 312 \quad 636}{8 \quad 21 \quad 22 \quad 28 \quad 15} \quad 703$$

a: 25.1; b: 6.6; c: 6.4; c′: 7.3; V: 44%

Other ♂♂ L: 509–817; a: 28.1–35.5; b: 5.5–7.5; c: 6.0–7.8; c′: 5.7–6.2; spic: 24–27
Other ♀♀ L: 566–817; a: 26.2–31.7; b: 5.7–7.3; c: 5.3–7.0; c′: 7.1–8.9; V: 43–47%

Description
Males: The body is cylindrical with blunt anterior end and pointed tail. Cuticle is annulated and punctated. The lateral differentiation is a narrow and raised ala (Figure 2K and 2L) which extends from mid-pharyngeal region till mid-tail region. Somatic setae are 5 μm long and in four longitudinal rows (Figure 2A & 2I). The amphids were not seen. The inner labial setae are inconspicuous, the outer labial are papilliform while the cephalic ones are 3–4 μm long (Figure 2C). The stoma has a large dorsal hollow tooth and two smaller subventral ones (Figure 2E).

Pharynx is cylindrical, 89–119 μm long, with posterior well formed bulb, 13 × 16 μm in dimension. The nerve ring surrounds the pharynx at 57–60% of the length of the pharynx from the anterior (Figure 2A). The ventral gland is located posterior of the cardia region and the gland opening is not conspicuous. The reproductive system is monorchic, with outstretched testis located to the right of the intestine. The testis is long and wide followed by a narrower vas deferens with a special junction in between them (Figure 2G). There are strong copulatory muscles extending anteriorly from the cloaca to about one tail length (Figure 2B). The spicules are 1.5–1.7 abd long, curved with poorly developed capitulum. The gubernaculum is one abd long and has a serrated posterior end (Figure 2I). Pre-cloacal supplements are absent.

The tail is 93–109 μm long, conical with a cylindrical end and pointed tip.

Females: They are similar to males in most aspects (Figure 2D, 2E) but the tail is relatively longer (Figure 2J) (see c- and c′-ratios). The reproductive system is amphidelphic with reflexed ovaries, anterior branch to the right and posterior one to the left of the intestine (Figure 2F). The vulva is circular and vagina has a thick wall (Figure 2H).

Differential diagnosis
Dichromadora gathuai sp.n. is characterised by cylindrical body with a blunt anterior end; cuticle with raised lateral alae; strong curved spicules and a guber-

naculum with serrated posterior end and lacks precloacal supplements.

Other *Dichromadora* species described without precloacal supplements are *D. abnormis* Gerlach, 1953, *D. apapillata* Timm, 1961, *D. arcospiculum* Timm, 1961, *D. geophila* (De man, 1876) Gerlach, 1971, *D. islandica* Kreis, 1963, *D. punctata* Schuurman Steckhoven, 1950, *D. simplex* Timm, 1961, *D. strandi* Allgen, 1940 and *D. tobaensis* Schneider, 1937.

Dichromadora gathuai sp.n. can be distinguished from *D. geophila*, *D. punctata* and *D. strandi* in that the latter species have a short thick tail. The shape of the gubernaculum (serrated on the posterior end) distinguishes it from *D. arbnomis* and *D. arcospiculum* whose gubernaculum are blunt on the posterior end,*D. islandica*, *D. simplex* and *D. tobaensis* whose gubernacula are short and sharp on the posterior end and *D. apapillata* whose gubernaculum has two teeth on the posterior end. *D. apapillata* also has spicules that are open on the anterior end and the cephalic setae are 50% hd compared to 30% hd in *Dichromadora gathuai* sp.n.

Table 2. Dichromadora species described below, distinguishing characters

	Body shape	Pharyngeal bulb	Supplements
D. longicaudata sp.n.	slender, long M = 13–14 μm	set off, pyriform	absent
D. gathuai sp. n.	cylindrical, M = 25–28 μm	set off, pyriform	absent
D. loisae sp. n.	cylindrical, M = 20–21 μm	double	7
D. cucullata	cylindrical, M = 20–26 μm	pyriform	7
D.quadripapillata sp.n.	cylindrical, M = 21–23 μ	pyriform	4

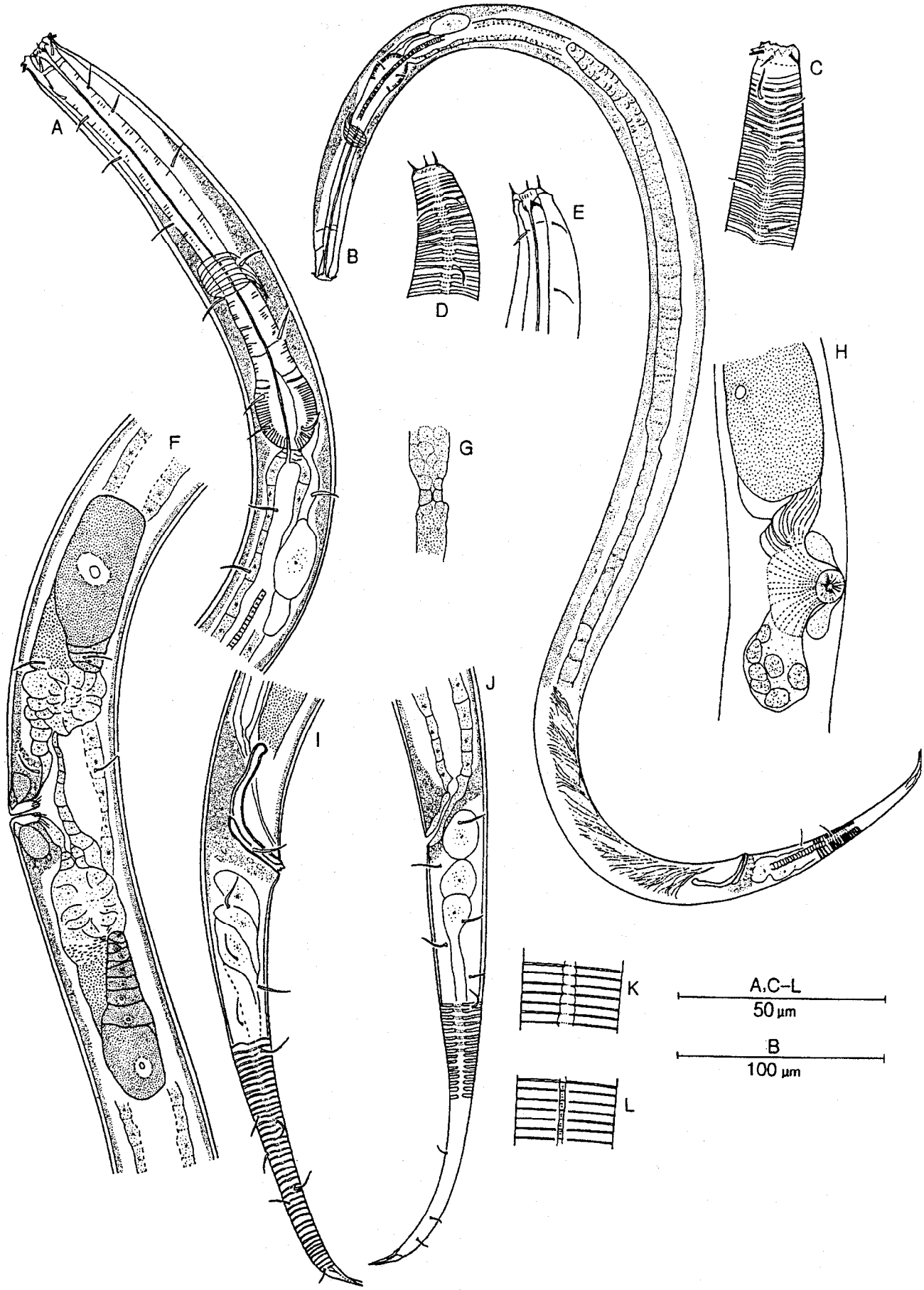

Figure 2. Dichromadora gathuai sp.n. A: ♂ 1 pharyngeal region; B: ♂ 1 total body; C: ♂ 1 head region; E: ♀ 1 head (section); F: ♀ 1 reproductive system; G: ♂ 1 testi-vas deferens junction; H: ♀ 1 vulva; I: ♂ 1 tail; J: ♀ 1 tail; K: cuticle; L: cuticle (more superficial).

The abbreviations used in the text are: a: body length divided by maximum body diameter, b: body length divided by pharyngeal length, c: body length divided by tail length, c′: tail length divided by anal body diameter, abd: anal body diameter, cbd: corresponding body diameter, hd: head diameter at the level of the cephalic setae, L: body length, M: maximum body diameter, spic: spicule length, V%: position of vulva as a percentage of body length from anterior, v: vulva distance from the anterior Formula:
distance from the anterior to;

$$\frac{\text{head} \quad \text{end of the pharynx} \quad \text{M (vulva)} \quad \text{anus}}{\text{cbd}} \quad \text{total length}$$

All measurements (not ratios) are in micrometers and all curved structures are measured along the arc.

Table 1a. Location and depth of the sampling stations for cruise A1

Date	Station	Latitude S	Longitude E	Depth (m)
20/06/92	103	04E.25′.83	39E.33′.58	62
22/06/92	105	04E.24′.06	39E.45′.99	511
23/06/92	106	04E.20′.35	40E.21′.70	1000
23/06/92	107	04E.21′.83	41E.13′.16	2053
25/06/92	108	03E.10′.06	40E.10′.32	18
25/06/92	111	03E.09′.78	40E.14′.41	53
27/06/92	114	03E.10′.27	40E.17′.02	213
28/06/92	117	03E.08′.21	40E.41′.80	500
29/06/92	118	03E.08′.46	41E.01′.77	1112
29/06/92	119	03E.10′.67	41E.14′.20	2007
30/06/92	120	02E.42′.20	40E.31′.18	21
30/06/92	12	02E.43′.07	40E.33′.89	52
02/07/92	127	02E.03′.61	41E.17′.80	24
02/07/92	128	02E.03′.16	41E.18′.48	55
03/07/92	132	01E.56′.03	41E.31′.54	1000
03/07/92	133	02E.01′.49	41E.46′.96	2015
04/07/92	131	02E.00′.27	41E.26′.62	500
06/07/92	136	02E.40′.05	41E.10′.17	992

Table 1b. Location and depth of the sampling stations for cruise A2

Date	Station	Latitude	Longitude	Depth
30/11/92	503	04E.19′.28	39E.35′.56	47
03/12/92	505	04E.25′.33	39E.45′.21	520
04/12/92	506	04E.19′.45	40E.21′.80	1020
02/12/92	507	04E.21′.31	41E.13′.64	2088
28/11/92	511	03E.09′.59	40E.13′.94	57
25/11/92	514	03E.10′.27	40E.17′.34	207
25/11/92	517	03E.09′.43	40E.41′.25	508
26/11/92	518	03E.07′.98	40E.59′.96	963
27/11/92	519	03E.09′.28	41E.16′.53	2179
23/11/92	528	02E.04′.76	41E.17′.40	39
20/11/92	531	02E.00′.48	41E.37′.56	516
22/11/92	532	01E.56′.02	41E.37′.56	904
21/11/92	533	02E.00′.86	41E.47′.71	2027
07/12/92	550	04E.11′.96	39E.37′.94	51
07/12/92	552	04E.07′.71	39E.54′.67	500