

*Paracanthonchus stateni* ALLGEN 1930c (fig. 103a—d)

juv.:	♀♀:	♂♂:	ALLGEN (juv.):
L=0,74—1,11 (0,90)	0,92—1,72 (1,24)	0,93—1,32 (1,10)	1,33
a= 19,9	17,9—23,9 (20,1)	18,2—27,5 (21,7)	22,2
b= 5,0	5,3— 6,4 ( 5,7)	4,5— 6,7 ( 5,1)	5,3
c= 9,2	10,1—14,6 (11,7)	10,0—14,7 (12,2)	12,7
	Vu=46,1—53,7 (51,7)		

Total of specimens: 43 juv., 361 ♀♀, 7 ♂♂.

Samples: M 3B, 49, 50A:1, :2, 113:V, 118B, 151.

Head: diameter 22—24  $\mu$ =53% of diameter at end of esophagus.

Labial setae: 6  $\mu$  long. Cephalic setae: 10—12+8—9  $\mu$  long.

Amphids: 9  $\mu$ =33% of corresponding diameter in width (both sexes), 5,5 turns.

Cuticular ornamentation: transverse rows of dots farther apart in anterior two thirds of cervical region than in remainder of the body. Lateral differentiation conspicuous both vertically and horizontally, especially in the anal region.

Dorsal tooth: big. Excretory pore: 60  $\mu$  behind anterior end.

Cervical setae: in male approx. 8  $\mu$  long.

Viviparous!

Spicula: 33  $\mu$ =1 anal diameter long, dilated posteriorly.

Accessory piece: 22  $\mu$  long, shaped like a spiculum, with two lateral teeth at tip. Preanal tubuli: 3+2, very small.

Tail: 3—3,3 anal diameters long.

Habitat: Mostly littoral muddy sand (sample M 151); several specimens in sheltered algae, sheltered sand, and sublittoral secondary substrate.

Distribution: State-Islands, Chile.

Remarks: In my material this species was predominant in the single sample from muddy sand. As in other cases a correlation might be supposed between unfavourable environmental conditions and viviparity. The nearest relative is *P. caecus*. Besides the distinguishing characters mentioned in the key above both species possess quite different accessory pieces; typical of *P. stateni* are the two lateral teeth on the distal tip of the accessory piece.

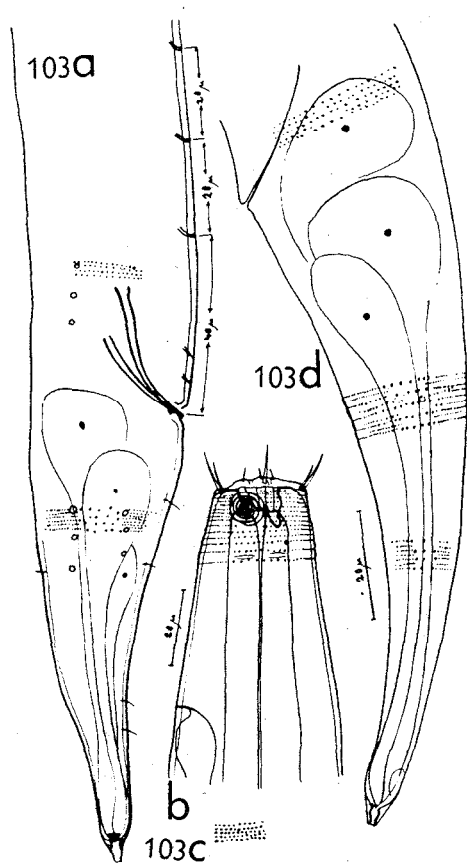


Fig. 103: *Paracanthonchus stateni*. a — tail of male, b — anterior end of female, c — cuticular dots in mid-body, d — tail of male.

## 2. List of samples where nematodes were obtained:

- M 3 A, B*: 10.29.XI.48. 41°29'15" S., 72°57'50" W. Seno Reloncavi, Canal Tenglo; Isla Tenglo, northern shore, opposite Puerto Montt harbour. Tidal belt. Bottom: Sand and gravel with mud and small stones, very sheltered. Sample from *Ulva*-like alga with much detritus. Hand sampling.
- M 8 C*: 17.XI.48. 41°50'12" S., 73°56'57" W. Canal Chacao, Golfo de Quetalmahué; Isla Pullinque, N of Punta Rangui. Tidal belt, sheltered. Grey mud with a little sand. Hand sampling.
- M 9D*: 17.XI.48. 41°49'54" S., 73°51'46" W. Canal Chacao, Bahía de Ancud; Peninsula Lacui, Punta Ahui, southern shore. Tidal belt, rather exposed. Algae (*Ulva* sp.) on rocks, boulders and stones. Hand sampling.
- M 10*: 41°52'42" S., 73°50'46" W. Canal Chacao, Bahía de Ancud; Punta el Morro. Tidal belt, very exposed. Algae on rocks and stones. Hand sampling.
- *B*: 18.XI.48. from *Ulva*.
- *D*: 28.XI.48. *Ulva*-like alga.
- *F*: 2.III.49. *Ulva* without sediment; 20 cm above low water.
- M 27*: 3.V.49. 41°49'40" S., 73°08'00" W. Golfo de Ancud, northern part; Between Isla Quenu and Isla Chidguapi. 45 m depth. *Anthozoa* with much detritus, on coarse sand with shells. Triangular dredge and Agassiz trawl.
- M 29B*: 4.I.49. 41°24'30" S., 72°19'45" W. Seno Reloncavi, Estero Reloncavi; inner part. Bahía Rakún, E of Punta Dirección. 35—40 m depth. Very fine sand with mud and terrestrial plant detritus. Mortensen microfauna collector.
- M 30A*: 5.I.49. 41°24'00" S., 72°19'20" W. Seno Reloncavi, Estero Reloncavi; inner part, Bahía Rakún, Banco Petrohué. Tidal belt, very sheltered; almost fresh water. Hand sampling.
- *A*: Old tree-trunks with barnacles.
- *B*: Sand and mud with terrestrial plant detritus.
- M 33A*: 3.I.49. 41°51'33" S., 73°50'14" W. Canal Chacao, Bahía de Ancud; Punta San Antonio. Tidal belt, extremely exposed. *Ulva* with some detritus, on rock, stones, and sand. Hand sampling.
- M 37A*: III.49. 41°30'06" S., 72°53'57" W. Seno Reloncavi proper; Punta Pilluco. Tidal belt, rather exposed. Boulders in sand, some beds of hard clay. Hand sampling.
- 1: from algae.
- 2: from *Ulva* with little detritus.
- M 38B*: 22.I.49. 41°55'00" S., 72°58'00" W. Golfo de Ancud, northern part; SW of Isla Quellin. 300 m depth, fine clay with fragments of polychaete tubes. Mortensen microfauna collector.
- M 41A*: 23.I.49. 42°26'40" S., 72°59'00". Golfo de Ancud, Eastern and southern parts; ESE of Isla Tac. 250—300 m depth. Sand and clay with small stones and shells. Triangular dredge.
- M 42A*: 24.I.49. 42°20'50" S., 73°22'00" W. Golfo de Ancud, western part; Paso Tenaun, S of Punta Tenaun. abt. 70 m depth. Algae and spongiae on hard bottom. Triangular dredge. Hauls 2, 3, 4.
- M 43A*: 24.I.49. 42°08'20" S., 73°28'20" W. Golfo de Ancud. western part; between Quemchi and Isla Caucahué, W of Punta Queler. 30—40 m depth. Coarse sand, small stones and a few boulders. Much detritus. Triangular dredge.

- M 44A*: 24.I.49. 41°58' S., 73°18' W. Golfo de Ancud, northern part; SW of Isla Tabon. abt. 200 m depth. Fine sand mixed with clay and mud. Triangular dredge.
- M 45A*: 24.I.49. 41°46'40" S., 73°90'20" W. Golfo de Ancud, northern part; Canal Caicaen, E of the mouth of Canal Quigua. abt. 18 m depth. Coarse sand with plant detritus. Van Veen grab.
- M 46B*: 25.I.49. 41°46'15" S., 73°09'00" W. Golfo de Ancud, northern part; Canal Caicaen, W of Calbuco. abt. 13 m depth. Coarse sand, boulders and dead algae. Sample from Kelp holdfast with much detritus. Circular dredge and Agassiz trawl.
- M 47A*: 25.I.49. 41°33'45" S., 73°02'05" W. Seno Reloncavi proper; Paso Maillén, between Punta Panitao and Punta Puchegui. Abt. 22 m depth, coarse sand with *Chaetopterus*-tubes, small stones with calcareous algae. Triangular dredge.
- 2: from *Delesseria*-like alga, some detritus.
- 3: from *Lithothamnium*, some detritus.
- 4: from *Dilsea*-like flat algae.
- M 48:1*: 3.II.49. 41°28'50" S., 72°56'50" W. Seno Reloncavi proper; The bay off Puerto Montt, S of the pier. Abt. 30 m depth, sand with detritus. Mortensen microfauna collector.
- M 49*: 6.II.49. 41°40'55" S., 73°00'00" W. Seno Reloncavi proper; Isla Guar, bay on the western side. Tidal belt, rather sheltered. Stones, shell-sand, coarse sand, Hand sampling.
- M 50A*: 16.II.49. 41°29'33" S., 72°58'38" W. Seno Reloncavi, Canal Tenglo; Near »Pontón Siréna«. 11 m depth. Algae on sand, much detritus. Triangular dredge. Hauls 1 and 2.
- M 56A*: 26,28.II.49. 41°47'00" S., 73°53'07" W. Canal Chacao proper; Peninsula Laqui, Punta Corona, northeastern point. Tidal belt, extremely exposed. Algae on rocks with small holes and very shallow rock pools. Hand sampling.
- M 58A*: 4.III.49. 41°52'04" S., 73°48'43" W. Canal Chacao proper; Estero Pudeto, E of Cerro Hueihuen. Tidal belt, rather sheltered. Beds of very hard clay, boulders. Brackish water. Hand sampling.
- M 60A*: 25,29.III. 3.IV.49. 41°30'15" S., 72°58'50" W. Seno Reloncavi proper; Isla Tenglo, the bay on the south side. Tidal belt, rather exposed. Sand. Hand sampling. Samples 1 and 2.
- M 61*: 15.II.49. 42°21'10" S., 73°33'40" W. Golfo de Ancud, western part; S of Quetalco. 39 m depth. Fine dark sand, much detritus. Hunt microfauna collector.
- M 63A*: 16.II.49. 42°25'30" S., 73°39'20" W. Golfo de Ancud, western part; Canal Dalcahué, W of Bajo Pasaje. Tidal belt, sheltered. Algae on stones. Hand sampling.
- M 64*: 17.II.49. 42°46'20" S., 73°28'00" W. Golfo Corcovado and Boca (Paso) del Guafo; light-buoy Vettor Pisani. 0—10 m depth, very exposed. Hand sampling.
- A:3: from *Bryozoa* and green algae on anchor, 10 m depth.
- B:2: from tubes of *Jassa* and algae on buoy.
- B 65B*: 17.II.49. 42°46'30" S., 73°28'10" W. Golfo Corcovado and Boca del Guafo; Bajo Vettor Pisano. 8 m depth. Rather coarse, clean sand. Circular dredge.
- M 69*: 19.II.49. 43°33'30" S., 74°49'30" W. Golfo Corcovado and Boca del Guafo; Isla Guafo, Punta Weather. Tidal belt, extremely exposed. Tufted algae on rocks. Hand sampling.
- M 70B*: 19.II.49. 43°33'00" S., 74°49'00" W. Golfo Corcovado and Boca del Guafo; Isla Guafo, the anchorage E of Punta Weather. 25 m depth, rather coarse sand with some stones. Hunt microfauna collector. Samples 1, 2.
- M 71A*: 21.II.49. 44°48'20" S., 73°35'00" W. Islas Guaitecas, Archipiélago de los Chonos, and Peninsula Taitao; Canal Moraleda, Cayo Blanco. Tidal belt, very exposed. Foliaceous green alga on steep rocks. Hand sampling.
- M 72*: 21.II.49. 45°07'40" S., 73°40'40" W. Islas Guaitecas, Archipiélago de los Chonos, and Peninsula Taitao; Canal Moraleda, El Morro. Tidal belt, exposed. Steep rocks with rock-pools. Hand sampling.
- I: tufted green alga, high-water-spring level.
- A: smooth foliaceous alga, middle tidal belt.

- M 73*: 22.II.49. 45°39'20" S., 73°52'00" W. Islas Gueitecas, Archipiélago de los Chonos, and Peninsula Taitao; Canal Errázuriz »Islote Elena» (Faro Islote Diego). Rather exposed.
- *A*:2: Tidal belt; tufted alga on rather steep rocks. High water level. Hand sampling.
  - *B*: 3—5 m depth. Small stones (1—5 cm), sand and gravel, much detritus. Circular dredge.
- M 74*: 22.II.49. 45°17'00" S., 73°45'00" W. Islas Gueitecas, Archipiélago de los Chonos, and Peninsula Taitao; Canal Moraleda, Puerto Lagunas.
- *B*: 5—7 m depth. Stones with algae and *Mytilidae*, samples from *Mytilidae* and echinids. Hand sampling (diver).
  - *C*: 0—1 m depth. Kelp from stones with algae and *Mytilidae*. Rather sheltered. Hand sampling.
- M 75B*: 24.II.49. 44°24'00" S., 73°34'00" W. Islas Gueitecas, Archipiélago de los Chonos, and Peninsula Taitao; Canal Moraleda, Penon Blanco. Tidal belt, very exposed. Rather steep rocks with rock pools. Hand sampling.
- *1*: from low, filamentous alga; upper tidal belt.
  - *2*: from crustaceous alga; upper tidal belt.
  - *3*: from »*Ulva*»; middle tidal belt.
  - *5*: from calcareous alga; rock pool, some detritus; lower tidal belt.
- M 77*: 25.II.49. 43°59'20" S., 73°27'00" W. Islas Gueitecas, Archipiélago de los Chonos, and Peninsula Taitao; Canal Moraleda, Islotes Locos. Tidal belt, extremely exposed. Rocks. Hand sampling.
- *1*: from filamentous alga; upper tidal belt.
  - *2*: from *Corallina* in rock pool; lower tidal belt.
  - *3*: from filamentous alga in rock pool; middle tidal belt.
- M 79B*: 28.II.49. 42°46'50" S., 73°12'10" W. Golfo Corcovado and Boca del Guafo; Light-buoy Bajo Solitario. Extremely exposed. Hand sampling.
- *1*: from green algae, several cm. below sea-level; on the buoy.
  - *2*: from tufted red algae, 10 cm below sea-level; on the buoy.
  - *3*: from foliaceous brown alga, at sea-level.
  - *4*: from crust of tubes of *Jassa*, no algae but detritus; 50 cm below sea-level, on the cable.
- M 98*: 5.V.49. 41°50'10" S., 73°51'20" W. Canal Chacao, Bahía de Ancud; SE of Punta Ahui. 8 m depth. Spongiae on small stones with algae. Triangular dredge.
- M 113*: 2.V.49. 53°22' S., 70°57' W. Southern Chile, the Magallanes area; Estrecho de Magallanes, Punta Santa Maria, near Agua Fresca. Tidal belt, exposed (shelter: kelp). Algae growing on boulders. Hand sampling.
- *zone I*: crustaceous lichen; 0—21 cm above low water level.
  - *zone II*: algae mit much detritus; 0—21 cm above low water level.
  - *zone IV*: detritus and sand; 33—49 cm above low water level.
  - *zone VI*: detritus and sand; 67—85 cm above low water level.
  - *zone V:1*: low crustaceous alga with much detritus; 49—67 cm above low water level.
  - *zone V:2*: Big alga; 49—67 cm above low water level.
- M 115*: 3.V.49. 53°11' S., 70°55' W. Southern Chile, the Magallanes area; estrecho de Magallanes, near the estuary of Rio los Ciervos, S of Punta Arenas. Tidal belt, exposed (shelter: kelp). Algae, gravel and clay, mixed with mud and covered with boulders. Hand sampling.
- *zone I*: tufted, rigid alga, fairly much detritus and sand; 0—9 cm above low water level.
  - *zone II*: sand with much detritus, between boulders and algae; 9—21 cm above low water level.
  - *zone IV*: tall, shrub-like alga, little detritus; 37—56 cm above low water level.
- M 116*: 7.V.49. 54°28' S., 68°59' W. Southern Chile, the Magallanes area; Seno Almirantazgo Caleta Maria. Tidal belt, rather sheltered. Algae growing on boulders. Brackish water. Hand sampling.
- *II:1:b*: small tufted alga without detritus.
  - *II:2*: small tufted alga without detritus.

- M 117:I*: 7.V.49. 54°28' S., 68°59' W. Southern Chile, the Magallanes area; Seno Almirantazgo. Caleta Maria. 0—0.5 m depth, rather sheltered. Sand. Hand sampling.
- M 118*: 10.V.49. 52°39' S., 71°27' W. Southern Chile, the Magallanes, area; Canal Fitz Roy. Tidal belt, sheltered. Stones with algae. Hand sampling.
- *I*: tufted alga with much detritus.
- *B*: tufted alga with much detritus.
- M 121B*: 9.VI.49. 36°43'36" S., 73°08'10" W. The Talcahuano — Golfo de Arauco area; Bahía San Vicente, Punta Liles just W of San Vicente. Tidal belt, rather exposed. Rocks with small rock pools, boulders. *Ulva*-like alga without detritus; 110 cm above low water level.
- M 122*: 10.VI.49. 37°06'17" S., 73°09'15" W. The Talcahuano — Golfo de Arauco area; Golfo de Arauco, Bahía de Lota, small promontories SE of Punta Fuerte Viejo. Tidal belt, extremely exposed. Hard rocks and boulders in coarse sand. Hand sampling.
- *A*: tufted green alga, without detritus; 130 cm above low water level.
- *B*: *Ulva*-like alga without detritus; 150 cm above low water level.
- M 123*: 17, 19, 21.IX.48., 5,14,15,16.X.48., 15.VI.49. 32°57'24" S., 71°33'25" W. The Valparaíso-San Antonio area; Montemar (N of Valparaíso), »Estación de biología marina.» Tidal belt, rocks with rock pools. Hand sampling.
- M 123A*: 15.IX.—17.X.48., 14.—16.XI.48. 32°57'24" S., 71°33'25" W. The Valparaíso—San Antonio area; Montemar, »Estación de biología marina.» Tidal belt, rocks with rock pools; exposure varying in different parts of the station. Hand sampling. (The samples of this station are characterized by the letter V).
- V 102:I*: *Mytilus* with much detritus.
- V 103:3b*: *Durvillia*-holdfasts.
- V 103:8b*: *Durvillia*-holdfasts.
- V 103:8d*: Inner parts of *Durvillia*-holdfasts, much detritus.
- V 103:4c*: Inner parts of *Durvillia*-holdfasts.
- V 103:1*: Small brown alga, no detritus; lower part of *Balanus*-belt.
- V 103:2*: Filamentous green alga, no detritus.
- V 103:5*: Small green alga on barnacles, no detritus.
- V 103:7*: *Corallina* and filamentous green alga, little detritus.
- V 103:8d*: *Durvillia*-holdfasts.
- V 116*: *Ulva*-like alga in big pool, sheltered, much detritus.
- V 126*: *Corallina*-like alga in same rock pool, little detritus.
- V 127*: *Corallinacea* and crustaceous algae, much detritus, not very exposed.
- M 126A*: 22.VI.49. 29°58'57" S., 71°22'45" W. The Coquimbo area; Bahía Herradura de Guayacán, southwestern corner, NW of Herradura. Tidal belt, sand beach with fine grey sand, rather sheltered. 80 cm above low water level. Hand sampling. 4 different samples.
- M 127A*: 24.VI.49. 29°55'56" S., 71°21'08" W. The Coquimbo area; Península Coquimbo, headland S of Roca Pelicanos, N of Coquimbo. Tidal belt, very exposed. Yellow rocks, holdfasts of big brown alga. Hand sampling.
- M 131A*: 4.VII.49. 20°13'10" S., 70°10'19" W. The Iquique area; Iquique, southern part of the town. Tidal belt, extremely exposed. Red rocks, with rock pools. Hand sampling.
- *1*: *Durvillia*-holdfasts.
- *2*: tubes of polychaetes, sheltered, much sand.
- M 135A*: 5.VII.49. 20°14'07" S., 70°10'05" W. The Iquique area; Cavancha, S of Iquique. Tidal belt, exposure varying. Holdfasts of big brown alga on rocks with rock pools. Hand sampling.
- M 136*: 6.VII.49. 20°13'08" S., 70°10'19" W. The Iquique area; Iquique, southern part of the town. Tidal belt, very exposed. Sand beach. Hand sampling.
- M 142*: 14.VII.49. 41°30'15" S., 72°57'50" W. Seno Reloncavi proper; the bay off Puerto Montt. E of Isla Tenglo. Abt. 35 m depth, coarse sand. Washings from echinid. Triangular dredge.
- M 144A*: 15.VII.49. 41°41'00" S., 72°47'00" W. Seno Reloncavi proper; E of Isla Guar. Abt.

250 m depth, coarse black sand with clay and fragments of polychaete tubes, much detritus. Triangular dredge.

*M 145A*: 16.VII.49.  $41^{\circ}32'00''$  S.,  $73^{\circ}01'30''$  W. Seno Reloncavi proper; Bahia Chincui. 70—80 m depth, fine soft grey sand with small stones. Triangular dredge and Agassiz trawl.

*M 146A*: 16.VII.49.  $41^{\circ}37'15''$  S.,  $73^{\circ}02'30''$  W. Seno Reloncavi proper; E of Punta Ilque. 390 m depth, coarse sand and gravel, much detritus. Triangular dredge.

*M 147A*: 16.VII.49.  $41^{\circ}35'40''$  S.,  $72^{\circ}58'15''$  W. Seno Reloncavi proper; S of Punta San Pedro at Isla Maillén. 40—45 m depth, coarse sand, much detritus.

*M 151*: 18.VII.49.  $41^{\circ}31'50''$  S.,  $73^{\circ}03'10''$  W. Seno Reloncavi proper; Bahia Chinqui. Tidal belt, sheltered. Dark sand with much detritus on clay, very stiff. Hand sampling.

*M 153*: 8.VI.49.  $36^{\circ}44'58''$  S.,  $73^{\circ}11'02''$  W. The Talcahuano-Golfo de Arauco area; Bahia San Vicente, the Ramutcho Bay, SE of Punta Gualpén. Tidal belt, exposed. Sand beach with coarse sand. Hand sampling.