

## Notes on *Careproctus longipectoralis* and *Paraliparis charcoti* (Liparidae, Liparinae) from the Weddell Sea, Southern Ocean

by

Natalia V. CHERNOVA (1) &amp; Guy DUHAMEL (2)

**RÉSUMÉ.** - Notes à propos de *Careproctus longipectoralis* et *Paraliparis charcoti* (Liparidae, Liparinae) de la mer de Weddell, océan Austral.

*Careproctus longipectoralis* Duhamel, 1992 et *Paraliparis charcoti* Duhamel, 1992 furent décrits de la mer de Weddell dans l'océan Austral, la première espèce provenant d'une profondeur de 2025-2037 m, la seconde de 460-793 m. La description originale comprend les photographies des holotypes mais pas leurs dessins. Ces derniers sont présentés ici. Quelques caractères systématiques additionnels, importants pour la taxinomie des espèces, ainsi que d'autres qui rendent les descriptions plus complètes et comparables à celles de congénères sont aussi ajoutés.

Key words. - Liparidae - Liparinae - *Careproctus longipectoralis* - *Paraliparis charcoti* - Southern Ocean - Weddell Sea.

### CAREPROCTUS LONGIPECTORALIS DUHAMEL, 1992

(Fig. 1A, B)

*Careproctus longipectoralis* Duhamel, 1992: 186, fig. 2a (Weddell Sea). - Andriashev and Stein, 1998: 32 (redescription). - Matal-

lanas, 1998: 383, fig. 2b (Additional specimen, ZUAB No 002-1997). - Andriashev, 2003: 138.

**Holotype.** - MNHN 1991-356, SL 168 mm, "Polarstern", Weddell Sea, 21 Feb. 1989, 71°08'8 S-13°48'1 W, 2025-2037 m.

Head wide and almost equal width to head depth. Rostral fold present but shallow and does not cover the upper lip; corner of the mouth is not covered by skin fold. Nostril in a wide short tube, of length about equal to 1/3 eye diameter; level with upper margin of eye. Interorbital wide, slightly swollen. Oblique oral cleft reaching to below anterior margin of eye, end of maxillary (covered by soft tissue) below eye centre. Symphysis of upper jaw level with lower margin of eye. Lower jaw terminal. Lips fleshy. Teeth sharp. Lower jaw teeth organized in 27 oblique rows anteriorly, but are uniserial (about 10 teeth sitting in a long row) on the posterior quarter of the tooth plate; 7 teeth present in the first full row near jaw symphysis. Upper jaw teeth somewhat smaller, not uniserial posteriorly, in 36 oblique rows; 8 teeth in the first full row near jaw symphysis. Diastema of upper jaw wide, almost equal to the width of the upper-jaw tooth plate. Transversal deep skin fold on isthmus present, anterior to symphysis of coracoids. Circumoral pores similar to nostril in diameter, contoured by raised rims; their pale openings

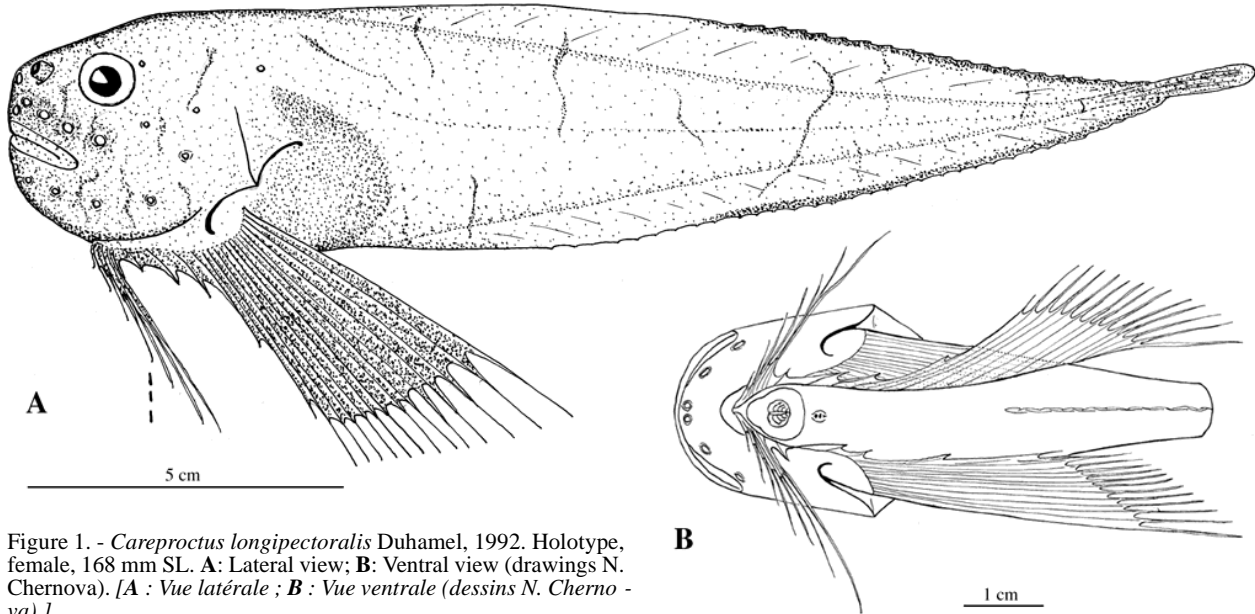


Figure 1. - *Careproctus longipectoralis* Duhamel, 1992. Holotype, female, 168 mm SL. **A**: Lateral view; **B**: Ventral view (drawings N. Chernova). [A : Vue latérale ; B : Vue ventrale (dessins N. Chernova).]

(1) Zoological Institute, Russian Academy of Sciences, St. Petersburg, RUSSIA. [chernova@zin.ru]

(2) USM 403 "Biodiversité et dynamique des communautés aquatiques", Dépt. "Milieux et peuplements aquatiques, Muséum national d'histoire naturelle, Case postale 26, 43 rue Cuvier, 75231 Paris cedex 05, FRANCE. [duhamel@mnhn.fr]

distinct on darker skin. Chin pores spaced at  $2/3$  of the distance pm1-pm2 and not smaller than the pores pm2 in diameter. On the right side of head a postorbital pore is present, suprabranchial pore one, located at a distance 8.5% SL from the upper end of the gill opening; on the left side a postorbital pore is absent, two suprabranchial pores; the first pore of two is smaller and looks abnormal, the normal set is 1+1 pores in the temporal canal, thus the pore formula 2-6-7-1. Dorsal end of the oblique gill opening below level of eye. End of operculum level with posterior end of oblique mouth.

Body low. Dorsal contour not humpbacked. Anus on vertical less than one eye diameter behind eye. Skin thin, semitransparent, but dense. Gelatinous tissue well developed (dorsal and anal-fin origins submerged). Uppermost pectoral ray well below the level of the posterior end of oblique mouth, its base is approximately below the end of opercular lobe. Lowermost pectoral ray below anterior third of eye. Upper pectoral lobe long and reaching to about  $1/6$  of anal-fin length. Because of its low position, the pectoral fin may easily turn its upper-lobe lateral surface ventrally, in the horizontal plane. It probably allows the fish "to swim" above the bottom. Pectoral fin 16+3+7 (right) and 15+3+7 (left) (as originally described, but no 5-notched rays, as re-counted by Matallanas, 1998). Segmental tubercles in disk not developed.

Additional measurements (see Andriashev and Stein, 1998 for abbreviations): SL 168 mm [168.2 mm in the original description], HL (to the end of opercular bone) 24.4 mm [22.8 mm in the original description], HD 21.4 mm (87.7% HL), HW 19.6 mm (80.3%), bd 20.8 mm (85.2%) [26.5 mm on fresh specimen in the original description], bdA 22.0 mm (90.2%), preA 34.3 mm (140.6%), preD 25.9 mm (106.1%), md 9.6 mm (39.5%), ma 17.3 mm (70.7%), aAf 20.8 mm (85.2%), E 5.0 mm (20.5%), sn 8.5 mm (34.6%), go 12.0 mm (48.8%), io 9.9 mm (34.8%), uj 12.2 mm (50%), lj 11.9 mm (48.8%), UPL 35.7 mm (146.3%), NR 39 mm (159.8%), LPL 21.4 mm (87.7%), disk 6.3 mm (25.8%), diskAnus 0.8 mm (3.3%).

After alcohol fixation the skin has lost its violet alive colour, and is now yellowish-pale, margins of D, A, C, P including lower

lobes of the latter are darkish brown. Mouth cavity and lower surface of head brown. Peritoneum brown. Disk pale with brown margins. Ovary greyish.

**PARALIPARIS CHARCOTI DUHAMEL, 1992**  
(Fig. 2 A, B, C)

*Paraliparis charcoti* Duhamel, 1992: 196, fig. 1c (Weddell Sea). - Matallanas, 1999: 1023 (3 specimens, Weddell Sea, 464-264 m).

**Holotype.** - MNHN 1991-352, SL 98 mm [not 94.5 mm as in the original description], "Polarstern", Weddell Sea, 9 Feb. 1989,  $74^{\circ}40'2''$  S- $29^{\circ}36'6''$  W, 484-509 m.

**Paratypes.** - MNHN 1991-349, 3 spms, "Polarstern", Weddell Sea, 19 Feb. 1989,  $71^{\circ}05'9''$  S- $12^{\circ}34'4''$  W, 522-531 m.

Head width slightly larger than its depth. Rostral fold deep, projecting well above upper lip. Nostril level with lower margin of eye, about  $1/3$  eye diameter. Pupil  $2/3$  eye. Interorbital wide, slightly swollen. Mouth almost inferior. Oral cleft reaching to below  $1/3$  of eye, maxillary to  $2/3$  of eye. Posterior end of upper jaw covered by skin fold. Pores 2-6-7-1. Circumoral pores 2-3 times smaller than nostril, slightly embedded gelatinous tissue. Chin pores well spaced, pm1-pm1 (2.5 mm) almost equal to pm1-pm2 (2.8 mm) in the holotype; in paratypes MNHN 1991-349 (2 specimens) the same (in Andriashev, 2003 not correct: pm1-1 about  $1/2$  pm1-pm2). Lower jaw included. Teeth sharp, organized in 18 oblique rows on the upper jaw (8 teeth in the first full row near jaw symphysis), and in 16 rows on the lower jaw (7 teeth in a row anteriorly); teeth in posterior rows are large and prominent. Diastema absent. Transverse skin fold, pocket-like in shape, present across the isthmus. End of opercular bone level with mid-eye.

Uppermost pectoral ray level with lower margin of eye. Lowermost pectoral ray on vertical of  $2/3$  postorbital space. Skin thin, transparent, naked. Mouth and oral cavities dark gray (in young paratypes darker). D and A deep, their depth in the middle of the caudal part of body about equal to body depth. D and A cover  $1/3$  of

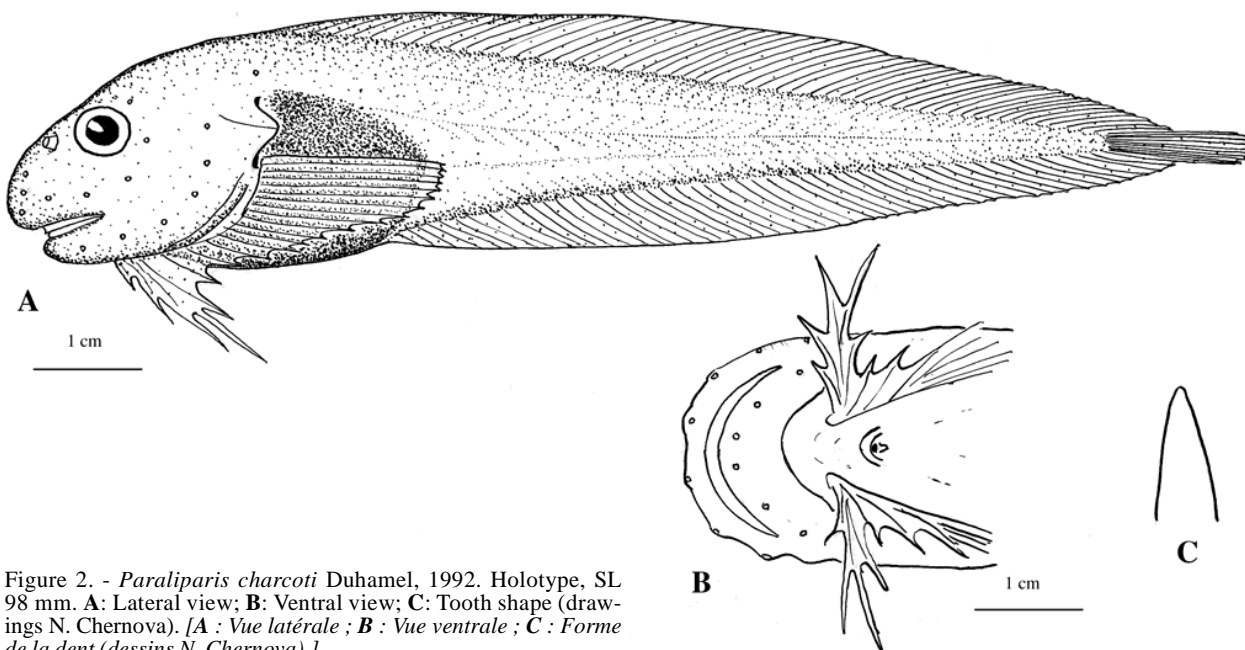


Figure 2. - *Paraliparis charcoti* Duhamel, 1992. Holotype, SL 98 mm. **A**: Lateral view; **B**: Ventral view; **C**: Tooth shape (drawings N. Chernova). [A : Vue latérale ; B : Vue ventrale ; C : Forme de la dent (dessins N. Chernova).]

caudal fin. P 13+2+4 (right) and 14+2+5 (left), notched rays not rudimentary. In paratypes P 13+2+4 (right), 12+2+4 (left.) Upper pectoral lobe reaching 2-3 anal-fin ray. Lower lobe not quite reaching anal-fin origin. Anus on vertical of 1/2 postorbital space.

Additional measurements: SL 98 mm (not 94.5 mm, probably because the soft snout included), HL 23.5 mm, sn 9.2 mm (39.1% HL), E 4.6 mm (19.6%), go 6.9 mm (29.6%), uj 12.0 mm (51.3%), lj 11.7 mm (49.8%), io 12.4 mm (52.8%), HD 18.6 mm (79.1%), HW 19.4 mm (82.6%), bd 21.4 mm (91.1%), bdA 17.3 mm (73.6%), ma 14.3 mm (60.9%), aAf 16.3 mm (69.4%), preD 30.6 mm (130.2%), preA 32.7 mm (139.1%), UPL 16.8 mm (71.5%), NR 7.1 mm (30.2%), LPL 16.3 mm (69.4%).

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