

Nota Científica

Two records of *Acanthochaenus luetkenii* (Gill, 1884) off southern Chile (Pisces: Stephanoberyciformes: Stephanoberycidae)

Richard F. Feeney

Section of Ichthyology, Natural History Museum of Los Angeles County 900 Exposition Blvd.
Los Angeles, CA 90007, USA

ABSTRACT. Two specimens were collected by the USNS *Eltanin* west of Chiloé Island in 1962 and off Tierra del Fuego in 1963 and deposited in the Natural History Museum of Los Angeles County identified only as stephanoberycids. They represent the first reported records of *Acanthochaenus luetkenii* (Gill, 1884) from Chile and the southeastern Pacific Ocean.

Key words: Stephanoberycidae, distribution, southeastern Pacific, Chile.

Dos registros de *Acanthochaenus luetkenii* (Gill, 1884) en el sur de Chile (Pisces: Stephanoberyciformes: Stephanoberycidae)

RESUMEN. Dos especímenes colectados por el USNN *Eltanin*, uno al oeste de la isla de Chiloé en 1962 y otro frente a Tierra del Fuego en 1963, fueron depositados en el Museo de la Historia Natural del Condado de Los Ángeles, identificados solamente como stephanoberycids. Estos especímenes constituyen los primeros registros de *Acanthochaenus luetkenii* (Gill, 1884) en Chile y en el Pacífico suroriental.

Palabras clave: Stephanoberycidae, distribución, Pacífico suroriental, Chile.

Corresponding author: Richard Feeney (rfeeney@nhm.org)

Acanthochaenus luetkenii is a deepwater stephanoberycoid described from specimens collected in the northwestern Atlantic Ocean (Jordan & Evermann, 1896; Myers, 1936; Grey, 1956; Ebeling & Weed, 1973). Subsequently, adults have been collected from the Canary Islands and the Azores (Koefoed, 1927; Grey, 1956), the western Indian Ocean (Ebeling & Weed, 1973), and the eastern Indian Ocean (Kotlyar, 1983). Forty-nine specimens were collected by the R/V *Vityaz* in the western Indian Ocean (Kotlyar & Andrianov, 1993). Eleven larvae were collected in the southwestern Pacific Ocean (38°48'S, 175°54'W), and a juvenile was collected in the south Atlantic (Kotlyar & Evseyenko, 1989; Kotlyar, 2004).

Measurements and meristics follow Hubbs and Lagler (1958); institutional abbreviations follow Leviton *et al.* (1985). Specimens were x-rayed with a Hewlett-Packard 43807N.

Two specimens identified as "Stephanoberycidae" were collected by the USNS *Eltanin* off Chile. The first specimen (LACM 10189-4, 97 mm, Fig. 1)

was collected 110 km west of Chiloé Island at *Eltanin* sta. 334 (42°57'S, 75°33'W to 43°08'S, 75°48'W) at 3,651 m with a 10 ft Blake Trawl on 27 November 1962. The second specimen (LACM 10669-1, 106 mm, Fig. 2) was trawled about 550 km west of Tierra del Fuego at *Eltanin* sta. 876 (55°22'S, 78°21'W to 55°22'S, 78°08'W), 4209-4328 m, 5' Blake Trawl, 29 November 1963.

The specimens are re-identified as *Acanthochaenus luetkenii* (Gill, 1884) and compared to *A. luetkenii* from other localities including: AMNH 73931 (1: 105 mm female, ripe), R/V *Iselin* (37°01.6'N, 74°22.5'W), 15 June 1973; LACM 44786-2 (6: 79-93.5 mm), R/V *Vityaz* sta. 2779 (30°30.0'S, 46°53.0'E to 30°25.0'S, 47°00.0'E), 2580-2680 m, 26 December 1988; MCZ 64947 (1: 132.5 mm) *Chain?* cr.124, sta. 424? (ca. 39°N, 70°W); USNM 307916 (3 of 5: 81-92 mm SL), R/V *Vityaz* 17 Coll. (30°30'S, 46°53'E to 30°25'S, 47°00'E), 2580-2680 m, 26 December 1988.

Morphometrics and meristics are given in Table 1. The snout, represented by a bony ridge of spines,

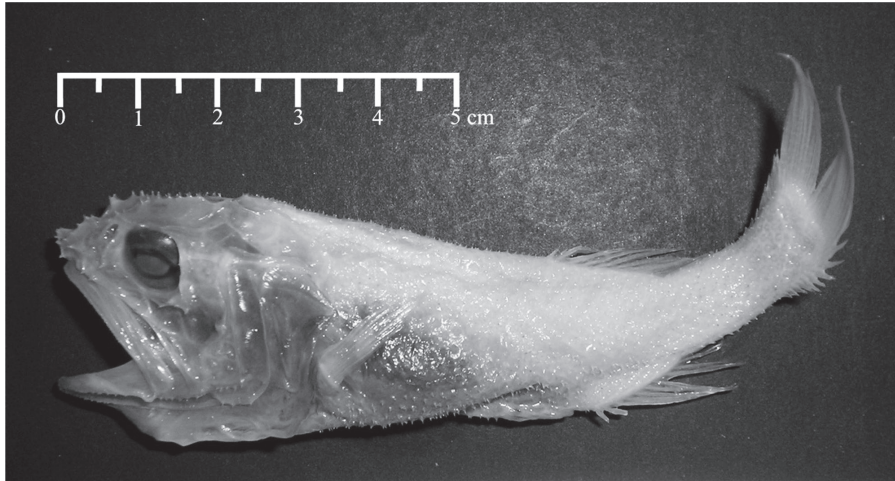


Figure 1. *Acanthochaenus luetkenii* (LACM 10189-4) collected west of Chiloé Island, Chile.

Figura 1. *Acanthochaenus luetkenii* (LACM 10189-4) recolectado al oeste de la isla de Chiloé, Chile.

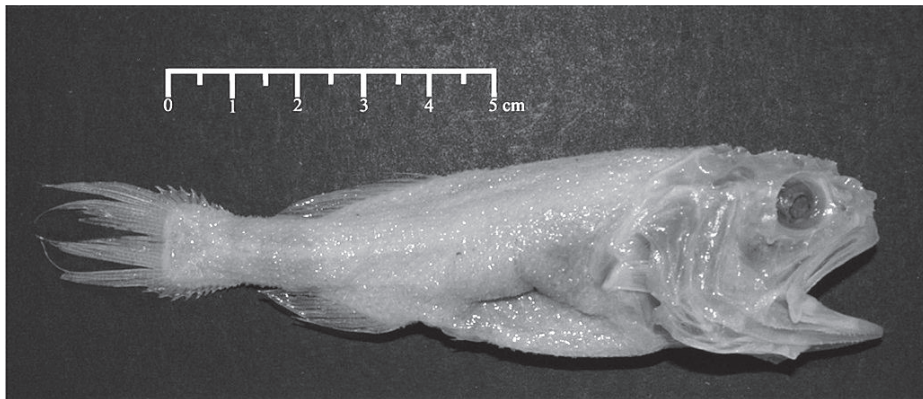


Figure 2. *Acanthochaenus luetkenii* (LACM 10669-1) collected west of Tierra del Fuego, Chile.

Figura 2. *Acanthochaenus luetkenii* (LACM 10669-1) recolectado al oeste de Tierra del Fuego, Chile.

protrudes anterior of the premaxillaries. Bony ridges of delicate spines cover the dorsoanterior cranium and encircle the orbit. Two ridges of spines line the edge of the preopercle. Fine comblike spines line the ventral edges of the dentary and angular.

Scales, each with 1-4 erect spines, cover the body and part of the preopercle. Each specimen appears to have a small spine at the origin of the dorsal fin. Dorsal pterygiophores number eleven. Two predorsal bones are visible on radiographs.

Color in alcohol pale except for darker areas on the head, opercular flap and peritoneal membrane. Both specimens appear to be female with developing oocytes present in the ovaries.

The SE Pacific *Acanthochaenus luetkenii* spe-

cimens are similar in morphometrics and meristics to the comparative specimens and to published accounts of specimens (Ebeling & Weed, 1973; Myers, 1936; Kotlyar, 1983, 1990; Schwartz, 1990) except for a higher number of dorsal rays (11-12 vs 10-11 in comparative material), higher number of dorsal pterygiophores (11 vs 10 in Atlantic specimens), and higher snout to pelvic lengths (57.5-60.8 vs 53.8-56.2% SL). A spine is present at the dorsal origin (also present in comparative material). Kotlyar & Andrianov (1993) also noticed a dorsal spine in some specimens. Five out of 11 comparative specimens (LACM 447862, MCZ 64947) also appear to have the spine, sometimes with a pterygiophore supporting it. The spines are hard with no segments. Anal spines, when present, do sometimes have segmentation.

Table 1. Morphometrics and meristics of *Acanthochaenus luetkenii*. SL: standard length, HL: head length, GR: gill rakers, PCR: principal caudal rays.**Tabla 1. Datos morométricos y merísticos de *Acanthochaenus luetkenii*. SL: longitud estándar, HL: longitud de la cabeza, GR: branquiespinas, PCR: rayos caudales principales.**

	LACM 10189-4	LACM 10669-1	LACM 44786-2	USNM 307916	MCZ 64947	AMNH 73931
Locality	SE Pacific	SE Pacific	W. Indian	W. Indian	NW Atlantic	NW Atlantic
Number of specimens	1	1	6	3	1	1
Size (mm SL)	97	106	79-93.5	81-92	132.5	105
Head to anal (%SL)	35.6	31.6	30.8-34.1	31.5-32.7	34	33.8
Length upper jaw (%SL)	20.1	21.2	21.9-23	21.3-25	19.2	20.2
Length peduncle (%SL)	24.2	23.6	24.5-27.1	23.9-26.8	23.8	24
Depth peduncle (%SL)	10.3	9.7	9.1-10.2	8.7-9.9	9.8	10.5
Snout to pelvic (%SL)	60.8	57.5	53.8-54.9	55-56.2	54.5	53.8
Head length (%SL)	37.1	37.7	35.4-37.4	35.9-37	34.3	36.2
Snout length (%HL)	28.3	26.3	23.9-26.6	24.3-27.6	27.1	28.9
Eye diameter (%HL)	22.2	21.3	20-22.9	20.2-21.7	19.4	18.4
Precaudal vertebrae	13	13	12-13	12-13	13	13
Caudal vertebrae	18	18	17-18	17-19	16	17
Dorsal pterygiophores	11	11	10-11	10	10	10
Dorsal rays	11	12	11	10-11	10	11
Dorsal spines	1	1	0-1	0	1	0
Anal rays	10	11	9-10	10	11	10
Anal spines	1	0	1	0	0	0
Pectoral rays	13	14	12-13	12-14	13	13
Pelvic rays	5	5	5	5	5	5
GR upper	8	8	8-9	8-10	10	9
GR lower	16	17	18-20	17-18	17	17
PCR upper	10	10	10	10	10	10
PCR lower	9	9	9	9	9	9
Procurrent upper	10	9	10-11	10-11	13	10
Procurrent lower	10	9	10-11	10	12	10

Despite variation the two specimens appear to be *A. luetkenii*. The species has a circumglobal distribution. Planktonic larval stages (Kotlyar & Evseyenko, 1989) probably facilitate this distribution. Major ocean areas where *A. luetkenii* have not been found to date are the North Pacific Ocean and the Arctic Ocean.

ACKNOWLEDGMENTS

I thank the following for their generous assistance: C. Baldwin, N. Camacho, D. Cohen, L. Feeney, N. Feinberg, K. Hartel, S. Jewett, A. Kotlyar, R. Lavenberg, D. Oda, C. Paulin, J. Paxton, J. Seigel, H. Schwartz, D. Striley and C. Tracker.

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Recibido: 22 junio 2006; Aceptado 19 octubre 2006