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NEW RECORDS OF MARINE FISHES FROM THE WESTERN SOUTH ATLANTIC

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INTRODUCTION

In 1972 the R/V "Prof. W. Besnard" of the Instituto Oceanográfico da Universidade de São Paulo carried out four cruises in the South Atlantic, between Torres, Brasil (29°S) and Maldonado, Uruguay (36°S), as part of the "Programa Rio Grande do Sul — II" (see Vazzoler, 1973). The fishes collected during these cruises are deposited in this museum and among them there are several species which represent new records for the Western South Atlantic. In a preliminary report (Benvegnú, 1973) most of the species treated in this paper were included in the general list of species collected, but no special reference was made to the fact that they represent new records; in some cases the identification was not carried down to the species level. Since then, additional information was obtained, and we found it necessary to present this report, as these forms represent important additions to the fauna of the South Atlantic.

We are grateful to Dr. James E. Böhlke of the Academy of Natural Sciences of Philadelphia for sending one specimen of *Chlopsis bicolor* for comparison and to Dr. Paulo E. Vanzolini of this museum for critically reading the manuscript.

METHODS AND MATERIALS

In the systematic account the family arrangement follows Greenwood et al. (1966) except for the inclusion of the Photichthyidae, a stomiatoid family recently defined by Weitzman (1974). The identification of each species is briefly discussed, based on comparison with previous descriptions; morphometric data (measurements and counts) of specimens are listed in tables at the end of the paper or included in the species account, when the species is represented by a single specimen.

Measurements and counts of the specimens which do not belong to the order Anguilliformes were made according to the methods advised by the authors who dealt monographically with the groups. Those of

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eels were made according to the following definitions (letters within parenthesis refer to the tables):

Total length (A) — from tip of snout to tip of caudal fin.

Standard length — from tip of snout to base of caudal fin.

Body depth at gill opening (B) — vertical distance measured across the gill opening.

Body depth at anus — vertical distance from base of dorsal fin to origin of anus.

Head length (C) — from tip of snout to anterior corner of gill opening.

Tail length (D) — from anterior border of anus to tip of caudal fin.

Snout length (E) — from its tip to anterior border of eye.

Gape length (F) from tip of snout to angle of mouth.

Interbranchial distance (G) — distance between lower corners of gill openings across ventral midline.

Gill opening length (H) — distance between upper and lower corner of gill opening.

Diameter of eye (I) — measured horizontally.

Interorbital distance (J) — the least distance between dorsal borders of eyes.

Predorsal distance (K) — from tip of snout to origin of dorsal fin.

Preanal distance (L) — from tip of snout to origin of anal fin.

Pectoral fin length (M) — from insertion of uppermost ray to tip of longest ray.

Caudal fin length (N) — from insertion of median caudal rays to tip of longest ray.

Lateral line pores (P) — includes only pores situated in front of a vertical line drawn through anterior border of anus.

All measurements were taken with a caliper, except for total length and tail length of large eels, which were measured with a ruler graduated to millimeters.

Systematic account

Family Xenocongridae

Chlopsis bicolor Rafinesque, 1810

Specimens examined (5): MZUSP 12128 — St. 1722, 31° 02'S, 49°52'W, 135 m; April 10, 1972 (1); MZUSP 19129 — St. 1740, 34°28'S., 51°50'W., 169 m; April 19, 1972 (1); MZUSP 12130-32 — St. 1883, 34°27'S., 51°50'W., 175 m; August 15, 1972 (3).

Chlopsis bicolor was known only from the Mediterranean (Böhlke, 1956) until reported from the Atlantic by Robins & Robins (1967). Our specimens entirely agree with the detailed description of the species given by Robins & Robins (l.c.), which is based on specimens collected both in the Mediterranean and in the Florida Straits. A further comparison was made between our material and one specimen of *C. bicolor* caught in the Yucatán Channel, Mexico, borrowed from the Academy of Natural Sciences of Philadelphia; no significant differences were found either in morphometrics or other morphological characters.

The measurements of the specimens are presented in table 1.

Previous distribution: Mediterranean Sea (Böhlke, 1956), Western North Atlantic (Robins & Robins, 1967; Böhlke & Smith, 1968) and West Africa (Blache, 1964; Castle, 1966).

Robins & Robins (l.c.) anticipated a broad distribution of the species in the Western Atlantic; the discovery of *C. bicolor* in Southern Brazil confirms their prediction.

Table 1 Measurements (mm) of *Chlopsis bicolor*

Specimen	A	B	C	D	E	F	G	H	I	J	K	L
12129	94.0	2.0	10.0	-	2.4	3.5	2.0	0.4	1.0	1.2	14.0	-
12132	123.0	4.4	15.0	78.0	3.7	6.5	3.7	0.5	1.3	2.0	19.0	45.0
12130	170.0	6.6	18.0	110.0	4.5	7.0	5.3	0.6	2.0	3.0	23.0	60.0
12131	184.0	6.5	21.0	120.0	4.8	7.0	5.4	1.0	2.3	3.4	27.0	64.0
12128	227.0	8.4	24.0	148.0	5.0	8.0	7.0	1.7	2.4	3.2	29.0	79.0

Family Dysommidae

Nettodarus sp.

Specimens examined (1): MZUSP 9862 — Extra trawl between stations 1711 and 1712; 30°26'S., 48°50W., 150 m; April 7, 1972.

Our specimen is similar to *Nettodarus brevirostris* (Facciolà) known, until recently, only from the Mediterranean, but subsequently reported from the Western North Atlantic (Böhlke & Robins, 1968) and from the Eastern Atlantic (Blache et al., 1970). It shows the most diagnostic feature of the species, that is, the bulbous snout densely covered with fleshy tabs, ridges and papillae, and the same arrangement and number of teeth on the jaws, as described by Böhlke & Robins (l.c.) and figured by Blache et al. (l.c.); differences are found with respect to maximum sizes attained and to the number of pores on the short lateral line.

According to Böhlke & Robins (l.c.) the specimen of *N. brevirostris* from the Western Atlantic is 209 mm long (total length) and has 10 pores on the lateral line. The Eastern Atlantic specimen has a standard length of 245 mm and 8 pores on the lateral line (Blache et al., l.c.). Our small eel measures only 85 mm (total length) but is very probably in the adult stage. It is an ovigerous female and the eggs, which occupy a considerable portion of the abdominal cavity, are apparently fully developed, each one measuring about 0.5 mm in diameter. The number of lateral line pores is 5 on each side.

Thus, it seems that our specimen represents an undescribed species of *Nettodarus;* however a direct comparison between it and the known representatives of the genus is required before a definite conclusion can be reached.

The measurements (mm) and counts of the specimen are as follows: total length — 85.0; standard length — 83.7; deth at gill opening — 2.3; depth at anus — 2.0; head length — 7.1; snout length — 1.4; gape length — 2.3; interbranchial distance — 0.6; tail length — 74.0; caudal fin length — 1.3; predorsal distance — 9.4; preanal distance — 11.2; lateral line pores — 5.

Family Nettastomatidae

Facciolella physonema (Facciolà, 1914)

Specimens examined (1): MZUSP 12300 — St. 1883, 34°27'S., 51°50'W, 175 m; August 15, 1972.

A detailed description and illustrations of this species have been given by Saldanha & Blache (1968) based on several specimens (adults and larvae) from the Eastern Atlantic. They discuss the history, synonymy and relationships of *F. physonema;* their data lead us to conclude that our single specimen is cospecific with the Western Atlantic materials.

Measurements (mm) and counts of the specimen from Southern Brazil are as follows: total length — 432.0; standard length — 426.0; depth at gill opening — 8.7; depth at anus — 8.0; head length — 42.0; snout length — 14.5; gape length — 18.5; width of isthmus — 2.0; gill opening length — 1.2; eye diameter — 3.4; interorbital distance — 2.5; pre-dorsal distance — 48.0; preanal distance — 130.0; caudal fin length — 6.0; lateral line pores — 53.

Previous distribution: Mediterranean and Eastern Atlantic (Saldanha & Blache, l.c.).

The specimen from Southern Brazil represents the first record of the species in the Western Atlantic.

Saurenchelys cancrivora Peters, 1864

Specimens examined (1): MZUSP 12299 — St. 1883, 34°27'S., 51°50'W., 175 m; August 15, 1972.

S. cancrivora was originally described by Peters (1864), based on a single specimen which, according to the author, came with a collection of fishes from India but, on the basis of the stomach content was apparently collected in the Mediterranean or in the Atlantic. Since then, larvae referred to this species have been found in the North Atlantic (Castle, 1969) but the specimens described as *Saurenchelys cancrivora* by Supino (1905) and Grassi (1913) were recently discussed by Saldanha & Blache (1968) and considered to belong to *Facciolella physonema* (Facciolà). In their paper, Saldanha & Blache show that *S. cancrivora* can be easily distinguished by certain morphological features from *Nettastoma melanurum* (Rafinesque) and *Facciolella physonema,* the other nettastomatid species with which it has often been confused.

S. cancrivora seems to be then a valid species which is relatively well known in its larval form but very poorly represented by adult specimens. Peter's original description is incomplete with respect to some important characters, such as number of cephalic and lateral line pores and some body proportions. However, the few proportions given, as well as the data on color, arrangement, shape and number of teeth on the jaws and on the palatal region, and especially the shape and position of the posterior nostril, fit perfectly our specimen. The latter character was illustrated by Saldanha & Blache (l.c.) who consideret it an important diagnostic feature of *S. cancrivora.*

In view of the above evidence we tentatively assign our specimen to *S. cancrivora.* It was taken in the same catch with *Facciolella physonema,* which of course shows that the two are sympatric in Southern Brazil.

Measurements (mm) and counts of the single specimen are as follows: total length — 400.0; standard length — 384.0; depth at gill opening — 8.0; depth at anus — 8.0; head length — 36.0; snout length — 13.5; gape length — 19.0; width of isthmus — 3.4; gill opening length — 1.6; eye diameter — 3.6; interorbital distance — 3.2; predorsal distance — 38.0; pre-anal distance — 91.0; caudal fin length — 6.0; lateral line pores — 32; supratemporal pores — 1; preoperculomandibular pores — 13; supraorbital pores — 5; infraorbital pores — 8.

Previous distribution: Mediterranean and Eastern North Atlantic (Castle, 1969).

Our specimen represents the first record of the species in the Western Atlantic.

Family Congridae

Gnatophis mystax (De La Roche, 1809)

Specimens examined (4): MZUSP 12160 — St. 569, 34°02'S., 51°30'W., 165 m; March 12, 1969 (1); MZUSP 12158 — St. 1648, 34°06'S., 51°33'W., 180 m; January 18, 1972 (1); MZUSP 12159 — St. 1740, 34°28'S., 51°50'W, 169 m; April 19, 1972 (1); MZUSP 12157 — St. 1883, 34°27'S., 51°50W., 175 m; August 15, 1972.

Two species of *Gnatophis* are known from the Atlantic: *G. mystax* (De La Roche) known from the Eastern North Atlantic and the Mediterranean (Saldanha, 1967; Castle, 1968), and *G. capensis* (Kaup), from South Africa (Castle, l.c.). Leptocephali of *G. mystax* were recently described by Castle (1970) from the South Atlantic. In view of the close similarity of these species, Castle (1968:703) suggested they should more appropriately be regarded as subspecies of *G. mystax*. Until more complete information on the geographic variation of the Atlantic species of *Gnatophis* is available, we recognize the specimens from Southern Brazil as *G. mystax,* as they entirely agree with the description and illustrations given by Saldanha (l.c.) and with the data presented by Castle (l.c.) for the species.

The measurements and counts of the specimens are given in table 2

Previous distribution: see above

Our material represents the first record of adult specimens of the species in the South Atlantic.

Table 2 Measurements (mm) and counts of *Gnathophis mystax*

Specimen	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
12158		3.3	12.4	-	3.6	4.3		1.0	2.3	0.3	13.0	25.0	5.0		13	32
12159	161.0	7.0	25.7		7.3	9.3	5.3	3.0	5.0	1.8		-	7.0	2.5	13	
12157	237.0	13.0	38.5	153.0	11.4	14.4	10.7	4.0	8.4	2.7	43.0	84.0	13.0	3.4	13	31
12160	338.0	20.0	61.2	212.0	18.0	22.5	19.0	8.2	13.0	5.0	64.0	126.0	17.7	4.4	13	34

Family Gonostomatidae

Pollichthys mauli (Poll, 1953)

Specimens examined (1): MZUSP 10642 — St. 1890, 33°58'S., 51°32'W, 200 m; August 17, 1972.

This species has been reviewed by Grey (1964) and our specimen corresponds exactly with her description and illustration. Although it is slightly damaged, it was possible to make the following measurements and counts; standard length — 30.5; head length — 6.1; body depth — 2.1; snout length — 1.5; orbital diameter — 1.0; interorbital distance — 0.7; caudal peduncle depth — 0.9; predorsal distance — 15.0; preanal distance — 15.6; preventral distance — 11.0; prepectoral distance — 5.9; distance between end of dorsal fin base and origin of adipose fin — 5.5; dorsal fin rays — 8; ventral fin rays — 7; gill rakers — 16; branchiostegal rays — 11.

Previous distribution: Western North Atlantic, Eastern Atlantic and Pacific (Grey, l.c.).

The Southern Brazilian specimen represents the first record of the species in the Western South Atlantic.

Family Chlorophthalmidae

Chlorophthalmus agassizi Bonaparte, 1840

Specimens examined (38): MZUSP 12206-21 — St. 1728, 31°31'S., 49°52'W., 200 m; April 11, 1972 (16); MZUSP 12202-3 — St. 1740, 34°28'S., 51°50'W., 169 m; April 19, 1972 (2); MZUSP 10648, 12184-201 — St. 1742, 34°01'S., 51°32'W., 175 m; April 19, 1972 (18); MZUSP 12204 — St. 1901, 32°49'S., 50°26'W, 180 m; August 19, 1972 (1); MZUSP 12205 — St. 1909, 31°58'S., 50°02'W., 184 m; August 21, 1972 (1).

Our *Chlorophthalmus* specimens were compared with the descriptions of *C. agassizi* given by Mead (1966) and Halliday (1969) and of *C. brasiliensis* given by Mead (1959, 1966), the only known species of the genus in the Western Atlantic.

Mead (1959) described *C. brasiliensis* from off Northern Brazil and considered it to be distinct from the adjacent populations of *C. agassizi.* During the revision of the family Chlorophthalmidae (1966:176) he compared again both species and gave as distinctive characters for *C. brasiliensis* the alignment of the tip of the lower jaw with the upper surface of the snout (both forming an almost straight line), the length of the snout (less than 1.3 in the horizontal diameter of the orbit, in adults), the diameter of the orbit (less than 40% of prepectoral length), and the average number of anal fin rays (9). In our specimens there is a notch on the upper surface of the snout, so that the upper face of the tip of the lower jaw does not form a continuous horizontal surface with it; the length of the snout is contained 1.2 to 1.8 times in the horizontal diameter of the orbit; the diameter of the orbit is 36.5 to 45.1% of the prepectoral length; and the average number of anal fin rays is 8.

These differences suggest that our material cannot be identified as *C. brasiliensis* but, since changes in body proportions with growth have been described in the genus, some of the differences we found may prove to be of limited value because the size range of our specimens (74.0 — 80.4 mm S.L.) does not correspond to that given for the specimens of *C. brasiliensis*. Unfortunately small specimens of *C. brasiliensis* have not been included in the description and redescription of the species, which is based only on the holotype (117.0 mm S.L.) and on a series of 20 adult paratypes (93.7 — 132.0 mm S.L.).

Data from our specimens when compared to those of *C. agassizi* of comparable size ranges revealed only minor differences which are expected because as Mead (l.c.) emphasized and Halliday (l.c.) confirmed, the species show great geographical variation and is presumably formed by separate populations.

Thus our specimens seem to be more closely related to *C. agassizi* than to *C. brasiliensis* and we tentatively consider them cospecific with the former. If this is true, the existence of a population of *C. agassizi* in Southern Brazil reveals a paradoxal situation in the pattern of speciation within the genus: *C. agassizi* extends from Nova Scotia to the coast of Surinam and *C. brasiliensis* is restricted to off Northern Brazil; it would be expected that the specimens from Southern Brazil represented just a southern extension of the latter. We feel that a study of the geographical differentiation of the species is needed before any conclusion can be reached.

Table 3 Measurements (mm) and counts of *Chlorophthalmus agassizi*

Specimen	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
12204	44.2	5.0	4.8	13.5	4.0	6.0	3.0	5.6	5.0	3.1	1.2	3.1	0.6	15.5	32.4	12.4	9.6	11	8	16	9	52	19
12200	47.3	6.4	5.7	15.2	5.0	6.9	4.3	5.6	5.3	3.7	1.4	3.6	0.8	17.8	36.6	13.8	11.2	11	8	16	9	50	18
12201	48.0	5.7	5.0	13.6	4.5	5.4	3.6	5.0	3.8	3.6	1.4		0.7	17.4	35.6	13.7		11	8	16	9		20
12218	50.8	5.9	5.6	15.3	5.3	7.2	4.6	5.7	5.7	4.7	1.5	3.5	0.7	19.7	38.8	14.3	12.6	11	8	16	9	52	19
12202	53.1	6.3	6.3	15.6	5.5	7.1	3.7	6.5	5.9	4.3	1.5	3.3	0.8	20.6	41.3	16.0	12.7	11	8	16	9	51	19
12220	54.4	8.5	8.0	17.5	6.2	8.5	5.0	6.9	6.8	5.7	1.5	4.2	1.0	21.3	42.0	16.8	14.3	11	8	16	9	50	19
12216	56.0	7.4	6.6	17.2	5.9	8.3	4.4	6.6	6.2	4.9	1.3	3.9	1.0	21.3	42.9	16.2	13.4	10	8	16	9	51	18
12221	57.7	7.5	7.6	18.0	6.3	8.8	5.0	7.0	6.6	5.1	1.7	3.9	1.0	21.3	45.7	16.9	13.2	11	8	16	9	52	20
12209	57.7	8.0	6.9	17.3	6.1	8.1	4.7	6.3	6.3	5.6	1.4	4.5	0.8	21.7	44.8	16.3	12.4	11	9	16	9	52	21
12210	58.2	9.0	7.1	17.8	6.3	8.4	4.5	6.9	6.3	5.5	1.4	4.9	0.9	21.8	45.9	17.1	14.4	11	8	16	9	51	19
12195	59.0	8.7	7.2	17.5	6.0	8.4	4.4	6.5	6.5	5.3	1.3	3.7	0.8	22.3	45.0	17.0	13.3	11	8	16	9	50	20
12211	59.0	7.5	7.1	17.7	6.1	8.4	4.3	6.6	6.1	5.7	1.4	4.6	1.0	21.4	46.6	17.1	14.6	11	8	17	9	51	19
12196	59.2	8.0	7.4	18.0	6.4	8.8	4.7	7.2	6.2	4.6	1.5	4.2	0.8	22.5	47.3	17.5	13.0	11	8	16	9	50	19
12219	59.3	8.3	7.4	18.3	6.9	8.9	5.6	6.9	6.5	5.7	1.7	4.5	1.0	23.6	45.9	17.3	13.9	11	8	16	9	50	21
12213	60.7	9.3	7.8	18.4	7.0	9.0	5.0	6.8	6.4	5.3	1.6	4.4	1.0	23.1	47.2	18.0	15.2	11	8	16	9	50	20
12214	60.7	9.0	8.0	19.2	6.8	9.1	5.4	7.0	6.9	5.8	1.9	5.0	0.9	22.7	47.6	18.2	15.6	12	8	16	9	52	18
12197	62.2	10.1	7.9	19.2	6.9	9.5	5.5	7.0	6.5	6.4	1.7	4.5	1.0	24.6	47.4	18.7	16.0	11	8	16	9	49	18
12217	63.8	9.5	9.0	19.3	7.1	9.7	5.6	7.5	7.2	5.8	1.7	4.6	1.1	25.3	48.3	18.7	16.7	11	8	16	9	51	18
12208	65.5	10.0	8.2	20.3	7.3	9.5	5.0	7.7	7.3	6.0	2.0	5.0	1.2	24.4	50.6	18.5	17.0	11	8	16	9	52	19
12191	66.0	9.9	9.0	19.9	8.3	10.6	5.5	7.0	7.4	7.0	1.7	4.9	1.0	24.0	52.7	18.9	17.0	11	8	16	9	50	20
12212	66.6	11.3	9.2	20.5	7.5	9.9	5.7	7.9	7.2	5.8	2.0	5.2	1.1	26.7	52.0	19.4	15.7	10	8	16	9	47	18
12199	67.0	9.5	8.5	19.0	6.9	10.0	5.1	7.5	7.2	6.0	1.7	4.9	1.0	25.6	51.2	18.3	14.5	11	8	16	9	50	18
12215	68.6	10.6	7.7	21.1	7.4	10.0	5.6	8.0	6.4	6.0	1.9	5.5	1.1	25.9	53.4	20.4	14.6	11	8	16	9	52	18
12206	69.4	9.5	9.4	20.0	7.0	9.9	5.7	7.8	7.4	5.7	1.6	5.5	1.0	25.2	54.0	19.0	17.3	11	9	16	9	51	19
12189	70.5	9.7	8.7	21.0	7.5	10.0	5.6	8.2	7.8	6.0	1.7	4.9	1.2	25.2	55.0	19.6	17.0	11	9	16	9	50	20
12186	70.6	10.3	8.5	21.3	7.5	10.0	6.0	8.2	7.8	6.1	1.8	5.9	1.1	26.6	55.3	20.5	16.3	11	9	16	9	51	19
12207	70.6	11.2	9.0	22.2	7.8	10.5	5.8	8.0	7.4	6.2	1.6	5.5	1.3	25.2	53.7	20.1	17.7	11	9	16	9	52	19
12198	70.7	10.0	9.0	20.5	7.3	10.3	5.4	8.3	7.6	6.4	1.7	5.3	1.7	26.5	56.2	19.5	17.7	11	8	16	9	50	19
12190	72.0	10.0	8.6	21.6	8.0	10.5	6.0	8.7			1.9	5.4	1.0	26.7	56.2	22.4	16.4	11	8	16	9	50	20
12188	73.3	9.5	9.3	22.0	7.9	10.4	6.3	8.2	7.7	6.5	1.7	5.7	1.2	27.0	57.0	21.4	17.8	10	8	16	9	50	20
12185	74.0	10.0	9.8	22.3	7.9	10.6	5.9	8.7	7.5	6.5	1.9	5.5	1.1	27.5	58.8	21.2	19.4	11	8	16	9	51	20
12194	74.2	10.4	9.7	22.0	7.9	11.2	6.0	8.4	8.0	6.8	2.2	5.9	1.2	27.9	57.8	21.0	19.3	10	8	16	9	50	19
12187	76.6	10.8	9.4	22.0	8.1	10.7	5.8	8.2	7.9	6.8	2.2	5.8	1.4	28.3	58.8	21.9	19.5	11	8	16	9	51	20
12192	78.0	12.5	9.8	24.1	8.3	11.4	6.9	9.0	8.3	6.8	2.2	6.5	1.4	29.2	60.7	23.1	19.4	11	9	16	9	51	20
12184	78.4	10.5	9.0	22.3	8.2	10.4	6.3	8.7	8.0	6.6	2.0	5.4	1.2	27.8	61.0	21.4	18.2	11	9	16	9	51	20
12193	79.0	12.3	8.9	22.5	8.0	11.0	6.7	8.6	8.2	6.2	2.0	6.4	1.1	28.4	61.3	21.7	19.0	11	8	16	9	50	19
10648	80.4	12.0	10.7	23.5	8.8	11.3	6.3	9.0	8.2	6.8	2.2	6.7	1.3	29.0	62.3	22.5	20.3	11	8	16	9	52	20

A Standard length
B Body depth
C Body width
D Head length
E Anterior head width
F Posterior head width
G Snout length
H Orbital diameter
I Horizontal diameter of eye
J Vertical diameter of eye
K Interorbital distance
L Caudal peduncle depth
M - Distance from snout to tip of lower jaw
N - Predorsal distance
O Preanal distance
P - Prepectoral distance
Q Pectoral fin length
R - Dorsal fin rays
S - Anal fin rays
T - Pectoral fin rays
U - Ventral fin rays
V - Scales in horiz. series
W Gill rakers

Table 4 Measurements (mm) and counts of *Chriolepis benthonis*

Specimen	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
12156	24.0	7.4	4.6	1.6	2.6	3.6	2.7	0.3	2.2	6.8	8.0	6.6	VII+10	I+8	15	5
12155	26.0	7.6	4.1	1.4	2.4	3.6	2.8	0.4	2.8	6.9	7.2	7.0	VII+10	I+8	16	6
10321	28.0	8.6	4.5	2.0	2.7	4.2	2.9	0.4	3.0	10.1	8.6	8.0	VII+10	I+8	16	6

A Standard length
B Head length
C Body depth
D - Snout length
E Diameter of eye
F Postorbital distance
G Upper jaw length
H Interorbital distance
I Caudal peduncle depth
J Pectoral fin length
K Ventral fin length
L Caudal fin length
M Dorsal fin elements
N Anal fin elements
O Pectoral fin rays
P Ventral fin rays

The measurements and counts of the specimens are given in table 3. Previous distribution: see above.

The presence of *C. agassizi* in Southern Brazil is a new record for the Western South Atlantic.

Parasudis truculentus (Good & Bean, 1895)

Specimens examined (1): MZUSP 10649 — St. 1655, 33°38'S., 51°04'W., 215 m; January 19, 1972.

The Western Atlantic species of the genus *Parasudis* has been identified and described as *truculentus* by Mead (1966) based on abundant material from the North Atlantic, including specimens from off Northern Brazil. The same author (1966:184) examined and compared three paratypes of *P. fraser-brunneri* (Poll) from the Eastern Atlantic with *P. truculentus* and having found only slight differences between them suggested they should be considered cospecific. Karrer (1968) described three specimens from the South Atlantic (coasts of Argentina and South Brazil) as *Chlorophthalmus fraser-brunneri* (= *P. fraser-brunneri*) but did not mention Mead's work.

Data from our specimen were compared with those of *P. truculentus* given by Mead (l.c.) and no significant differences were found both in meristic and morphometric characters. With this evidence and since the published data on Karrer's specimens are meager, especially with respect to some important body proportions, we recognize our specimen as *P. truculentus* until large samples from the Western South Atlantic and the Eastern Atlantic can be adequately studied and compared with the material from the Western North Atlantic.

Measurements (mm) and counts of the specimen are as follows: standard length — 111.4; body depth at origin of dorsal fin — 18.5; body depth at origin of anal fin — 12.5; body width — 12.8; head length — 35.5; interorbital distance — 4.0; snout length — 13.9; distance from tip of upper jaw to end of maxillary — 16.0; horizontal diameter of eye — 11.5; vertical diameter of eye — 9.8; caudal peduncle depth — 8.2; dorsal fin length — 24.5; anal fin length — 17.6; caudal fin length — 24.5; pectoral fin length — 23.8; predorsal distance — 45.6; preanal distance — 87.6; preventral distance — 48.6; distance from origin of dorsal fin to origin of adipose fin — 45.8; distance from origin of dorsal fin to origin of anal fin — 44.6; gill rakers — 1+11; dorsal fin rays — 10; anal fin rays — 9; principal caudal rays — i+17+i; ventral fin rays — 9; pectoral fin rays — 16.

Previous distribution: Western North Atlantic and Eastern Atlantic (Mead, l.c.).

The occurrence of *P. truculentus* in Southern Brazil represents a new record for the Western South Atlantic.

Family Gobiidae

Chriolepis benthonis Ginsburg, 1953

Specimens examined (3): MZUSP 12156 — St. 1858, 31°08'S., 49°31'W, 184 m; August 6, 1972 (1); MZUSP 10321, 12155 — St. 1908, 32°21'S., 50°13'W., 180 m; August 21, 1972 (2).

The gobiid genus *Chriolepis* is represented by two species in the Western Atlantic: *C. fisheri* Herre, known only from the holotype, from off Barbados (Herre, 1942) and another specimen recently found in the Bahamas (Böhlke & Chaplin, 1968), and *C. benthonis,* described by Ginsburg (1953), based on a single specimen from off Progreso, Yucatán, Mexico. These two species can be readily distinguished on the basis of the scalation of the body. In *C. fisheri* the scales are restricted to the base of the caudal fin and represented only by two scales on either side of the body (Böhlke & Chaplin, 1968:599), whereas in *C. benthonis* the scales, according to the original description, are restricted to the posterior part of the body "extending forward to a point near the midline under base of seventh dorsal ray".

In our specimens most of the scales have fallen but the scale pockets, clearly visible on the sides of the posterior part of the body, indicate that the scale arrangement is identical to that described for *C. benthonis*. The characteristic modified scales on the caudal base are preserved in only one specimen.

With respect to other characters, a comparison of our data with Ginsburg's shows only slight differences in the number of dorsal fin rays (VII+9 in *benthonis* and VII+10 in our specimens) and anal fin rays (I+7 in *benthonis* and I+8 in our specimens); these differences are very small and most probably irrelevant.

We feel that more information on the Western Atlantic species of *Chriolepis* is needed, but based on the above we provisionally consider the specimens we have as cospecific with *C. benthonis*.

The measurements and counts of the specimens are given in table 4.

Previous distribution: see above

The specimens from Southern Brazil represent a new record of the species in the Western South Atlantic.

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