

NOTES ICHTYOLOGIQUES

FIRST RECORDS OF *PARAPERCCIS ROSEOVIRIDIS* (PERCIFORMES: PINGUIPEDIDAE) IN THE SOUTHEAST ATLANTIC. Rafael BAÑÓN, Rocío [lola@iim.csic.es], Dolores GARABANA, Tomás Alonso 53-5°A, Angeles ARMESTO, Chano Piñeiro 11-1°B & Durán PABLO, Instituto Español de Oceanografía, Aptdo. 1552; 36208 Vigo, SPAIN.

RÉSUMÉ. Premiers signalements de *Paraperccis roseoviridis* (Perciformes: Pinguipedidae) en Atlantique Sud-Est.

Ce travail donne des informations sur la capture de quatre spécimens de *P. roseoviridis* au large du banc de Valdivia et du mont sous-marin Vema et analyse la distribution de cette espèce. Jusqu'à maintenant, le genre était seulement représenté dans l'Atlantique par *P. atlantica*, des îles du Cap Vert.

Key words. Pinguipedidae - *Paraperccis roseoviridis* - ASE - Valdivia Bank - Vema seamount - First records.

The genus *Paraperccis* Bleeker, 1863 is constituted by marine fishes from the tropical and warm temperate Indo-Pacific area and the subtropical parts of Eastern Atlantic Ocean (Kamohara, 1960). Randall (1984) recognized 40 valid species and Heemstra (1986) about 50 species, including several undescribed ones. In the eastern Atlantic only one species, *P. atlantica* (Vaillant, 1887), was described from the Cape Verde Islands and is endemic (Cadenat, 1937). This paper reports the first record of *P. roseoviridis* (Gilbert, 1905) in the Southeast Atlantic, from the Valdivia Bank and Vema seamount.

Material and methods

Four *Paraperccis roseoviridis* specimens were collected during two experimental surveys, VAL 96 and VAL 98, carried out by two Spanish commercial bottom trawlers during the last trimester of 1996 and 1998 in the SE Atlantic. The specimens were frozen on board and later, in the laboratory, measurements and meristic characters were recorded. Afterwards the specimens were preserved in 70% ethanol and stored in the fishes collection of the Instituto Español de Oceanografía in Vigo (IEOV).

Measurements were made according to Gilbert (1905) and Yamakawa (1982) with a calliper to the nearest mm. Lateral line scales were counted from the posterior margin of opercle and do not include the few that extend posteriorly to the caudal fin base.

Paraperccis roseoviridis

Material examined. IEOV 03596, 186 mm SL, Valdivia Bank, 15 Aug. 1996, 26°13'S-6°14'E, 220 m; IEOV 03696, 158 mm SL, Valdivia Bank, 30 Aug. 1996, 26°13'S-6°15'E, 220 m; IEOV 01598, 190 mm SL, Valdivia Bank, 18 Nov. 1998, 26°11'S-06°21'E, 228 m; IEOV 01698, 148 mm SL, Valdivia Bank, 16 Nov. 1998, 26°06'S-06°21'E, 235 m.

Description (Fig. 1). Body elongate, subcylindrical; head wide, somewhat depressed; mouth slightly oblique and moderately large, the maxilla extending posteriorly to a vertical at anterior margin of pupil; upper jaw with a band of villiform teeth anteriorly which tapers laterally and an outer series of larger teeth; lower jaw with a band of anterior villiform teeth that tapers laterally to a single series of larger teeth; six enlarged canines at front of lower jaw; vomerine and palatine teeth present, latter in a single series; scales on body, cheeks and opercles but lacking on rest of head; smaller scales on bases of pectoral and caudal fins; dorsal, anal and ventral fins naked; lateral line continuous, slightly arched, over pectoral fin; numerous pores in scaleless parts of head, but lacking in preopercular and opercular margin; opercle with a single, short, flat spine above; dorsal fin with five spines gradually longer posteriorly and 23 soft rays; the last spine fully connected to first ray by a fin membrane; anal fin with a feeble spine and 19-20 soft rays; all dorsal and anal soft rays branched, the last to base; gill rakers short, represented by stout tubercles with 4-7 teeth; rosy-reddish colour in head and body, whitish below; ten yellow cross bands arranged roughly in pairs, fading out dorsally and below lateral line; a yellowish band from posterior part of eye toward preopercle angle; a red margined band above base of pectoral fin; lips yellow; spinous dorsal reddish or blackish, the other fins yellowish, unmarked; no black blotch at base of caudal. Biometric and meristic characters are presented in table 1.

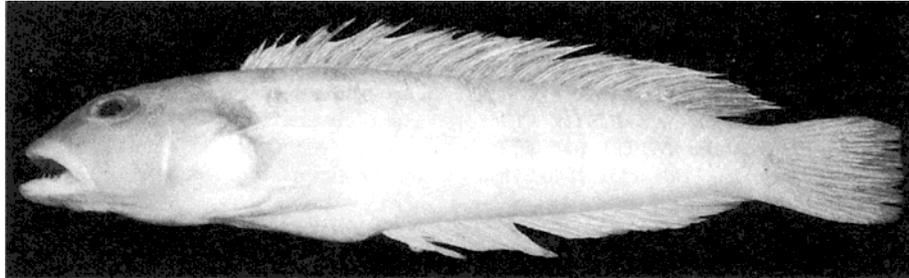


Fig. 1. Specimen of *Parapercis roseoviridis*, IEOV 01598, 190 mm SL, captured in Valdivia Bank on 18 Nov. 1998.

Distribution. In the Pacific ocean, known from Hawaiian islands (Gilbert, 1905) and Kyushu–Palau Ridge (Japan) (Yamakawa, 1982) and in the Atlantic ocean, Valdivia Bank and Vema Seamount.

Discussion

The realisation of experimental fishing surveys in little known areas by commercial bottom trawlers permits us to discover the presence of species in areas where they had not previously

Table 1. Biometry and meristic characters of the four IEOV specimens of *Parapercis roseoviridis*.

	IEOV 03596		IEOV 03696		IEOV 01598		IEOV 01698	
	L (mm)	% LS	L (mm)	% LS	L (mm)	% SL	L (mm)	% SL
Biometry								
Total length	224		190		226		178	
Standard length	186		158		190		148	
Head length	48	25.8	42	26.5	51	26.8	35	23.6
Preorbital length	14	7.5	11	6.9	14	7.4	8	5.4
Postorbital length	22	11.8	17	10.6	23	12.1	17	11.5
Interorbital width	11	5.9	10	6.3	11	5.8	7	4.7
Eye diameter	12	6.4	14	8.8	14	7.4	10	6.7
Dorsal base length	123	66.1	105	66.4	122	64.2	97	65.5
Anal base length	90	48.3	72	45.5	90	47.4	74	50.0
Pectoral fin length	41	22.0	33	20.8	42	22.1	30	20.3
Ventral fin length	38	20.4	32	20.2	40	21.0	30	20.3
Body depth	39	20.9	35	22.1	43	22.6	31	20.9
Body width	35	18.8	36	22.7	39	20.5	29	19.6
Predorsal length	55	29.5	47	29.7	55	28.9	40	27.0
Preanal length	86	46.2	76	48.1	90	47.4	62	41.9
Mouth length	21	11.3	16	10.1	22	11.6	16	10.8
Meristics								
Dorsal fin rays	V+23		V+23		V+23		V+ 23	
Anal fin rays	I+19		I+20		I+19		I+19	
Pectoral fin rays	20		20		21		20	
Ventral fin rays	I+5		I+5		I+5		I+5	
Scales in lateral line	61		63		63		62	
Canine teeth in lower jaw	6		6		6		6	
Gill rakers in first arch	4+10		4+10		5+10		4+10	

been recorded. The specimens here described were captured in Valdivia Bank (Fig. 1), but they are also observed by one of the authors in Vema seamount the 11 November 1997, at 31°37'S-8°23'E and 1130m depth, although specimens from this area were not preserved.

The specimens here studied coincide in general terms with previous descriptions, but we have found some differences.

According to the literature, the colour of the spinous dorsal fin in this species is largely blackish (Gilbert, 1905; Randall, 1984). Yamakawa (1982) does not describe this coloration for the specimens of Japan but the photo attached to text shows clearly this blackish membrane. We could observe this character in three of the four described specimens, and it was reddish in two of them, IEOV 03596 and IEOV 01598 (Fig. 1), and blackish in the other one, IEOV 01698. Different sexual colour phases are characteristic of some species of this genus (Randall, 1984); the smaller (female) fish often have a colour pattern that is different from the pattern of the larger (male) specimens of the same species (Heemstra, 1986). The presence of a reddish spinous dorsal fin in most of these specimens could be indicative of a sexual dichromatism for this species, although, after conservation, it was not possible to determine with certainty the sex in the specimens described.

The presence of a feeble spine in the anal fin has not been described before for this species, however, this character is mentioned in the descriptions of numerous species of the genus (Shen, 1983; Randall, 1984) and Heemstra (1986) mentioned this character in the family diagnosis based on genus *Parapercis*. The four specimens examined have this spine, although what is named spine here may be really a soft ray (Kamohara, 1960).

The scales number in lateral line is 55-58 for the specimens of Hawaii (Anderson, 1992) and 62-63 for the specimens of Japan (Yamakawa, 1982). Our specimens have 61-63 scales in lateral line, similar to the number in Japanese specimens.

Some of these differences could be related with the isolation of distinct populations, although the scarcity of references to this species does not allow us to made any conclusions and the study of more specimens is necessary.

The presence of *P. roseoviridis* in the Atlantic is unexpected; until now, only one species of the same genus, *P. atlantica* was recognized for the east Atlantic, endemic of Cape Verde

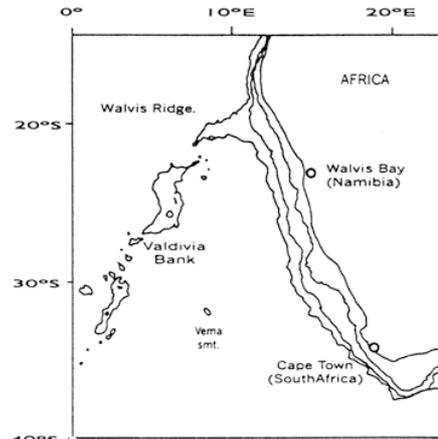


Fig. 1. Map of western Africa region showing the areas where specimens of *P. roseoviridis* were observed.

islands. The presence of *P. roseoviridis* in Valdivia Bank and Vema seamount extends its distribution in seamounts and Islands of tropical and subtropical waters of Pacific and Atlantic.

Acknowledgements. The authors would like to thank Drs. J.E. Randall, J.-C. Quéro and M.E. Anderson for their help in the determination of *P. roseoviridis*. The Instituto Español de Oceanografía supported this study.

REFERENCES

- ANDERSON M.E., 1992. A new sandperch, *Parapercis maritzi* (Teleostei: Pinguipedidae), from South Africa. *S. Afr. J. Zool.*, 27(4): 151-155.
- CADENAT J., 1937. Recherches systématiques sur les poissons littoraux de la côte occidentale d'Afrique, récoltés par le navire Président Théodore-Tissier, au cours de sa 5^e croisière (1936). *Rev. Trav. Inst. Pêches Marit.*, 10(4): 508-511.
- GILBERT C.H., 1905. The aquatic resources of the Hawaiian islands, Part II, Section II. The deep sea fishes. *Bull. U.S. Fish. Comm.*, 23(2): 575-713.
- HEEMSTRA P.C., 1986. Mugiloididae. In: Smith's Sea Fishes (Smith M.M. & P.C. Heemstra, eds), pp. 39-741. Johannesburg: MacMillan South Africa Ltd.

- KAMOHARA T., 1960. **■**A review of the fishes of the family *Parapercidae* found in the waters of Japan. *Rep. Usa Mar. Biol. Sta.*, 7(2): 1-14.
- RANDALL J.E., 1984. **■**Two new Indo-Pacific Mugiloidid fishes of the genus *Parapercis*. *Freshw. Mar. Aquar.*, 7(12): 41-49.
- SHEN S.C., 1983. **■**Study on Sand Perch (Mugiloididae) from Taiwan. *J. Taiwan Mus.*, 36(2): 23-36.
- VAILLANT M.L., 1887. **■**Sur la présence d'un poisson appartenant au genre *Neopercis* dans l'Atlantique. *C.R. hebd. Acad. Sci. Paris*, 105: 1032-1033.
- YAMAKAWA T., 1982. **■***Parapercis roseoviridis*. In: Fishes of the Kyushu-Palau ridge and Tosa Bay (Okamura O. *et al.*, eds), p. **■**85. Tokyo: JAMARC, Tosho Printing Co.

Reçu le 21.10.1999.

Accepté pour publication 03.03.2000.