NOTES

SYMPHODUS (CRENILABRUS) OCELLATUS BERTINI (PRAS, 1961) (PISCES, LABRIDAE), A NEW RECORD FOR THE SPANISH MEDITERRANEAN COAST

LL. MERCADER

The Red Wrasse *Symphodus (Crenilabrus) ocellatus bertini* (Pras, 1961) is an endemic subspecies of the Mediterranean Sea (FREDJ & MAURIN, 1987). It lives on rocky bottoms and near eel-grass beds up to 30m of depth (QUIGNARD & PRAS, 1986). It is found mixed with other Labridae, specially *Symphodus (Crenilabrus) ocellatus ocellatus* (Forsskal, 1775), among which it appears in a rate of not more than 0.1% (Pras in GARNAUD, 1970).

The subspecies was discovered for the first time in Salins d'Hyères (PRAS, 1961), near Toulon (France), in the eastern end of the Gulf of Lion. Found in 1963 and 1964 by the Zoological Station from Villefranche-sur-Mer (GARNAUD, 1970), it has been seen recently in Le Brusc, near Sanary (France), (PRAS, 1982) and south of Sicily (FREDJ & MAURIN, 1987).

During 117 scuba diving carried out between January 1986 and February 1990 in the littoral of Palamós (Costa Brava, NE Spain), *S. (Cr.) ocellatus bertini* was seen ten times, mainly in summer, swimming alone on rocky bottoms or on *Posidonia oceanica* meadows among many specimens of *S. (Cr.) ocellatus ocellatus*.

The only specimen of the red wrasse studied was a male of 60.6 mm TL. It was caught together with four specimens of *S. (Cr.) oce-*

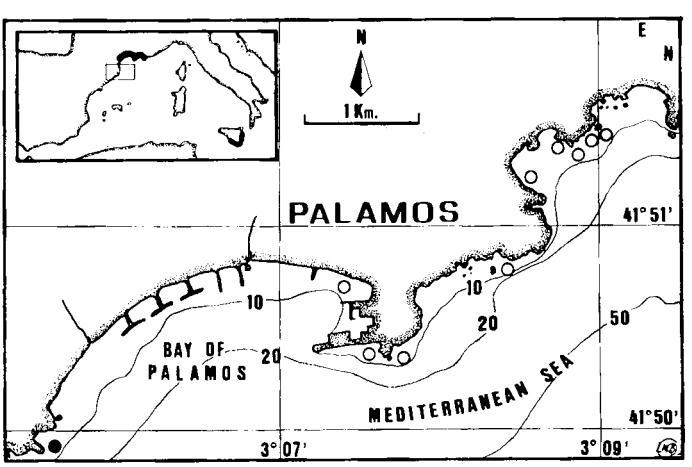

Fig. 1. Localization of several specimens of *Symphodus (Crenilabrus) ocellatus bertini* in the littoral of Palamós: ● Specimen studied; ○ Other specimens. Bathymetry in metres.

Localización de varios ejemplares de Symphodus (Crenilabrus) ocellatus bertini *en el litoral de Palamós:* ● *Ejemplar estudiado;* ○ *Otros ejemplares. Batimetría en metros.*

Table 1. Biometric and meristic characters of the *Symphodus (Crenilabrus) ocellatus bertini* from Palamós and others specimens caught in the French Mediterranean coast.

Caracteres biométricos y merísticos del ejemplar de Symphodus (Crenilabrus) ocellatus bertini *capturado en Palamós y de otros ejemplares de la costa mediterránea francesa.*

	This work		Pras (1961)		Garnaud (1970)							
					1		2		3		4	
Biometric characters	mm	%(TL)	mm	%(TL)	mm	%(TL)	mm	%(TL)	mm	%(TL)	mm	%(TL)
Total length (TL)	60.6	100.0	64.0	100.0	62.0	100.0	62.0	100.0	63.0	100.0	64.0	100.0
Standard length (SL)	49.7	82.0	–		52.0	83.9	52.0	83.0	52.0	82.5	52.0	81.2
Cephalic length (CL)	17.8	29.4	18.0	28.1	14.0	22.6	15.0	24.2	15.0	23.8	15.0	23.4
Preorbital length (PROL)	5.8	9.6	–		5.0	8.1	4.5	7.3	4.0	6.3	5.0	7.8
Interorbital space (IOS)	4.2	6.9	–		–		–		–		–	
Eye diameter (ED)	4.7	7.7	4.5	7.0	5.0	8.1	5.0	8.1	5.0	7.9	5.0	7.8
Dorsal fin base length (DL)	24.6	40.6	–		–		–		–		–	
Anal fin base length (AL)	11.8	19.5	–		–		–		–		–	
Dorsal fin height (DH)	6.8	11.2	–		–		–		–		–	
Anal fin height (AH)	5.8	9.6	–		–		–		–		–	
Body height (BH)	15.9	26.2	20.0	31.2	16.5	26.6	18.5	29.8	18.0	28.6	20.0	31.2
Meristic characters												
Dorsal fin	XIV+11		XIV+10		XIII-XIV + 9-10							
Anal fin	III+11		III+11		III + 9-10							
Caudal fin	13		12		13							
Pectoral fin	11		11		11-12							
Pelvic fin	I+5		I+6		I+5							

Table 2. Biometric and meristic characters of the *Symphodus (Crenilabrus) ocellatus bertini* (SCOB) and of four specimens of *Symphodus (Crenilabrus) ocellatus ocellatus* (SCOO) all caught in Palamós.

Caracteres biométricos y merísticos del ejemplar de Symphodus (Crenilabrus) ocellatus bertini *(SCOB) y de cuatro ejemplares de* Symphodus (Crenilabrus) ocellatus ocellatus *(SCOO) todos procedentes de Palamós.*

	SCOB		SCOO							
	1(♂)		1(♀)		2(♀)		3(♂)		4(♂)	
Biometric characters	mm	%(TL)	mm	%(TL)	mm	%(TL)	mm	%(TL)	mm	%(TL)
Total length (TL)	60.6		63.4		90.4		91.0		94.5	
Standard length (SL)	49.7	100.0	52.1	100.0	75.0	100.0	74.9	100.0	79.9	100.0
Cephalic length (CL)	17.8	35.8	18.6	35.7	26.3	35.1	26.3	35.1	29.6	37.0
Preorbital length (PROL)	5.8	11.7	6.4	12.3	10.2	13.6	8.3	11.1	11.6	14.5
Interorbital space (IOS)	4.2	8.4	3.8	7.3	5.4	7.2	5.8	7.5	6.0	7.5
Eye diameter (ED)	4.7	9.5	4.6	8.8	5.8	7.7	5.9	7.9	5.9	7.4
Dorsal fin base length (DL)	24.6	49.5	26.0	49.9	36.4	48.5	38.2	51.0	37.5	46.9
Anal fin base length (AL)	11.8	23.7	12.2	23.4	18.3	24.4	18.3	24.4	21.4	26.8
Caudal fin length (CAL)	10.9	21.9	11.3	21.7	15.4	20.5	16.1	21.5	14.6	18.3
Dorsal fin height (DH)	6.8	13.7	6.8	13.0	8.8	11.7	12.9	17.2	13.2	16.5
Anal fin height (AH)	5.8	11.7	6.1	11.7	8.9	11.9	10.3	13.7	13.2	16.5
Body height (BH)	15.9	32.0	16.3	31.3	25.9	34.5	26.0	34.7	25.0	31.3
Meristic characters										
Dorsal fin	XIV+11		XIII+10		XIV+10		XIV+10		XIV+9	
Anal fin	III+11		III+10		III+10		III+9		III+10	
Caudal fin	13		13		13		13		13	
Pectoral fin	11		12		12		12		12	
Pelvic fin	I+5		I+5		I+5		I+5		I+5	

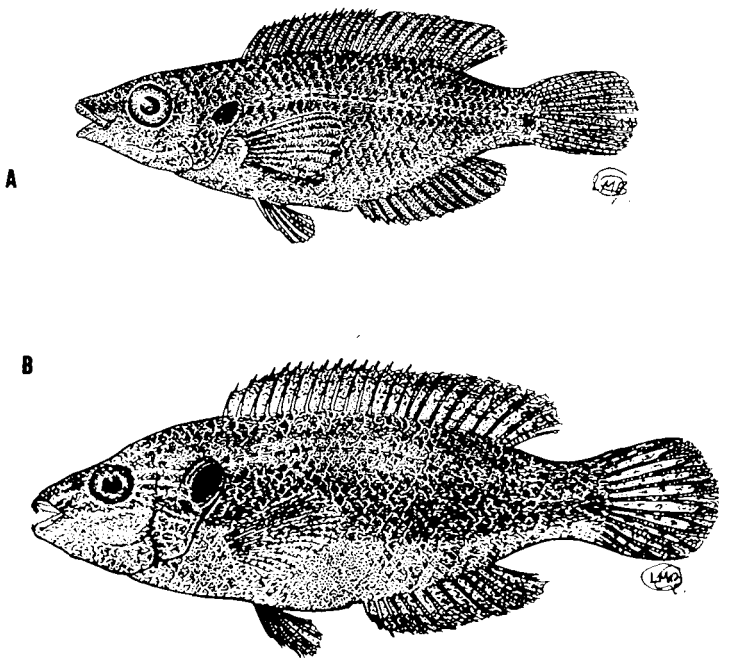

Fig. 2. A. Male of *Symphodus (Crenilabrus) ocellatus bertini* (60.6 mm TL); B. Male of *Symphodus (Crenilabrus) ocellatus ocellatus* (94.5 mm TL). Both specimens from Palamós.

A. Macho de Symphodus (Crenilabrus) ocellatus bertini *(60,6 mm LT); B. Macho de* Symphodus (Crenilabrus) ocellatus ocellatus *(94,5 mm LT). Ambos ejemplares capturados en Palamós.*

llatus ocellatus –two males and two females– with a fishing hand net on 12 VIII 1987 at 6 m depth in Torre Valentina (41° 49' 55" N– 3° 05' 20"E), in the western end of the Bay of Palamós (fig. 1).

Body and fins show an orange-red colour. It has a black spot like an ocellus on the rear corner of the operculum and a small one on the caudal peduncle, below the lateral line (fig. 2). These remarks agree with the ones of PRAS (1961) and GARNAUD (1970).

The specimen from Palamós has the cephalic and preorbital lengths bigger that those from the French coast studied by PRAS (1961) and GARNAUD (1970) (table 1). In regard to meristic characters, the specimen from Palamós has 11 soft dorsal finrays while the others show nine or ten. PRAS (1961) counts six soft pelvic finrays in his specimen while there are only five in the rest.

It would be interesting to compare the biometric and meristic characters from both sexes but, at present, any female of *S. (Cr.) ocellatus bertini* has been caught. The paper of PRAS (1982) suggests several hypothesis to explain the absence of the females.

Both opercular and caudal peduncular dark spots of *S. (Cr.) ocellatus bertini* are similar to the *S. (Cr.) ocellatus ocellatus* caught in Palamós, but smaller. Both subspecies differ on its colour and specially on the eye diameter and caudal fin length, bigger in the former (table 2). It can also be seen that the dorsal and anal fins of *S. (Cr.) ocellatus ocellatus* from Palamós has one or two soft rays less than the ones of *S. (Cr.) ocellatus bertini*. The contrary occurs with the pectoral fins.

This record is then the first one in the Spanish Mediterranean coast and it increases the reduced geographical distribution of *Symphodus (Crenilabrus) ocellatus bertini*.

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ABSTRACT

Symphodus (Crenilabrus) ocellatus bertini *(Pras, 1961) (Pisces, Labridae), a new record for the Spanish Mediterranean coast.*– The capture of one specimen of the red wrasse *(Symphodus (Crenilabrus) ocellatus bertini* (Pras, 1961)) in the littoral of Palamós (Costa Brava, NE Spain) is reported. Its biometric and meristic characters are compared with those of several specimens caught in the French Mediterranean coast.

Key words: Fish, Labridae, New record, Spain.

RESUMEN

Symphodus (Crenilabrus) ocellatus bertini *(Pras, 1961) (Pisces, Labridae), nueva especie para la costa mediterránea española.*

Se presenta la captura de un tordo de roca anaranjado *(Symphodus (Crenilabrus) ocellatus bertini* (Pras, 1961)) en aguas del litoral de Palamós (Costa Brava, España). Sus caracteres biométricos y merísticos son comparados con los de otros ejemplares de la costa mediterránea francesa.

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DATOS SOBRE LA ALIMENTACIÓN DE ARDÉIDOS EN EL DELTA DEL EBRO

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La alimentación de los ardéidos se conoce relativamente bien (MOLTONI, 1936, 1948; SIEGFRIED, 1971; OWEN & PHILLIPS, 1956; WILLIAMS, 1959; HAFNER, 1977; HOFFMAN, 1978; FASOLA et al., 1981). Sin embargo, en el caso del Delta del Ebro, únicamente se dispone de información de alimentación durante un ciclo anual para la garcilla bueyera (*Bubulcus ibis*) (RUIZ, 1985), mientras que en el resto de especies, fuera del período reproductor se desconoce. Por ello se ha considerado de interés la publicación de los contenidos gástricos de nueve ardéidos adultos procedentes del Delta del Ebro: cuatro garzas reales (*Ardea cinerea*) y un martinete (*Nycticorax nycticorax*) capturados en enero de 1978 y cuatro garcetas comunes (*Egretta garzetta*) capturadas en abril de 1980.

Hasta el momento de su análisis, los estómagos se conservaron en alcohol de 70°. Posteriormente se disgregó el material mediante un tamizado y se procedió a la identificación