

NEW RECORDS OF *PARABLENNIUS PILICORNIS* (CUVIER, 1829)(PISCES, BLENNIIDAE) ALONG THE ITALIAN COASTS

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Abstract

New records of *Parablennius pilicornis* (Cuvier, 1829)(Pisces, Blenniidae) along the Italian coasts are reported. Previous studies showed the species' presence only in one site along the Western Ligurian coast and in three sites in the Gulf of Palermo (northern Sicily). On the basis of underwater observations, occurrence of *P. pilicornis* is here described in north-western Sardinia and in other sites of southern Tyrrhenian. These findings may represent a progressive expansion of the species to the whole western Mediterranean Sea.

Keywords: *Parablennius pilicornis*, biogeography, Italy, Central Mediterranean

Introduction

The ringneck blenny, *Parablennius pilicornis* (Cuvier, 1829), is widely distributed in rocky bottoms of the western Indian Ocean, the eastern and southwestern Atlantic Ocean, and the western part of the Mediterranean Sea, including Morocco, Algeria, Spain and France (1, 2). Until a few years ago, it was considered absent from the Italian coasts (3). Its presence was reported only in three sites in the Gulf of Palermo (northern Sicily) (4) and in one site along the Ligurian coast (5). Given the concern about the variation of species' distribution in the Mediterranean Sea, and its possible link with global climate changes (6), new information on its distribution is here presented and discussed in the light of the current knowledge on its biogeographic distribution in the area.

Materials and methods

All results are coming from underwater observations. Specimens were photographed or fished with a polyethylene bag trap. The identification of the specimens was done on the basis of livery and morphological features. At least three basic color patterns are reported: basic light livery with a median band or with scattered dark brown patches, almost black (only males) and striking yellow (only females). Considering the morphological features easily recognizable during diving or on photos, the presence of typical supraorbital tentacle with 5 filiform appendages of similar size is remarkable (7).

Results and discussion

Results of *P. pilicornis* observations along the Italian coasts are reported in Table 1. All known liveries were recorded in the examined lot, without any site preference.

Table 1. New records of *Parablennius pilicornis* in Italian coasts. UWP = Author's archives of under water photos; ICUWPH = Italian competition of underwater photographic hunting of Italian Federation of Underwater Sports (FIPSAS); * =one specimen; ** =more than one specimens.

Date	Site	Sources and remarks
Sept. 1997	Porto Conte (North-western Sardinia)	UWP * (basic livery)
May 1998	Addaura (North-western Sicily)	UWP ** (basic livery)
May 1999	Addaura (North-western Sicily)	UWP ** (black, yellow, basic liveries)
Oct. 2000	Sferracavallo (North-western Sicily)	ICUWPH * (basic livery)
May 2001	Ganzirri (Strait of Messina)	UWP * (basic livery)
June 2001	Amantea (Tyrrhenian Calabria)	ICUWPH * (basic livery)
August 2001	Castellammare del Golfo (North-western Sicily)	UWP ** (basic livery)
May 2003	Addaura (North-western Sicily)	mature female, 80 mm TL * (basic livery)
July 2003	Sferracavallo (North-western Sicily)	UWP * (black livery)
August 2003	Castellammare del Golfo (North-western Sicily)	UWP ** (basic livery)
Sept. 2003	Panarea (Aeolian Islands)	UWP * (yellow livery)

The only dissected specimen was a female (80 mm TL, 68 mm SL and 5.50 g of body weight) with an ovary weight of 0.20 g and large, transparent eggs.

Our observations expand the known geographical distribution of *P. pilicornis* in the Italian coasts. After the first reports of the species along the coasts of northwestern Sicily and the eastern Ligurian Sea, no more are available in the literature. It must be noted that the assemblages of blenniid fish were studied earlier in the Ligurian and Tyrrhenian Sea, down to Capo Vaticano (Calabria) (8). Twelve species out of the 20 blennies occurring in the Italian seas (9) were reported, with slight variation in species composition among sites. Although the thermophilic species *Scartella cristata* was recorded at 21 of the 25 sampling sites, no evidence of *P. pilicornis* was given.

Even if the Italian competitions of underwater photographic hunting have been held since the 80's throughout the Italian seas, the species was photographed only twice. Furthermore, even though one of the authors routinely dives in the eastern coasts of Sicily (Ionian Sea), no specimen of *P. pilicornis* was ever observed in the area.

The presence of the species in many sites of northern Sicily (southern Tyrrhenian) suggests that *P. pilicornis* is, at present, a stable component of the blenniid assemblage along this coast, marking an apparent eastward expansion of the species in the Mediterranean. The presence of the species in the northwestern coast of Sardinia, in front of the Balearic Islands, where its occurrence is well documented (1), gives a greater value to the species occurrence in the eastern Ligurian coast (5) and in the Gulf of Lions (2). Finally, the presence of the species in Amantea (Tyrrhenian coast of Calabria), north of the Capo Vaticano station, where *P. pilicornis* was not reported earlier (8), suggests that the species expanded from the northern Sicilian coast to the Calabrian one.

According to us all these records are sign of the species' progressive expansion to the whole western Mediterranean Sea. This might be interpreted as a step in the more general extension of geographical distribution of subtropical Atlantic species, due to the climatic variation which can affect the current regime in the Mediterranean (2)

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