

Additional records of the Grant's rockling, *Gaidropsarus granti* (Actinopterygii: Gadiformes: Lotidae), from the Ionian Sea

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Two specimens of the Grant's rockling *Gaidropsarus granti* (Regan, 1903) were caught in the Ionian Sea, just south of the Strait of Messina (Italy) in December 2016. Their body colouration pattern is consistent with that reported in the literature for this species. These specimens were described and illustrated.

Key words: *Gaidropsarus granti*, Ionian Sea, biodiversity, occurrence, range expanding species

INTRODUCTION

The Grant's rockling *Gaidropsarus granti* (REGAN, 1903) is a rare deep-living gadiform fish species discovered in the Azores (Atlantic Ocean) and described under the genus *Omus*. After its first record, it has been recorded again in Atlantic waters, after about one century, in the Canary Islands (BRITO *et al.*, 2002), north Spain (BAÑÓN *et al.*, 2002; BAÑÓN *et al.*, 2010), Seine Seamount (MENEZES *et al.*, 2009) and again in the Azores (ORSI RELINI & RELINI, 2013). In the Mediterranean, this species has been recorded first in the Ligurian Sea in the period 1989-1990, and later also in other Italian Seas (AA. VV. 2011; ANGELETTI *et al.*, 2014; ORSI RELINI & RELINI, 2013; MURA & CAU, 2003; TIRALONGO & RUSSO, 2015; BELLO, 2018) as well as in Rhodes, Greece (ZACHARIOU-MAMALINGA, 1999) and in the Alboran Sea (GARCIA, 2015).

Figure 1. reports the updated distribution of documented and undocumented records of this species in the Mediterranean and Atlantic Ocean. The biology and ecology of this species is poorly known. It feeds on crustaceans (palaemonid prawns and galatheids) (PAIS *et al.*, 2008; SVETOVIDOV, 1986; BELLO, 2018). The maxi-



Fig. 1. Known distribution of *Gaidropsarus granti* in the Mediterranean Sea and Atlantic Ocean; squares indicate documented records, triangles undocumented records, circles are the present records in the Ionian Sea

imum total length (TL) reported in the literature for this species is 39 cm (ORSI RELINI & RELINI, 2013). It is found in several types of substrate, at depths ranging from 120 m in Gulf of Cagliari (MURA & CAU, 2003) to 823 m at Galician Bank, (BAÑÓN *et al.*, 2002), although SVETOVIDOV (1986) speculates that it could live at 20-50 m of depth.

In the Atlantic, this species has never been caught in the continental shelf and its distribution seems to be restricted to islands and seamounts (BAÑÓN *et al.*, 2010).

In this note, we report the occurrence of two additional specimens of *G. granti* in the Ionian Sea.

MATERIAL AND METHODS

Two specimens of *G. granti* were caught alive by bottom traps used for the fishery of shrimps (*Plesionika* spp.), at about 300 m of depth on a muddy bottom with rocks, south of Reggio Calabria in the Ionian Sea. Both specimens were placed and kept in an aquarium tank (400 liters), maintained on a 12 h light-dark cycle, aerated with two aquarium circulation pumps. During day, specimens were fed once in the afternoon with shrimps or marine fish eggs. Identification of the species was based on the typical pattern coloration which make this species unmistakable (ORSI RELINI & RELINI, 2013). The assessment of sex and gonad maturity was carried out by macroscopic observation, according to HOLDEN & RAITT (1975).

RESULTS AND DISCUSSION

The first specimen of *G. granti* (Fig. 2) was collected on 6 December 2016, south of Reggio Calabria in the Ionian Sea (38°4'11.24" N, 15°37'26.11" E), together with specimens of the boarfish *Capros aper*. It was kept alive in aquarium by an aquarium hobbyist for about one week, then it died. It was 23 cm long (total length, TL). The macroscopic observation of the gonads revealed that the specimen was a female with mature ovary.

The second specimen (Fig. 3) was caught in about the same area (38°4'4.02" N, 15°37'32.78"

E) on 13 December 2016. After 185 days from its catch it had died. It was 20 cm long (total length, TL). The macroscopic observation of the gonads revealed that the specimen was a female with ovary in maturing process..



Fig. 2. Alive specimen of *Gaidropsarus granti* collected on 6 December 2016 south of Reggio Calabria (Ionian Sea)



Fig. 3. Alive specimen of *Gaidropsarus granti* collected on 13 December 2016 south of Reggio Calabria (Ionian Sea)

Description of the pattern coloration

The first specimen had a color pattern consisting of brown markings on a body light background forming asymmetrical patterns on the upper part, creamy stripes and spots were patchily distributed on the head and the anterior dorso-lateral body region, a dorso-lateral sinuous pale band, parallel to the second dorsal fin, started shortly after the fin insertion and runned for about all fin length, a central longitudinal whitish stripe runned on the rusty-brown coloured dorsal fin for all its length, scattered orange spots were present on the light coloured belly.

The second specimen showed a similar color pattern, with reticulations on the head and in the anterior body region, but lacking the orange spots on the belly; the whitish stripe under the second dorsal fin runned parallel from the fin insertion to the caudal fin.

The color pattern of both specimens typically agrees with the description of *G. granti* provided in the literature (SVETOVIDOV, 1986; ORSI RELINI & RELINI, 2013; BELLO, 2018).

This species has been previously caught only once in the Calabrian Ionian Sea, in about the same area, season and depth (TIRALONGO & RUSSO, 2015). According to early findings of *G. granti* in the western Mediterranean Basin (at

the end of '80s), followed by a comparatively high number of recent records, it may be speculated that this species is an immigrant from the Atlantic. However, there is no reason to reject the hypothesis that it could be a rare native Mediterranean species which is expanding its population due to favorable unknown events (see also BELLO, 2018).

ACKNOWLEDGEMENTS

The Authors are grateful to the aquarium hobbyist Mr. Carmelo INFORTUNA for his cooperation.

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Received: 18 October 2018

Accepted: 26 March 2019

Dodatni nalazi šarene ugorove majke *Gaidropsarus granti* (Actinopterygii: Gadiformes: Lotidae) u Jonskom moru

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SAŽETAK

Dva primjerka *Gaidropsarus granti* (Regan, 1903) ulovljena su u Jonskom moru, južno od Mesinskog tjesnaca (Italija) u prosincu 2016. Njihov uzorak obojenosti tijela je u skladu s onim iz literature za ovu vrstu. Ti su uzorci opisani i prikazani u radu.

Ključne riječi: *Gaidropsarus granti*, Jonsko more, bioraznolikost, pojavljivanje, širenje vrste