



The occurrence of *Ranzania laevis* off the Island of Gran Canaria, the Canary Islands, related to sea warming

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Catches of the slender sunfish Ranzania laevis were reported off the coastline of the island of Gran Canaria, the Canary Islands, Spain in May-June 2001, apparently associated with a sudden west-east warming process of the sea surface in the central Atlantic.

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Key words: warming process; unusual occurrence; Ranzania laevis; slender sunfish; thermal oscillation.

The slender sunfish Ranzania laevis (Pennant) (Molidae) is an epipelagic species which inhabits open tropical and subtropical ocean waters and occurs circumglobally (Eschmeyer et al., 1983; Ebenezer & Joel, 1984; Tortonese, 1986). In the eastern Atlantic, it has been reported from Scandinavia to Senegal and Sierre Leone, and is also present in the Mediterranean (Specchi & Bussani, 1973; Parenzan, 1978; Jardas & Knezevic, 1983; Tortonese, 1986, 1990). It is considered to be a warm water species, individuals of which are generally to be found swimming alone (Scott, 1995).

Although this species has been reported off the coastline of the Madeira Islands (Tortonese, 1986), its presence in the Canary Islands has not been recorded. During May to June 2001, however, over 300 individuals were caught by the purse seine fishery in the south-west of the island of Gran Canaria (28° N, 15° W). All the specimens caught were 20–25 cm in total length (L_T) and the majority were solitary, although schools of >500 individuals were also recorded. They were always observed in surface waters <90 m.

The presence of this species, as reported for other Molidae, is normally associated with a seasonal warming process (Quero et al., 1983). On 10 May, from SST satellite images, a warm water tongue, 21–23° C (3–5° C warmer than the surrounding area) was detected extending from the west, and reaching the island of La Gomera (17°30′ W) [Fig. 1(a)]. On 11 May, the warm water spread to the south of the island of Gran Canaria (15°30′ W) [Fig. 1(b)], coinciding with capture of the first specimen of R. laevis. From 20 June 2001 warm water had invaded the whole area [Fig. 1(c)]. The presence of this species off Gran Canaria was reported by the purse seiners until the middle of July 2001.

The progressive west-east warming process is a normal annual environmental event which occurs at the end of spring in the central-east Atlantic. The yearly capture of tropical tunas, e.g. Katsuwonus pelamis (L.), off the Canary Islands has been linked to this warming process (Ramos et al., 1996). This is the first time that the presence of a species such as R. laevis, however, has been reported as coinciding with this event.

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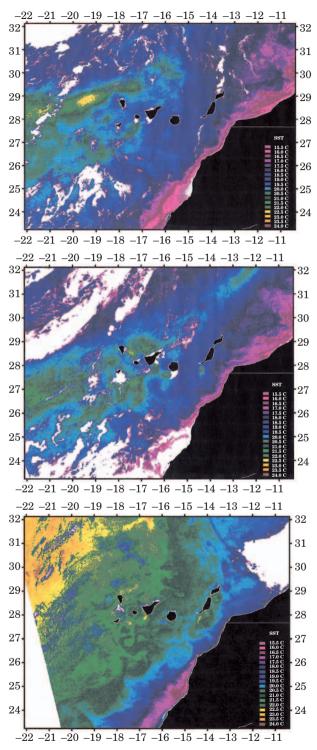


Fig. 1. SST satellite image of water temperature at sea surface obtained on (a) 10 May, (b) 11 May and (c) 20 June 2001.

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