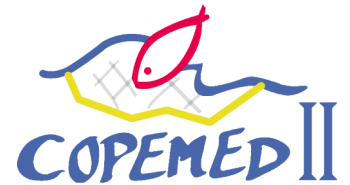




FOOD AND AGRICULTURE ORGANIZATION
OF THE UNITED NATIONS



OCCASIONAL PAPER

5

**REPORT ON DOLPHINFISH LARVAL CATCHES OFF
THE BALEARIC SEA**

A CopeMed II contribution to:

**CopeMed II - MedSudMed Workshop on Fisheries
and appraisal of *Coryphaena hippurus***

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Dolphinfish (*Coryphaena hippurus*) is a migratory apex predator species widely distributed over tropical and temperate waters in the world inhabiting the epipelagic layers of oceanic waters. It is a highly prized species that is fished by recreational and commercial fisheries. It is a short-living species, living up to a maximum of three years which observes fast-growth attaining maximum lengths of over 1m (Palko et al., 1982). The Western Mediterranean basin forms part of its northernmost distributional range. Although, most research on this species is conducted in tropical waters, important aspects on the species' reproductive biology (Massuti and Morales-Nin, 1997) and its seasonality collected from the Dolphinfish Balearic fishery (Massuti and Morales-Nin, 1995) is also being research.

The species' reproductive seasonality extends along the summer months from June to September in the Balearic waters (Massuti and Morales-Nin, 1995, 1997). Nonetheless, the presence of their eggs and larvae is very scarce in the areas where it has been found. Their catch may be considered as occasional in open sea waters. Alemany (1998) first reported the catch of 4 Dolphinfish larvae in the Mediterranean Sea off the island of Mallorca on the basis of the description of Dolphinfish larval development by Ditty et al., (1994) and with a comparison with larvae reared in captivity. These larvae were sorted from 1177 in plankton samples that were collected from 1985 to 1995 which gives an idea of their scarcity. All the larvae were captured in June, as those reported by Alemany (2006) for another Dolphinfish larval catch whose estimated density was quite low (0.8 larvae/1000m³).

The reproductive cycle of the species is contemporaneous with bluefin tuna and other tuna like species spawning off the Balearic archipelago. During years 2001 to 2005, a series of oceanographic surveys in the TUNIBAL project focusing on bluefin larval ecology were carried out. This document provides further Dolphinfish records in the area off the Balearic archipelago by means of a scan over the species data record of the TUNIBAL surveys. One of the plankton sampling nets used for a rapid sorting on board was a squared mouth Bongo of 90cm which was towed at surface. This net captured during 2001 and 2005 a number of advanced stages of development, at early juvenile stages (see plate 1), located in the oceanic waters of the Balearic archipelago whose

geographic locations may be observed in Fig. 1. A further idea of its scarcity is that the TUNIBAL surveys did on average about 200 Bongo 90 tows every year.

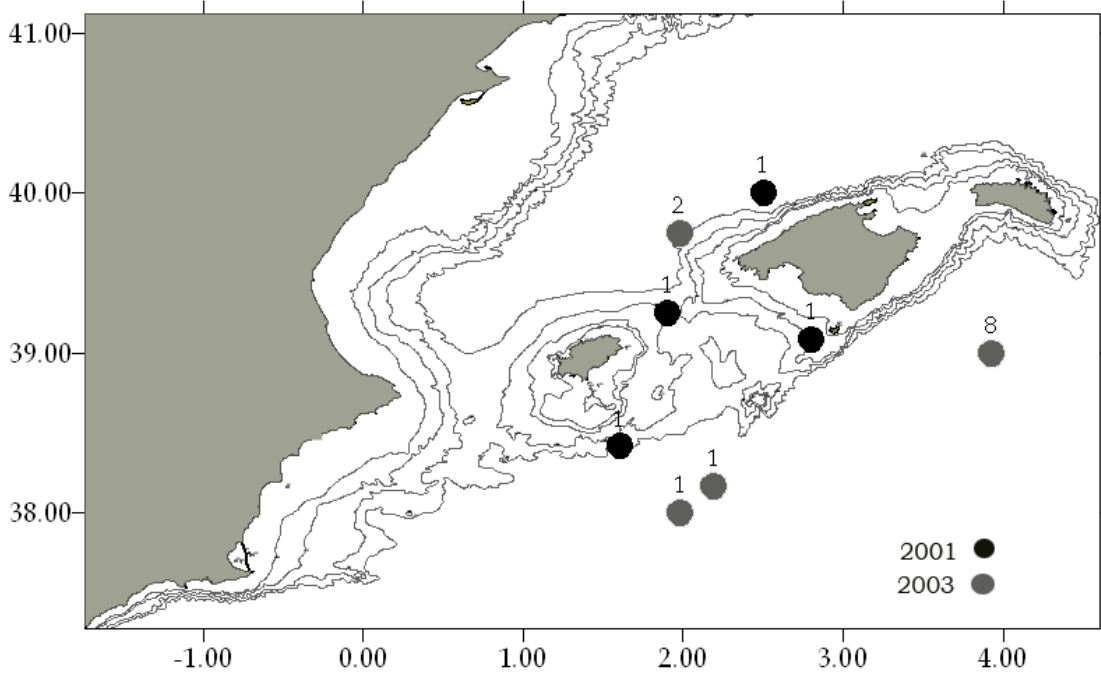


Figure 1- Plankton catches of early juveniles of *Coryphaena hippurus* caught in the 2001 and 2003 TUNIBAL surveys.

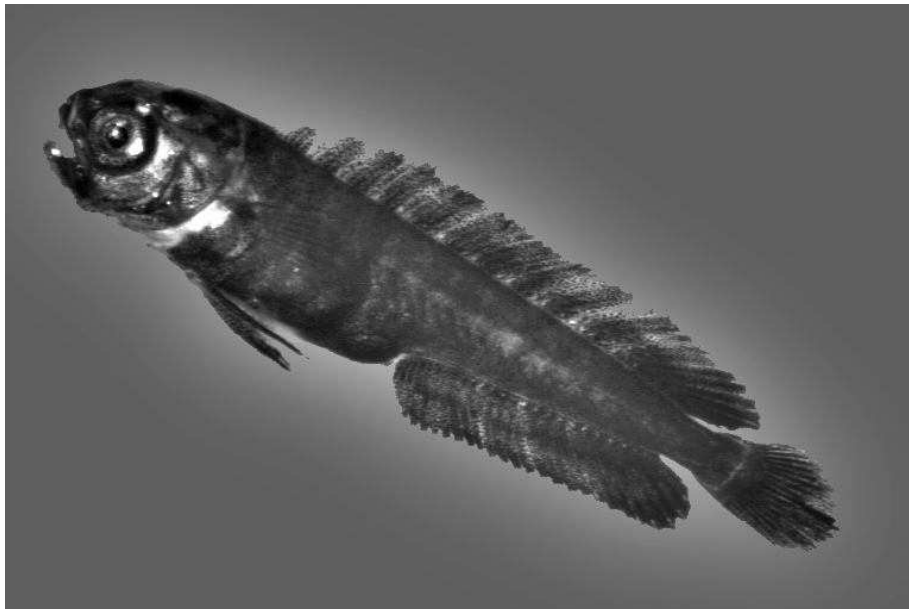


Image 1. Dolphinfish juvenile standard length (19mm).

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