

# Feeding habits of the Thin-lipped Grey Mullet, *Liza ramada*, in Gökova Bay in the southern Aegean Sea

(Osteichthyes: Mugilidae)

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**Abstract:** We analysed the stomach contents of 240 Thin-lipped Grey Mullet, *Liza ramada*, in Gökova Bay in the southern Aegean Sea, to study their feeding habits. The diet comprised species belonging to 32 genera, with 25 of them belonging to plants and 7 to animals. The diet consisted of 97.41% of Bacillariophyta, 0.24% of Chlorophyta, 0.16% of Cyanophyta and 2.17% animal organisms.

**Key words.** *Liza ramada*, mullet, stomach contents, Gökova Bay, Turkey.

## Introduction

The Thin-lipped Mullet, *Liza ramada* (Risso, 1826), is a pelagic species inhabiting various habitats, such as shallow brackish and marine waters close to lagoons, estuaries and river deltas, and surviving in extreme salinity conditions as well as abrupt changes of water quality (THOMSON 1990). It is a catadromous species that spends most of its life cycle in estuarine environments (MCDOWALL 1988). The success of this species in estuarine ecosystems may result from its feeding plasticity (COSTA et al. 1993). It feeds mainly on the extensive surface of the mud flats ingesting a mixture of benthic micro-algae, organic detritus and inorganic particles. Feeding intensity is apparently related to the tidal cycle, attaining a maximum during high tide and a minimum at low tide (ALMEIDA et al. 1992, 1993).

This study has been made in order to determine the food and feeding habits of the species and to understand the success of the *Liza ramada* populations in aquatic ecosystems of the Aegean Sea.

## Material and methods

The feeding habits have been determined by the investigation of the stomach contents of 240 *Liza ramada* specimens, which were collected with local gear and nets from Gökova Bay in the South Aegean Sea between June 2007 and May 2008. Gökova Bay is located between Bodrum and Marmaris and has been declared a “Natural Protection Area” with high biological potential and tourism importance. Gökova Bay is the clearest and the richest in fish species in the Aegean Sea because of its geological structure, nutrients and karstic fresh water input. A rich mineral input from the sea bottom increases the biological productivity (KOCATAŞ & BILECIK 1992, CIHANGIR et al. 1998, 2000).

The obtained samples were immediately washed with fresh water; after identifications, they were stored in 70% alcohol or 4% formaldehyde solution and were brought to the laboratory. Stomach contents were examined under a binocular microscope. The fish caught were weighed