The First Record of Lithodesmium undulatum Ehrenb. (Bacillariophyta, Mediophyceae) in the Estuaries of the Northern Black Sea Area (Ukraine)*

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ABSTRACT: Data on the findings of the invasive species of Lithodesmium undulatum in the estuaries of the Northern Black Sea area (Tuzla group of lakes, Odessa region) are given. The species has not previously been found in the phytoplankton of the Black Sea. It is assumed that it fell into the Tuzla estuaries with the ballast waters from ships. In the specified area, it was first observed in June 2015. Data on the abundance and biomass of L. undulatum and its distribution in the waters of one of the lakes of Tuzla group — Lake Alibey were reported. The emergence of invasive phytoplankton species threatens the existence of aquatic organisms as a result of the development of potentially dangerous allochtonous microalgae.

KEY WORDS: first occurrences, Lithodesmium undulatum, Bacillariophyta, Northern Black Sea area

INTRODUCTION

Invasive species Lithodesmium undulatum has quite a wide distribution range over the world ocean, however, it was not previously mentioned as part of the Black Sea phytoplankton. The species was detected just once in ballast waters carried onboard a merchant ship in the southeast part of the Black Sea (October 2009) with no further signs of it within the port area (Yasakova, 2010). The ingress of such species increases phytoplankton biodiversity and is a hazard to hydrobionts that arises from the development of potentially harmful (toxic) allochtonous microalgae. The Tuzla group of estuaries (lakes Alibey, Burnas, and others) is situated in the inter – rivers of the Danube and Dniester with busy sea routes that run nearby. The estuaries (lakes) are periodically open water bodies

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