THE FIRST RECORD OF *CHELONIBIA TESTUDINARIA* (LINNAEUS, 1758) (CIRRIPIEDIA, CHELONIBIIDAE) ON THE TURKISH AEGEAN COAST

BY

ALPER DOĞAN¹), KEREM BAKIR and TUNCER KATAĞAN

Department of Hydrobiology, Fisheries Faculty, Ege University, TR-35100 Bornova-Izmir, Turkey

INTRODUCTION

The barnacle genus *Chelonibia* is known to be represented by four living species today (Hayashi, 2013). These all have a wide distribution in the world’s oceans and three of them have been reported from the Mediterranean Sea up to date (Hayashi, 2013). Among these, *Chelonibia testudinaria* (Linnaeus, 1758), which was already reported from many tropical and subtropical parts of oceans and seas (Hayashi, 2013) is known from the entire Mediterranean. It has often been found as an epibiont on marine turtles (Newman & Ross, 1976) and rarely also on inanimate objects (Relini, 1980; Kitsos et al., 2003).

One of the other two species, *Chelonibia patula* (Ranzani, 1818), which is a cosmopolitan species (Darwin, 1854; Newman & Ross, 1976; Relini, 1980; Frazier & Margaritoulis, 1990; Kitsos et al., 2003), is usually reported from crustaceans and gastropods (Darwin, 1854). It was also reported from the surface of inanimate objects by Relini (1980) and Frazier & Margaritoulis (1990), and as an ongrowth on marine turtles by Ross & Jackson (1972). The last species, *Chelonibia caretta* (Spengler, 1790) is generally found on *Caretta caretta* (Linnaeus, 1758) and shows a distribution comprising the Atlantic, Pacific, and Indian oceans, as well as the Mediterranean Sea (Monroe & Limpus, 1979; Caine, 1986; Hayashi, 2013).

On the other hand, Cheang et al. (2013) mentioned that based on both morphological and molecular evidence, *C. testudinaria* and *C. patula* from SE Asia and Taiwan are the same species and belong to the western Pacific population of *C. testudinaria* as identified by Rawson et al. (2003). Moreover, according to Zardus et al. (2014) *C. testudinaria, C. patula*, and also *C. manati* Gruvel, 1903, are genetically indistinguishable species.

¹) Corresponding author; e-mail: alper.dogan@ege.edu.tr

© Koninklijke Brill NV, Leiden, 2015 DOI 10.1163/15685403-00003477
CHELONIBIA IN TURKISH WATERS

The occurrence of *Chelonibia* species in Turkish seas is not well known, and until now restricted to only the Levantine coast of Turkey. Monod (1931) reported *C. testudinaria*, as the first member of the genus for the Turkish fauna, from the shell of *Caretta caretta* (as *Thalassochelys caretta*) from Iskenderun Bay on 17 March 1930. Another record of *C. testudinaria* was given by Geldiay et al. (1982), who determined the barnacles on the carapace of turtles in Dalyanköy, which is located in the most western part of the Turkish Levantine Sea. *C. patula* is reported from the carapace of the blue crab *Callinectes sapidus* Rathbun, 1896, and the swimming crab *Portunus segnis* (Forskål, 1775) from Iskenderun Bay (Bakır et al., 2010; Özcan, 2012). Beşir & Çınar (2012) reported *C. patula* attached to the shell of the bivalve mollusc *Spondylus gaederopus* Linnaeus, 1758 from the Gulf of Antalya.

MATERIAL, RESULTS, REMARKS

The present study presents the first record of the occurrence of *Chelonibia testudinaria* on the Aegean coast of Turkey. Eight specimens of *C. testudinaria* (fig. 1) were obtained from the shell of a dead loggerhead turtle, *Caretta caretta*, which was found in the tidal zone of Kum Denizi Beach in Urla, Izmir Bay (fig. 2) on 6 November 2014. The coordinates of the location where the turtle was encountered are 38°21′22″N 26°47′46″E. The specimens were deposited at the Museum of the Faculty of Fisheries, Ege University (EFSM), Ege, and the Collection No. is ESFM-MAX/2014-3. Among the eight specimens identified, the maximum and minimum basal rostro-carinal diameters are 50.7 and 9.9 mm, while the maximum and minimum shell heights are 14.8 and 3.3 mm, respectively.

In a study performed by Karaa et al. (2012) in the Gulf of Gabès, the numbers of *C. testudinaria* specimens discovered on the shells of 526 individuals of *Caretta caretta*, were found to range from 2 to 110. Kitsos et al. (2003) recorded 155 individuals of *C. testudinaria* from the shells of *Caretta caretta* in the northern Aegean Sea and mentioned that the maximum basal rostro-carinal diameter among the 155 specimens determined was 56.6 mm.

In conclusion, *Chelonibia testudinaria* can now be reported with certainty also from the Turkish coast of the Aegean Sea, and the data found are in accordance with earlier records of *C. testudinaria* in the adjacent regions of the Mediterranean Sea.