GRATELOUPIA MINIMA (*RHODOPHYTA, GIGARTINALES*) IN THE THAU LAGOON AND IN THE MAR PICCOLO OF TARANTO: FIRST REPORT FOR THE MEDITERRANEAN SEA

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In May 1998 and March 2010, a species of *Grateloupia*, possessing terete to compressed axes with substantial morphological plasticity in branching patterns of axes and lateral branchlets, was discovered for the first time in the Thau Lagoon (France) and in the Mar Piccolo of Taranto (Italy), respectively. Morphological studies and *rbc*L sequence analyses indicated that this alga is *Grateloupia minima* P. Crouan *et* H. Crouan, a recently reinstated NE Atlantic species (De Clerck *et al.*, 2005), never reported before for the Mediterranean Sea. In the Thau Lagoon, *G. minima* was common, but not invasive. Thalli grew from 0 to -1 m depth, attached to hard substrata: bedrock outcrops, loose stones and oyster shells. Since 1998, the species seems to be perfectly acclimatized in the lagoon although only tetrasporophytes were observed in May-June. In the Mar Piccolo, *G. minima* generally grew on plastic nets commonly used for mussel packaging, at a depth not higher than –50 cm. Tetrasporophyte and female gametophytic thalli were found in April.

The Thau Lagoon and the Mar Piccolo of Taranto, with the Lagoon of Venice, are the major hot spots for the introduction of alien seaweeds in the Mediterranean transitional water systems (Verlaque *et al.*, 2005; Cecere & Petrocelli 2009; Sfriso *et al.*, 2009). The importation of shellfish for both aquaculture and sale purposes is the main vector of introduction (Mineur *et al*., 2007; Verlaque *et al.*, 2007). Consequently *G. minima* was probably recently introduced from the NE Atlantic via the shellfish transfer. However since this species was considered for a long time a synonym of *G. filicina* (J.V. Lamouroux) C. Agardh, a thorough screening of samples of this last would be advisable in order to confirm this hypothesis and to ascertain the real Mediterranean distribution of *G. minima*.

Acknowledgements. Study carried out within VECTOR Project.

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