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*Asparagopsis armata* Harvey, 1855 - Sliema (Malta)



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Cover. *Asparagopsis armata*, Malta, Sliema, 7 m depth, 30.VIII.2011. 1) *Siganus luridus*, Gozo, Xlendi, 6 m depth, 30/07/2011. 2) *Melibe viridis*, Comino, Stanley, 12 m depth, IX.2011. 3) *Rhopilema nomadica*, Malta, Sikka l-Bajda, 4 m depth, XI.2004.

**ALIEN SPECIES IN THE MEDITERRANEAN SEA.** Allochthonous or alien species are those organisms introduced outside their natural distribution, present or past, across a direct action (intentional or unintentional) by man. The Mediterranean Sea is particularly susceptible to alien species invasion. In addition to the Strait of Gibraltar which is a well-known access route to the Mediterranean, the opening of the Suez Canal in 1869 has fostered, over the years, the introduction of tropical or subtropical species from the Red Sea, a phenomenon which was named, by the engineer F. M. De Lesseps who designed the canal, lessepsian migration. Other principal vectors of the alien species introduction are the mariculture, shipping and or the increase in average water temperature occurred in recent years. Alien species, often invasive species, have out-competed or replaced native species, and are considered pests or cause nuisance.

The Mediterranean sea is a veritable hotspot for such introductions in view of its geographical position and vessel traffic which traverses it. In recent decades, more than 950 new alien species have been encountered in the coastal environments of the eastern Mediterranean Sea.

The influx of marine allochthonous species within the Mediterranean is inexorable indeed, with some benthic invasive alien species (IAS), including the green alga *Caulerpa racemosa* (Forsskål) J. Agardh, 1873 (Caulerpaceae) and the red alga *Asparagopsis armata* Harvey, 1855 (Bonnemaisoniaceae) now having colonised large swathes of the basin. Even the fish, with a number of pelagic species, most notably *Fistularia commersonii* Rüppell, 1838, bluespotted cornetfish (Fistulariidae), *Sphyrna viridensis* Cuvier, 1829, the yellowmouth barracuda (Sphyrnidae) and *Siganus luridus* Rüppell, 1829, dusky spinefoot (Siganidae), are regularly caught by fishermen through most of the Mediterranean. Other invasive species are the nudibranch *Melibe viridis* (Kelaart, 1858) (Tethydidae), the marine gastropod mollusk *Bursatella leachii* (Blainville, 1817), the ragged sea hare or shaggy sea hare (Aplysiidae), the crab *Percnon gibbesi* (H. Milne Edwards, 1853) (Paguridae), and the scyphozoan jellyfish *Rhopilema nomadica* Galil, 1990 (Rhizostomatidae), a real trouble for fishermen, bathers and power station operators in the eastern part of the Mediterranean sea.

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