

## The occurrence of *Carupa tenuipes* Dana, 1851 (Crustacea: Brachyura: Portunidae) from Rhodos Island (SE Aegean Sea, Greece)

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### Abstract

A specimen of *Carupa tenuipes* Dana, 1851 (Crustacea: Brachyura: Portunidae) from the eastern coastline of Rhodos Island is reported from under stones of a rocky substrate with low vegetation coverage at 0.5 m. *Carupa tenuipes* is considered to be a well established alien decapod species in the Eastern Mediterranean.

**Key words:** alien crustaceans, Decapoda, Brachyura, Portunidae, *Carupa tenuipes*, habitat, range extension, SE Aegean Sea

*Carupa tenuipes* Dana, 1851 (Crustacea: Brachyura: Portunidae) is widely distributed across the Indo-Pacific, from the Red Sea, East Africa and Madagascar to Japan, Australia, French Polynesia, and Hawaii (Apel and Spiridonov 1998). Galil (2004) reported the first occurrence of this portunid species in the Mediterranean Sea, from near Tel Aviv. Since then, the presence of *Carupa tenuipes* has been recorded from the Turkish coast off Kas Peninsula (Yokes and Galil 2004), and recently from between Iskenderun and Fethiye (Yokes and Galil 2006) and Datça Peninsula, separated by a narrow strait from Rhodos Island (Yokes et al. 2007).

The species is known to inhabit coral reef and coral rubble in the Western Indo-Pacific (Spiridonov and Neumann 2008), where it has been reported as living exclusively on the exposed reef (Vannini and Innocenti 2000), from the intertidal to 80 m depth. In the Mediterranean it has been reported from rocky bottoms (Yokes and Galil 2004) and off a submerged sandstone ridge on biogenic rubble (Galil 2004). Thus, it seems that the species shows a great capability of adaptation to new and different habitats. Its

recent finding under stones during daylight supports the nocturnal habits of the species observed in the Mediterranean (Yokes and Galil 2004).

A single specimen of *Carupa tenuipes* Dana, 1851 was collected on April, 8, 2009, during a survey of the benthic fauna along the South Eastern coasts of Rhodos island (Lardos, south of Lindos: 36°04'07"N 28°00'17"E, Figure 1). The specimen was found under stones at 0.5 m on rocky bottom with a low hydrodynamic regime and vegetation coverage. Dominant algal species were *Cystoseira* spp., *Dictyota dichotoma* (Hudson) Lamouroux 1809, *Taonia atomaria* (Woodward) J. Agardh 1848, *Stypocaulon scoparium* (Linnaeus) Kützing 1843, *Padina pavonica* (Linnaeus) Thivy in W.R. Taylor 1960, *Jania rubens* (Linnaeus) Lamouroux 1816, *Liagora* sp. The zoobenthos was abundant and diverse, including molluscs, echinoderms, polychaetes, etc. Among molluscs the new alien species for Greek waters *Cerithium scabridum* Philippi, 1848 was abundant (Zenetos et al. 2009). It is worth mentioning that the sampling site was located next to a pier used by large ships. The specimen was a male with carapace

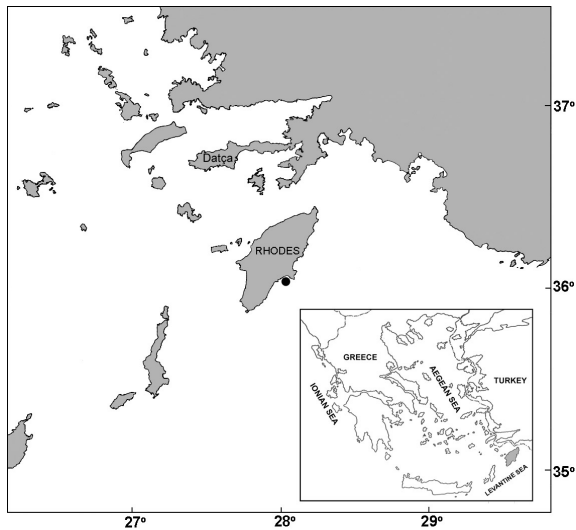


Figure 1. Location of the sampling site

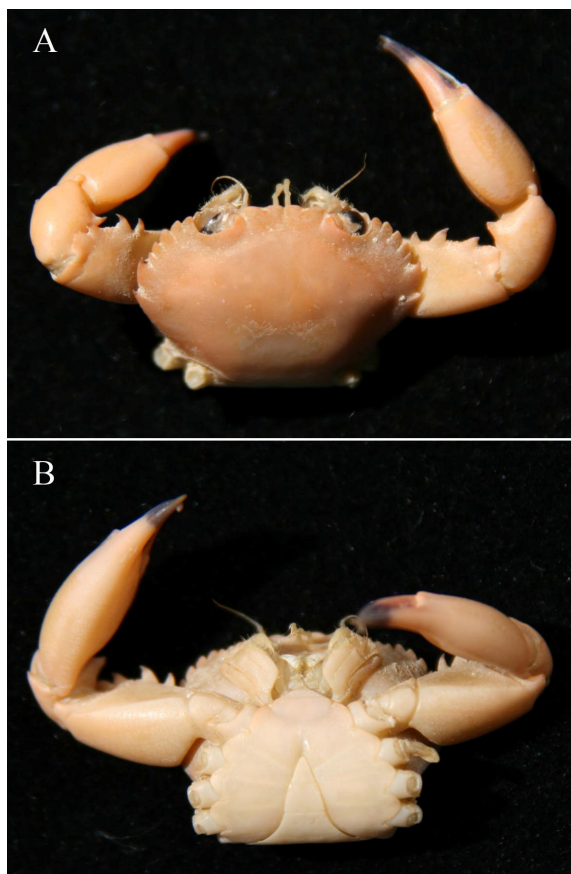


Figure 2. *Carupa tenuipes* from Rhodes Island, dorsal (A) and ventral (B) view. Photograph by D. Papadopoulos

dimensions: CL 12 mm, CW 17 mm (Figure 2). It is deposited in the Hellenic Centre for Marine Research collection, registration number C101.

To date, 13 alien decapod species (including 9 brachyurans) have been identified along the coasts of Rhodes Island (ELNAIS 2009), 11 of which have Indo-Pacific origin and have reached the SE Aegean by traversing the Suez Canal.

This record extends the previous known range of *Carupa tenuipes* by approximately 80 Km southward from Datça Peninsula and 120 Km westward from Fethiye.

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