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Short communication

A new record of *Callinectes sapidus* Rathbun, 1896 (Crustacea: Decapoda: Brachyura) from the Cantabrian Sea, Bay of Biscay, Spain

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Abstract

A single immature female specimen of the blue crab, *Callinectes sapidus* Rathbun, 1896 was collected on 22 September 2004 in a refrigeration pipe of the power station at Port of El Musel, Gijón, Northern Spain. This is the first record of this alien species from northern Spain.

Key words: *Callinectes sapidus*, alien species, blue crab, Biscay Bay, Spain

A single immature female specimen of the estuarine blue crab, *Callinectes sapidus* Rathburn, 1896 (Figure 1) was collected on 22 September 2004 from the grille of the refrigeration pipe in a power plant, Port of El Musel, Gijón (43º34'N and 5º41'W), northern Spain. Carapace measurements include CL = 45mm, CW (distance between longest lateral carapace tooth) = 103 mm. The identification of the crab was based on carapace and chelar morphology as well as on the coloration pattern, according to Tavares (2002), and it is still alive in the aquarium of the Centro Experimentación Pesquera, Gijón. On 2 June 2005 the female moulted and the exuviae is preserved in the collection of the marine centre.

The Spanish specimen was small in comparison with others collected in France (CL 90 mm, Vincent, 1986) and in The Netherlands (CL 90, 140 and 165 mm). Ovigerous females have been collected in the northern coast of France, Belgium and Netherlands (ICES WGITMO 2001, 2004). However, the blue crab specimen reported here was considered to be immature as the size for mature females is between 120-170 mm, as indicated in studies of the Chesapeake Bay (Cadman and Weinstein 1985).

Figure 1. *Callinectes sapidus* immature female from El Musel Port (photo by J. A. Pis Millán)

Callinectes sapidus is euryhaline and eurythermal with a high fecundity, aggressive behaviour and it is a good swimmer (Zibrowius, 2002). Such characteristics make the crab a successful invader. It can live in estuaries and marine embayments. Discharges of freshwater in Gijon Bay, where the port of El Musel is located, are scarce. In fact salinities vary from 34.5 to 36 PSU and water temperatures range from 13ºC to 21ºC. Furthermore, the benthos of the Bay is rich in molluscs, crustaceans and fishes providing optimal feeding conditions for a predator. For these reasons, the environmental conditions are good for the settlement of *C. sapidius*.

This specimen is the first description of the species in the north of Spain. Other citations of this species from the Iberian Peninsula are in the mouth of Tajo River, Lisbon (Gaudencio and Guerra 1979) and the Guadalquivir estuary, SW Spain (WWF/Adena, 2002). The possible impact of this introduced crab on native species is unknown and further research in this field should be undertaken.

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