Abstract: *Stichopus regalis* is a common sea cucumber that is found in a wide depth range in the Mediterranean beyond 50 m depth. Its five longitudinal muscular bands are a culinary delicacy. It is the most expensive seafood product on the Catalan market, and it can reach up to 130 €/kg. Despite its ecological and economical importance, information related to this species is very scarce. The population inhabiting the Mallorca and Menorca continental shelf and slope was studied using data from several different surveys conducted from 2001 to 2009. The spatial distribution of the royal cucumber is strongly aggregated. The population showed a multimodal length-frequency distribution, with individuals ranging from 65 to 295 mm in length. Abundance was highest between 100 and 299 m depth and sizes were largest between 50 and 299 m depth. The length–weight relationship indicates a negative allometry, explained by the fact that the thickness of some parts of the body wall appears to be independent of the size of the individual. Although *S. regalis* has a high price, due to its relatively low abundance it is not a particular target species of the multispecies trawl fisheries, and is captured as a by-catch, with a mean catch per unit effort of 1.78 kg per boat and day. The edible part corresponds to 9.81% of the drained weight of the whole animal.

Keywords: *Stichopus regalis*; Commercial cucumber; NW Mediterranean; Trawl fisheries