{rokbox title=|El alga invasora Caulerpa racemosa var. cylindracea :: Foto: Maite Vázquez Luís| thumb=|images/stories/ieo/imagenespublicaciones/caulerparacemosa_maite_2012_640_thumb.jpg|}images/stories/ieo/imagenespublicaciones/caulerparacemosa_maite_2012_640.jpg{/rokbox}

Maite Vázquez-Luis, Pablo Sanchez-Jerez and Just T. Bayle-Sempere, (2012). **Does the invasion of *Caulerpa racemosa var. cylindracea* affect the feeding habits of amphipods (Crustacea: Amphipoda)?**. Journal of the Marine Biological Association of the United Kingdom, Available on CJO doi:10.1017/S0025315412000288

Abstract: Ecological interactions involving introduced seaweeds constitute an important research gap, since they could alter the trophic dynamics of native populations, but indirect effects on trophic levels are poorly known. The seaweed *Caulerpa racemosa* is one of the most notable invaders in the Mediterranean Sea. It is well known that *C. racemosa* modifies the amphipod community with respect to native habitats, but nothing is known regarding the common use of the same trophic resources. Therefore, the aim of this study was to assess if the feeding habits of amphipods associated with algal habitats are affected by the spread of the invasive *C. racemosa*, through stomach content analysis of amphipods living in both native and invaded seaweed assemblages. A total of 240 specimens of 14 species of amphipods were examined. Ten species were present in both studied habitats (native and invaded), while two were exclusive to native and invaded habitats, respectively. Ten individuals of each species at each habitat were selected and their gut contents were examined. A total of 11 different items was found in the gut contents: detritus; vegetal detritus; algae; animal tissue; Oligochaeta; Polychaeta; Foraminifera; Crustacea; Sipuncula; diatoms; and non-identified items. The expansion of *C. racemosa* into the native algal community changes the feeding habits of herbivorous amphipods, since their preferred food (epiphytic algae) is not available in the new habitat produced by *C. racemosa*. This community change occurs because of the presence of caulerpenyne in *C. racemosa*, which retards the growth of epiphytic algae. Nevertheless, other species are not affected or benefited by the invasion, such as detritivorous species whose main food source and habitat remains available. Altogether, slight changes in the trophodynamism of amphipod assemblages have been detected, which are not seen as relevant in an initial stage. However, they might be

promoting some indirect effects in the energetic budget of populations, which may affect the life history. Further studies on food-web interactions in the ecosystems affected by invasive species are necessary.

Keywords: biodiversity; exotic species; detritus; feeding habits; gut contents; impact; invasive species; trophic dynamics