The crustacean decapod assemblages associated to shallow soft bottoms in the bay of Tunis (Tunisia)

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The decapod (crustaceans) assemblages from shallow soft bottom of the bay of Tunis (La Goulette: 36° 49.1'N - 10° 18.7'E) are characterized throughout an annual cycle (March 2009 to May 2010). Monthly samples at two different depths (3-4 m, 10-15 m, with three replicates each) were taken using a small rock dredge, with each haul covering ca. 112 m\textsuperscript{2}. Granulometry and organic matter content (annual evolution in both depths) have been analyzed.

In total 2944 specimens (3-4m: 1841 ind.; 10-15m: 1103 ind.) belonging to 28 species were captured. Faunal composition (species, abundances) and structure (richness, H', J') of both assemblages are compared within and between depth intervals, throughout the cycle.

The study of the assemblages (aggregation analysis, multidimensional scaling analysis, Simper, Anosim) shows no significant differences between depths, but a seasonal trend has been found. The composition and structure of these assemblages are similar to those of other Mediterranean areas. The analysis of annual fluctuations of the abundances of the three dominant species, \textit{Philocheras monocanthus}, \textit{Diogenes pugilator} and \textit{Paguristes syrtensis}, shows a clear seasonality. In the case of the last two it is related, apparently, to migration between depths that could be conditioned by reproduction and/or a strong human pressure during summer season.