Establishment of a primary cell culture from *Crangon crangon* and their characteristics

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The present study reports a culture technique for hepatopancreatal tissues of brown shrimp (*Crangon crangon*). This commercially important species of shrimp is widely distributed along the European coast from the White Sea to Morocco within the Atlantic and North Sea as well as throughout the Mediterranean and Black Sea. Hepatopancreatal tissues were isolated and digested by a trypsin-EDTA treatment and a mechanical dissection with scissor, resulting in a slowly but continuously proliferating cell culture. The cells were stable in the process of long-term cultivation over six month. Light and electron microscopically studies as well as red oil staining were carried out in order to characterize the cells and the isolated tissue of the brown shrimp. Two types of cells were recognized: dark pigmented cells with highly different shape and colourless spherule cells with vacuoles containing lipid droplets.
These results contribute to the development of invertebrate cell culture and provide an important tool for research of *Crangon crangon* populations regarding to virus infection and other immunologically studies.