2.2.3. Biological *in-situ* studies

In order to give better picture of toxicity level of site of interest also biological material has been gathered and analysed, results of these studies are given in electronic supplementary material.

Biodiversity has been assessed on the basis of qualitative and quantitative analysis of the benthos samples. Due to huge pollution with mazout analyses in most of locations was impossible.

Cytogenetic and pathologic studies

Due to small size of fauna only settled species were collected for research as they can only to small extend change their inhabited location. These were bivalve species as mentioned in Table A. organisms were separated into two groups, one was taken for micronuclei analyses while second one was left for 8 days in the filtered marine water in order to clean organisms and prepare them for cytogenetic studies.

Table A. General characteristics of biological material collected for studies

Species	**Length [mm]**	**Amount**
Macoma balthica	11,66-19,42	90
Mya arenaria	12,33-16,93	9
Mytilus trossulus	25,24-35,38	18
Cerastoderma glaucum	13,07	1

Based on initial analyses of preparations the following chromosomal mutations were proved: monosomy, aneuploidy, trisomy. Histological studies proved numerous cases of both atrophy of selected organs and parasites presence.