

SUMMARY

The fact that many various substances produced by industry, metabolised and excreted by animals and human contaminate environment, became the major problem of present years. These substances have a negative effect on number of animals in different ecosystem levels, but retroactively also on human body. Nowadays, the most important substances are endocrine disruption chemicals (EDC) which have many negative effects. They disrupt the reproduction and regular development of animals and endocrine system of human (cancerogenic effect, lower quality of sperm). That is why it's necessary to test these substances. Testing of lower form of life is necessary for two reasons: Partly due to the regulations and legislative organs, which prefer the testing of invertebrates (so called alternative methods of testing) as well as due to the lowering occurrence of these organisms in nature, which has the implications on the whole ecosystem. My effort was to explain how EDC can interfere to invertebrates life and other lower forms of life, to find their practical use for testing and the specific species for experiments, to classify endocrine active substances and to assess the effect of pharmaceuticals on environment.