

Abstract

The progress of modern society has brought along the issue of environmental contamination with various chemical substances which ensue from all kinds of anthropogenous activity. Among the substances which contaminate the living environment in this way are compounds that influence the endocrine system of an organism by disrupting the physiological function of its endogenous hormones. These compounds are known as endogenous disruptors and alongside certain substances of natural origin they, too, show estrogenic activity. The exogens in question have similar structural features, such as the hormone estrogen, which is why they can interact with the estrogenic receptors. The compounds are dangerous in that they can influence biological functions, despite being at very low concentrations. At present, intensive research employing the latest instrumental methods is carried out with the aim of assessing the impact of these compounds on mankind and its living environment.

The aim of this bachelor's thesis is to summarise the present knowledge of the impact of endocrine disruptors on the living environment, classify them according to their source and outline the methods of analysis as well as the possibility of their decomposition with the help of biodegradation.