

Jakost povrchových a podzemních vod v zemědělsky využívaných oblastech

Quality of groundwater and surface water in areas used for agricultural purposes

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Abstract

This bachelor thesis deals with the quality of groundwater and surface water from areas that are agriculturally used. Acquaints with the sources of contamination from agriculture: manures and industrial fertilizers and pesticides.

Nowadays many substances are used for agricultural production to ensure greater yields of quality crops. With a growing population is used more different types of fertilizer to improve the soil and stimulate plant growth.

Pesticides are substances capable of guaranteeing high quality and sufficient quantity of the harvest. Although there are many negative features, their role in agricultural production is irreplaceable: it protects plants from various pests from the plant and animal kingdom.

In the thesis I deal with the composition, characteristics and applications of these substances. I also summarize the various elements and compounds contained in them, which are the most common environmental pollution: nitrogen and phosphorus compounds, heavy metals and pesticides. Explains the possibility of the spread of these contaminants in the soil and aquatic environments and ongoing reactions. The most common impacts that these pollutants have on the environment, organisms and humans are also described in the thesis. These impacts are based on data from Czech and foreign research. The final chapters are dedicated to the possibilities of water purification from specific pollutants, as well as the general protection of water resources and the legislation of the Czech Republic connected with the issue.