

QUALITY OF SLUDGES AND WASTES FROM HOUSEHOLD AND SMALL WASTEWATER TREATMENT PLANTS AND THEIR UTILIZATION IN AGRICULTURE MANAGEMENT

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The aim of this article is to introduce partial sections of the research projects TA02020128 and TA02021032 (Technology Agency of the Czech Republic). These parts of the projects pay attention to the issue of quality of sludge and other wastes produced in wastewater treatment plants (WWTP) using activated sludge process, anaerobic processes (including septic) and extensive (natural) wastewater treatment plants (with horizontal subsurface flow reed-beds), which also include mechanical pre-treatment. The research work covers monitoring and analysis of sludge in different stage of dewatering and digestion. It also covers monitoring and analysis of other wastes produced by the treatment processes in mechanical pre-treatment facilities, reed-beds (macrophyta vegetation, clogged filtration materials) and stabilization ponds (sediments, macrophyta vegetation) built as a part of natural wastewater treatment plants. There are presented results of analysis from a few WWTP up to approx. 800 p.e. from the period 2006–2014 and results of experimental composting of the mentioned materials.