STUDY OF THE EFFECTIVENESS OF THE SMALL MUNICIPAL SOURCES SEWAGE SLUDGE EXTENSIVE STABILIZATION FOR THEIR USE AS A FERTILIZER

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The article is devoted to the presentation of partial results of a study aimed at determining the potential use of extensive sludge dewatering technology for small municipal WWTPs (up to 1000 PE) in the conditions of the Czech Republic. The study has shown that the use of technology based on extensive sludge dewatering and their stabilization in sludge dewatering reed beds with suitable wetland vegetation can be an alternative to other technologies. Especially in combination with constructed wetland (CW) based WWTPs, which are characterized by lower sludge production. A sufficiently large area of available land for such technology is a key parameter. This is often an example of small municipalities that use CW WWTPs. The described technology of dewatering of sewage sludge can open the way for rational use of sludge on arable land by ensuring the first suitable treatment and standardization of substrates (mixing with selected additives, further processing into pellets, etc.). We assume that the application of organo-mineral fertilizers to the soil will have a highly positive effect not only on the formation of a stable soil structure, but above all almost eliminates the risk associated with leaching N and P into water.