



BIODEGRADIBILITY AND ECOTOXICITY TESTS FOR PAPER SLUDGE

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Abstract

Major papermaking rejects are related to the waste paper recycling process. They come mainly from a mechanical effluent treatment stage and/or from a deinking line. At present landfilling is almost the unique disposal option in Romania for the high organic content WWTP/DIP sludge, despite its good agricultural valorisation potential as compost.

This paper shows the preliminary results obtained in a laboratory biodegradability and ecotoxicity evaluation for two typical lignocellulosic solid wastes, in order to predict their agricultural utilisation possibilities.

All tests (disintegration, respirometric and ecotoxicity tests) at the Stazione Sperimentale Carta from Milan were performed during a Short Term Scientific Mission (STSM) accomplished within the COST Action E26 "Effective solutions to reduce the impact of waste arising from the papermaking process".

The results show that the tested compost does not produce inhibition on the germination and growth of the referent plants.

Keywords: solid waste, compost, biodegradability, landfilling
