



ASPECTS REGARDING RECYCLING SLUDGE BY COMPOSTING

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Abstract

It has been an increased interest in using sewage sludge as agricultural fertilizer and soil improvement material, especially as compost with biomass.

This paper analyses five samples of composts from bio waste and sewage sludge, with various percentage of sludge, using the following parameters: pH, EC, carbohydrates content, enzymes content and C: N ratio.

The results were correlated with FT-IR spectra and germination test in order to assess the stability and maturity of the composts samples.

It was also calculated the composition efficiency of compost samples.

All tests indicate a favorable environment for microorganisms and a good conversion to complex compounds: amino acids, carbohydrates and products of their biodegradation amines, amides, carboxylic acids, aldehydes, ketones, enzymes, proving they can act as bio fertilizers.

Key words: analytic composting, sewage sludge, vegetable waste

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