

## A Software for soil quality conservation at organic waste disposal areas: The case of olive mill and pistachio wastes.

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For the sustainable reuse of organic wastes at agricultural areas, apart from extensive evaluation of waste properties and characteristics, it is of significant importance, in order to protect soil quality, to evaluate land suitability and estimate the correct application doses prior waste landspreading.

In the light of this precondition, a software was developed that integrates GIS maps of land suitability for waste reuse (wastewater and solid waste) and an algorithm for waste doses estimation in relation to soil analysis, and in case of reuse for fertilization with soil analysis, irrigation water quality and plant needs. EU and legislation frameworks of European Member States are also considered for the assessment of waste suitability for landspreading and for the estimation of the correct doses that will not cause adverse effects on soil and also to underground water (e.g. Nitrate Directive).

Two examples of software functionality are presented in this study using data collected during two LIFE projects, i.e. Prosodol for landspreading of olive mill wastes and AgroStrat for pistachio wastes.