



LIFE + Environment Policy and Governance

Project Number: LIFE10 ENV/GR/594

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Project: Best practices for Agricultural Wastes treatment and reuse in the Mediterranean countries.

www.wastereuse.eu

Action 4 – Development of alternative agricultural practices – Lab experiments (Italy)

Deliverable “Evaluation of effects of wastes application on different Italian soil types. Definition of maximum annual load of nutrients and organic constituents”

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Executive summary

Pot trials carried out in the frame of Action 4 of Wastereuse project allowed to achieve the following results that are described in the relevant Deliverables:

- Deliverable *"Characterization of wastes treated by different technologies regarding their suitability for agricultural use and especially for vegetable and ornamentals cultivation under Italian climatic conditions"* describes the characterization of selected wastes to determine their suitability for agricultural use. On the basis of the analysis performed 2 kinds of composts were selected for the subsequent phases of the project.
- Deliverable *"New cultivation methods with the use of treated or untreated AW. Effects on soil quality (Italy)"* describes the effects deriving from the adoption of a growing media composed by the selected composts and selected natural soils - that were characterized according to their main physical and chemical parameters – on the chemical properties of soils and leachates.
- Deliverable *"Guide for open field and greenhouse cultivation of the tested crops (Italy)"* describes the suitability of the selected composts mixed with natural soils and other materials in terms of promotion of plant growth with specific regards to potted plants outlining practical indications for the proper use of compost for the cultivation of potted plants as well as the management of the composting process starting with the selection of raw materials till the correct handling of the compost pile and stocking.

Considering the procedure above mentioned, the present deliverable provides indications about the possibility to use composts for the cultivation of some key crops defining amounts that can be applied in order to assure a correct establishment of the crop (on average: 25-30 t/ha for open field crops, mixture of 20 to 40% (v/v) compost with natural soil or peat for potted plants). From an ecological point of view the use of compost can have an important added valued due to the possibility of being assigned the ECOLABEL brand that is recognized at EU level.