

# WASTEREUSE

Best practices for Agricultural Wastes (AW)  
treatment and reuse in the Mediterranean countries



1st Newsletter  
March 2012

## WASTEREUSE addresses two significant environmental problems

- Uncontrolled disposal of agricultural wastes (olive oil mill wastes, wastes from the wine industry, etc) as well as their uncontrolled use for crops / land fertilization
- The excessive use of nutrients and natural resources (water, phosphoric minerals used for the production of fertilizers, etc) and the possibility to increase recycling of nutrients and water

CEBAS-CSIC  
headquarters  
(Murcia, Spain)



CERSAA/CCIAA  
headquarters  
(Albenga, Italy)



Project duration: 01/09/2011 – 31/08/2015

Website: [www.wastereuse.eu](http://www.wastereuse.eu)

Total budget: 1,384,799 €

EC funding: 679,399 €

Beneficiaries contribution: 705,400 €

## Coordinating Beneficiary

Technical University of Crete (TUC), Greece  
Dpt. Mineral Resources Engineering

[www.mred.tuc.gr](http://www.mred.tuc.gr)

Contact person

Prof Kostas Komnitsas

e-mail: [komni@mred.tuc.gr](mailto:komni@mred.tuc.gr)

[http://www.mred.tuc.gr/p013215\\_UK.htm](http://www.mred.tuc.gr/p013215_UK.htm)

## Associated Beneficiaries

Centro de Edafología y Biología Aplicada del Segura, Consejo Superior de Investigaciones Científicas (CEBAS-CSIC), Spain

[www.cebas.csic.es](http://www.cebas.csic.es)

Contact person

Dr Maria-Teresa Hernández

e-mail: [mthernan@cebas.csic.es](mailto:mthernan@cebas.csic.es)

Regional Center for Agricultural Experimentation and Assistance (CERSAA), Italy, [www.cersaa.it](http://www.cersaa.it)

Contact person

Dr Federico Tinivella

e-mail: [federico.tinivella@alice.it](mailto:federico.tinivella@alice.it)

Chemical Laboratory of the Chamber of Commerce of Savona (Laboratorio Chimico CCIAA), Italy

Contact person

Dr Luca Medini

e-mail: [luca.medini@labsvcamcom.it](mailto:luca.medini@labsvcamcom.it)

Signosis Sprl., Belgium, [www.signosis.eu](http://www.signosis.eu)

Contact person

Mr Dimitris Micharikopoulos,

e-mail: [dimitris@signosis.eu](mailto:dimitris@signosis.eu)



LIFE10 ENV/GR/594

## The WASTEREUSE project objectives

- Evaluation of innovative and traditional technologies for agricultural wastes treatment regarding their suitability for crop cultivation (irrigation and fertilization)
- Development of Alternative Cultivation Practices for the most widely cultivated and water consuming crops (e.g. vegetables, cereals) in Mediterranean by recycling nutrients and water
- Identification and development of Best Management Practices for waste application to main market crops aiming at maximizing yields and minimizing environmental impacts
- Protection of soil quality from the disposal of processed and un-processed AW by developing and using cultivation practices which are suitable for representative Mediterranean soil types, including the degraded and the vulnerable ones
- Reduction of carbon footprint by recycling AW and minimizing the use of fertilizers. Preventing excessive use of natural resources (e.g. soil, water, phosphatic deposits) and uncontrolled waste disposal
- Increase competitiveness of Mediterranean agricultural products and profits via the reduction of external inputs (irrigation water and fertilizers)



## Expected results

- Create an inventory of all available technologies for AW treatment
- Assess the effect of different AW applications on soil properties and plant production using lab and field tests
- Assess the risk as well as the carbon footprint of the proposed methodologies through LCA studies
- Develop a Code of Best Waste Management Practices in Agriculture and provide decision - making tools for the most commonly cultivated crops in the Mediterranean region
- Provide suggestions to improve European legislation
- Develop a network involving research organizations, agricultural associations, SMEs, regional /national authorities and policy makers
- Develop an after Life Communication Plan to maximize dissemination of project results after the end of the project

## Progress so far

- The kick off meeting of the project was held in Albenga, Italy, at the premises of CERSAA on 07/10/2011
- Two deliverables regarding development of an inventory of all available technologies for AW treatment and preliminary techno-economical and environmental evaluation of these technologies, were prepared by TUC
- Various agricultural and non agricultural soils from Spain, Italy and Greece, as well as treated and untreated AW, are being collected and characterized to assess their suitability for crop production and quality improvement; phytotoxicity tests are in progress using different wastes and plants. All these activities are carried out by CEBAS, CCIAA and CERSAA.
- Project leaflets and posters were prepared in English, Greek, Italian, Spanish and French



*CERSAA greenhouse (Albenga, Italy)*