ECOSISTEMI

NEW LIFE

1st Conference

SOIL IMPROVEMENT

TECHNOLOGY FOR DEGRADED SOILS RESTORATION

APPLIED SOIL SCIENCE
FROM THEORY TO PRACTICE

May 19th-20th, 2016
Palazzo Farnese
Piacenza - Italy

In collaboration with :

UNIVERSITÀ CATTOLICA del Sacro Cuore

COMUNE DI PIACENZA

PROVINCIA DI PIACENZA

SOIL IMPROVEMENT

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Mission

In this conference, we are glad to present the results of the **Life+ New Life** project co-financed by the European Commission and discuss the reconstitution efficiency - using also some waste materials - for soil restoration.
The aim is to put together local authorities, private stakeholders and international scientists to discuss the more advanced methodologies and strategies for soil protection and restoration in order to implement common activities for a proper management of our territories.

NEW LIFE

LIFE10 ENV/IT/000400 NEW LIFE
Total budget: 4.025.473 €;
EU Contribution: 1.929.837 €

Under the patronage of:

NATURAL ORGANIC MATTER RESEARCH

Regione Emilia-Romagna

EUROPEAN SOCIETY for SOIL CONSERVATION

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Degraded soils

Soils characterization for the restoration design.

A survey was conducted on soils coverage of a closed landfill located in Piacenza to define the entity of soils degradation and planning restoring treatments. The preliminary investigations in the study area, included physical, chemical and microbiological analyses on soils, together with botanic reliefs.

Additional materials

Research on materials to be used in treatments.

Extensive investigations were carried out nationwide for searching the most suitable materials to be used in the soil restoration process (reconstitution).

Research and experimentation

Improving and restoring soil quality.

All experiments focused on soil fertility restoration, improving the efficiency and efficacy of the reconstitution technology. Every treatment has to be site-specific, but also reproducible in other contexts, in different stress conditions.

Soil Restoration

Let give soil what it needs.

The reconstitution is made up of chemical-mechanical actions. In the first step degraded soil is added with suitable organic and mineral materials. Then the mixture is disintegrated and eventually added with humic and fulvic acids. The disintegrated mixture is reconstituted through a mechanical system and then fragmented again. In this way neoaggregates are created. These neoaggregates make a new soil with better chemical and physical fertility. Each treatment is calibrated according to the soil physical and the additional materials properties.

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May 19th First Day

Session 1 | chairman Prof. Marco Trevisan

8:45	Welcome coffee
9:00 - 9:30	Registration and authorities greetings
9:30 - 10:00	**Dr. Paolo Manfredi** **m.c.m. Ecosistemi srl** *Fundamentals of reconstitution: futures of its implementation, technology and future development.*
10:00 - 10:30	**Prof. Marco Trevisan** **Università Cattolica del Sacro Cuore - Piacenza** *The developments in reconstituted soils research as a tool to retrieve organic matter waste and to store carbon.*
10:30 - 10:50	**Dr. Chiara Cassinari** **Università Cattolica del Sacro Cuore - Piacenza** *Scientific researches on the reconstitution.*
10:50 - 11:30	Coffee break
11:30 - 12:00	**Prof. Francesco Timpano** **Università Cattolica del Sacro Cuore - Piacenza** *Restoration soils in the circular economy era.*
12:00 - 12:40	**Prof. Carmelo Dazzi** **President European Society for Soil Conservation - Università di Palermo** *Pedotechniques: Lights and Shadows.*
12:40 - 13:00	Discussion
13:00 - 14:30	Lunch **Palazzo Farnese**

Session 2 | chairman Dr. Chiara Cassinari

14:30 - 14:50	**Prof. Teodoro Miano** **Past-President International Humic Substance Society - Vice-President Società Italiana di Chimica Agraria - Università di Bari Aldo Moro** *The role of organic matter in processes of soil restoration.*
14:50 - 15:10	**Prof. Fabio Terribile** **Past-President Società Italiana di Pedologia - Università di Napoli Federico II°** *Moving from theory to the geospatial ground truth of contaminated soils: an innovative integrated approach.*
15:10 - 15:30	**Prof. Claudio Marzadori** **Università di Bologna** *Enzymatic indices for assessing the quality of soils restored through the use of biosolids.*
15:30 - 15:50	**Prof. Anna Benedetti** **CREA-Centro di ricerca per lo studio delle relazioni tra pianta e suolo (RPS) di Roma** *Restoration techniques for soil biological fertility.*
15:50 - 16:10	Coffee break
16:10 - 16:30	**Dr. Michele Solmi** **Consorzio Bonifica Renana** *Management of sewers excavation in a Land reclamation Syndicate: problems linked to mud quality.*
16:30 - 16:50	**Prof. Gilmo Vianello** **Università di Bologna** *Natural and assisted pedogenesis for PTE contaminated soils rehabilitation.*
16:50 - 17:10	Discussion
18:30	Closing first day

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May 20th Second Day

Session 1 - Life+ Projects | chairman Dr. Chiara Cassinari

9:00 - 9:30	Welcome coffee
9:30 - 9:50	**Prof. Massimo Fagnano** **Università di Napoli Federico II°** *LIFE+ Ecoremed: degraded soil assesment and reconditioning.*
9:50 - 10:10	**Dr. Grazia Masciandaro** **CNR Istituto per lo Studio degli Ecosistemi (ISE) Pisa** *Dredged sediments as component of agronomic substrates alternatively to the soil resource.*
10:10 - 10:30	**Dr. Edoardo Costantini** **Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria CREA** *Tools for proximal soil sensing and site-specific reclamation.*
10:30 - 10:50	**Dr. Raffaella Mossotti** **CNR - Istituto per lo Studio delle Macromolecole (ISMAC)** *Life+12 ENV/IT000439 GreenWoolF: Green hydrolysis conversion of Wool wastes into organic nitrogen Fertilisers.*
10:50 - 11:10	**Dr. Mario Montanari** **Emilia-Romagna Region** *LIFE+ Climate Change E_R: reduction of greenhouse gas emissions from agricultural sources in Emilia-Romagna region.*
11:10 - 11:40	Discussion
12:00	Departure by bus for lunch and subsequent visits
12:30 - 14:30	Lunch at **Ostreria**

Session 2 - Visits | by Dr. Paolo Manfredi

14:30	m.c.m. Ecosistemi
15:00	The two **LIFE+ NEW LIFE** working sites: the closed landfill in Borgotrebbia and experimental plots in Gossolengo
17:00	Thanks and closing

MUSEI DI PALAZZO FARNESE PIACENZA

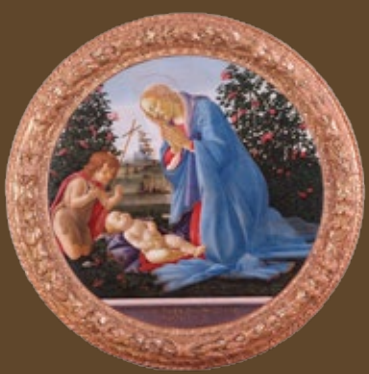
If you want the Museums of **Palazzo Farnese** are open.
timetables - Thursday: 9:00 - 13:00
Friday: 9:00 - 13:00
15:00 - 18:00

PIACENZA musei in rete

Outdoor of Palazzo Farnese

Courtyard of Palazzo Farnese

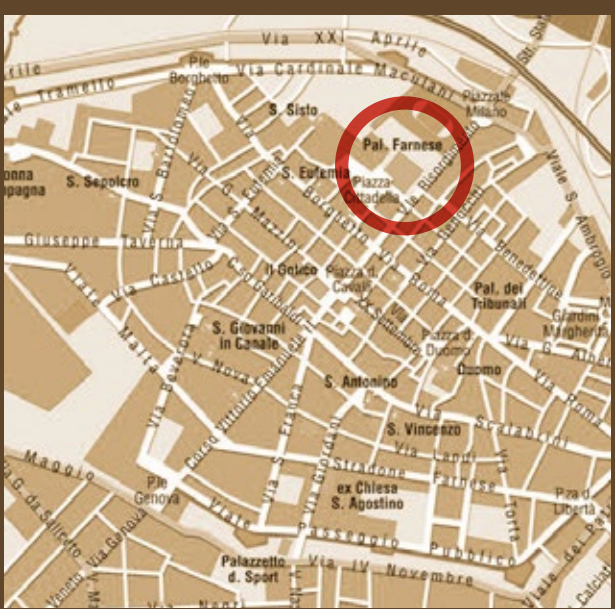
Etrusco liver



Botticelli's tondo

Palazzo Farnese in one of the most important monument in the city of Piacenza. It is situated in Piazza Cittadella and hosts the Civic Museums of the city and the State Archives.

Picture of Alessandro Bersani, Carlo Pagani



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