COST Action TD1107

Biochar as option for sustainable resource management

2012|2016

Objectives

- Harmonization of Biochar production and characterization
- Environmental impact: Evaluation of Biochar benefits versus risks
- Knowledge expansion and handling
- Life cycle analysis

Main Achievements

- 269 individual members(+92) of 28 COST countries plus 3 non-COST countries; 32% female participants; 43% ESRs.
- Biochar Ring Trial: 733 data sets received and currently in evaluation with robust statistical methods
- Knowledge exchange between COST network and REFERTIL Biochar EU27 standardization and law harmonization work platform.
- Establishment of an extended online Biochar database as basis for a meta-analysis of Biochar pot and field trials across Europe (results paper in progress)
- Expansion of the existing Biochar country report
- Report of Biochar EU27 standardization and law harmonization to the Commission September 30, 2013
- 1st Annual newsletter published in July 2013
- Creation of six thematic cross-link groups to identify and reach required levels of scientific understanding of Biochar effects on main soil processes
- 2 European Biochar Summer Schools held in Germany and Switzerland
- Involvement of 40 new stakeholders at 1st European Biochar Stakeholder Meeting (Hungary)
- Creation of an Organization for Scientifically Responsible Biochar (Kick-off meeting in June 2014)

Contact details

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X-ray CT scan images of raw Miscanthus biomass (upper image) and Biochar produced at 600° C (lower image) (© Alessio Cibati)
WG1: Production & Characterization

- What is Biochar and how to make it?
- Char archive (reference set) and sample exchange
- Harmonization in methods, properties and thresholds

WG2: Land Use Management

- How to use it?
- Study site exchange and synergistic field trials
- Distribution of practical reports & recipes

WG3: Economic & Life cycle analyses

- Is it economic and efficient?
- Feedstock and Technology
- Model scenarios
- Implementation of SMEs
- Waste management

WG4: Environmental impact

- How does it work?
- Is it save?
- How to legalize and communicate?
- Biochar database
- Meta analysis
- Synthesis reports, review papers