Recycling treated organic waste as compost and bio-char products for reducing mineral fertilisers and chemicals use in agriculture

**REFERTIL**
Conversion of science - into - knowledge based economical industrial practice for SME farmers
Edward Someus  http://www.refertil.info

What is biochar: plant or food grade animal bone based carboniferous product with well defined, controlled and safe quality.

**Plant based biochar**: high C content soil improver.

**Food grade animal bone biochar**: full value organic P fertilizer.

**Benefits**: improving soil physical and/or chemical and/or biological properties/soil activity, water/nutrient retention, organic P fertilizer, providing new SME economy, supporting conservation agriculture.

Biochar is for low carbon bioeconomy
Biochar for high efficient bio-waste resource utilization

3R pyrolysis processing field demo plant since 2004: proven demonstrated in 10 years

Commercial production tests

The advanced REFERTIL results are achievements of the integrated EU top science and technology cooperation.

Efficiency tests

ABC Animal Bone bioChar

ABC AGROCARBON

The final product SAFE FOOD for affordable cost

Drought tolerance tests

Targeted users: SME FARMERS, horticulture, tobacco and + added value crops
REFERTIL main results

1. Bridge over and interconnection of biochar applied science and economical industrial practice for the interest and benefits of the SME farmers.

2. Improvement and validation of biochar production and BAT treatment process towards high quality standardized biochar production.

3. Biochar product validation tests in different climatic, soil and dose conditions in Europe.

4. Scale up field demo into zero emission full industrial replication model with 10,000 t/y output ABC Animal Bone bioChar at Hungarian site. Targeted turn over > € 20 M/y. Low CAPEX, low OPEX, ROI <3 years, strong output product uptake market in IT, FR, ES, DE, JP, AU and US.

5. EU FERTILIZER REGULATION revision policy support development for setting up common quality biochar standard requirements, limit values and EU/MS law harmonization.

6. Target next: be global and strategic player for ABC before 2020.