

BIOCHAR AS SOIL AMENDMENT



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 635750



Ministry of Science and Technology Grant no. 2016YFE011270
Chinese Academy of Sciences Grant no. 16146KYSB20150001



Swiss State Secretariat for Education, Research and Innovation Contract: 15.0170-1

Project - www.isqaper-project.eu

Information - www.isqaper-is.eu

Content of this info-graphic was prepared by Ana SCHWARZMANN and Tomaž ŽIŽEK,
Biotechnical Faculty of University of Ljubljana, Slovenia

1



RAW MATERIALS

- wood biomass (sawdust)
- plant residues (straw, grass)
- manure

2



PRODUCTION

Biochar is obtained by pyrolysis, which is carried out at temperatures between 250 and 700 °C and in oxygen deficiency.

3



THE PRODUCT

Biochar is grounded before soil application.

4



SOIL APPLICATION

- while sowing
- mixed with slurry or manure

5



BENEFICIAL EFFECTS

- improved physical properties of the soil (increased porosity, aeration and water retention capacity);
- improved chemical properties of the soil (pH and cation exchange capacity optimization, increased sorption of nutrients);
- the leaching of nutrients (nitrate, ammonium) is reduced;
- biochar provides a good habitat for organisms in the soil;
- warmer soils due to changes in surface albedo and good insulating properties of biochar