

# MultiHemp

## **Multipurpose hemp for industrial bioproducts and biomass**

Stefano Amaducci

Università Cattolica del Sacro Cuore



## **Multipurpose hemp for industrial bioproducts and biomass**

Start: September 2012

End: February 2017

Duration: 54 months

Total cost: 8 M€

EC Contribution: 6 M€

22 Partners (13 SME) from 11 EU countries + China

**Keywords:** Hemp; Biorefinery; Fibres; Non-food oils; Molecular plant breeding; Cultivation; Modelling; Process innovation; LCA; Economic evaluation

## **Overall objective**

Advance the scientific and technical research needed to consolidate and expand the market of hemp renewable materials

## **Specific objectives**

- Understand the physiological and genetic basis of relevant hemp traits;
- Parameterisation and validation of a sophisticated crop model;
- Development of a high-throughput quality evaluation system;
- Genotypes with enhanced traits for diverse environments and use;
- Characterization of hemp varieties that are commercially available;
- Advances in agronomic practices;
- Design of a modular biorefinery, in which markets dictate the flow of raw material;
- Integrated sustainability assessment with LCA & techno-economic evaluation
- Targeted dissemination and exploitation activities.

## Specific objectives

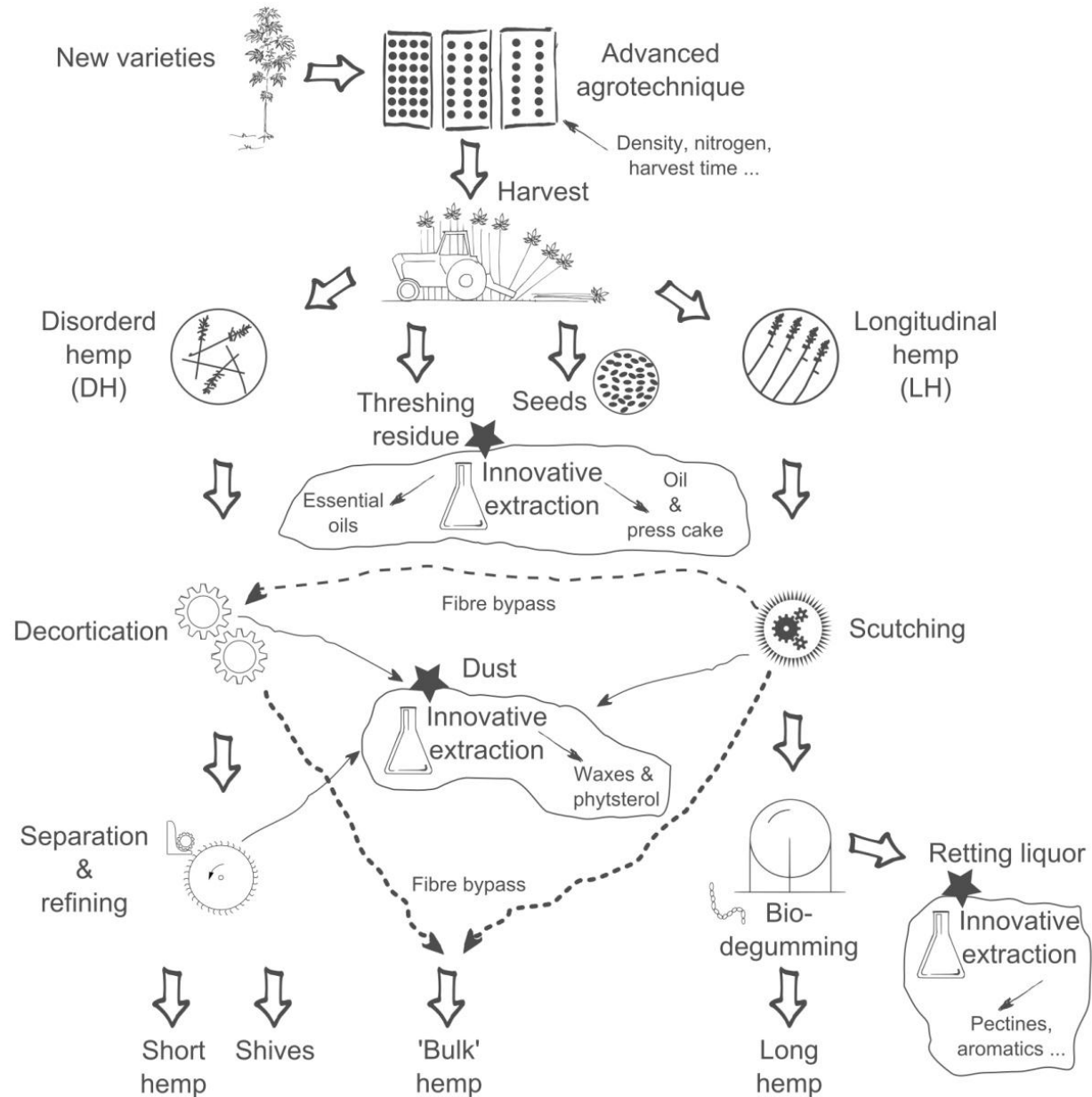
- Develop target end use applications:
  - Flock insulation system
  - Fiber boards - hemp wall concept
  - Fiber reinforced composites
  - Cosmetic applications
  - Propose potential application for by-products



TADEJ ZIMIC S.P.



## Scheme of the MULTIHEMP Biorefinery concept





# MultiHemp

Please follow the up dates on:  
**www.multihemp.eu**

The screenshot shows a Firefox browser window displaying the MultiHemp website. The browser's address bar shows the URL [www.multihemp.eu/project/](http://www.multihemp.eu/project/). The website header features the MultiHemp logo on the left, the Seventh Framework Programme logo in the center, and the European Union flag on the right. Below the header is a navigation menu with the following items: Home, **Project Overview**, Research, Partners, Partner's Area, and Contact us. The main content area is dominated by a large photograph of a lush green hemp field. At the bottom of the page, there are two columns of text. The left column is titled "Project Overview" and contains the text: "Hemp is a sustainable high yielding crop well adapted to most European conditions, with". The right column is titled "Project data" and contains the text: "FP7-Project number 311849".