BioBoost
Accelerating biobased horticulture

New products from sugar beet pulp

Crop	Sugar Beet *Beta vulgaris subsp. vulgaris cultivar Altissima*
Croppart	Roots / Tubers
Application area	Materials Fine chemicals
Status	Research stage
Relevant plant compounds	fibres pigments Cellolose Sugars Aromats organic acids

Description

By using multiple extraction techniques, PULP2VALUE will extend the high value products extracted from sugar beet sidestreams, isolating microcellulose fibres (MCF), arabinose (Ara) and galacturonic acid (GalA).

The project will demonstrate an integrated and cost-effective cascading bio-refinery system to refine sugar beet pulp and identify applications for approximately 65% of its mass in high value markets, increasing its current value by as much as 20-50 times.

Pros and cons

- ⊕ Upgrading the value of a very important residual stream in Europe
- ⊕ create awareness about the opportunities of bio-based materials

- ⊖ New product on a very competing market
- ⊖ Challenges in upscaling the product

Used conversion methods

Mechanical-Physical processes

Extraction

Fiber separation

Chemical processes

Oxidation

Resources

https://www.bbi-europe.eu/projects/pulp2value Initiative website