

Fine chemicals from beet pulp and molasses



Crop

Sugar Beet

Beta vulgaris subsp. vulgaris cultivar Altissima

Croppart

Roots / Tubers

Application area

Fine chemicals

Status

Research stage

Relevant plant compounds

Sugars

Cellulose

fibres

Description

The AFTERBIOCHEM project wants to develop a chemical platform for transforming sidestreams from the sugar industry – mainly beet pulp and molasses as well as non-food biomass – into bio-molecules and derivatives of industrial interest. This will increase the economic and environmental sustainability of the sugar beet industry at a time when it faces severe competitive pressures. Although the project will initially target sugar beet processing plants, the platform will be sufficiently flexible to be able to adapt to alternative feedstocks.

Pros and cons

-  Upgrading the value of a very important residual stream in Europe
 -  Creating sustainable chemicals
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Used conversion methods

Mechanical-Physical processes

Fiber separation
Extraction

Biochemical processes

Aerobic/ Anaerobic fermentation

Resources

<https://bbi-europe.eu/projects/afterbiochem> Initiative website