

Lignocellulosic biomass

Combined auto-hydrolysis and enzymatic hydrolysis process for malt bagasse pretreatment



Photo: Andrey Orekhov/iStock



Embrapa
Agroenergy

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Raw material

Process

End Product

Malt bagasse

Auto-hydrolysis and enzymatic hydrolysis

Glucose

Combined hydrothermal process of auto-hydrolysis and enzymatic hydrolysis as pretreatment for release of glucose from malt bagasse. The auto-hydrolysis pretreatment removes the hemicellulose and chemically modifies the lignin, facilitating the access of enzymes to the cellulose, which will be converted into glucose.

Applications

- + Companies in the processing sector - agro-industry.
- + Food industry.

Advantages

- + Does not require the addition of reagents, besides water as solvent, for the deconstruction of biomass.
- + Possibility of using residues from the brewing industry.

Stage ► TRL/MRL 3 - Lab scale

Take this technology to another stage



Research with us for other potential uses



Make this technology the basis of your incubated company

Person in charge: **ROSSANO GAMBETTA**

TC229