



FACTSHEET 4

# **FERMENTABLE SUGARS**

# WHAT ARE FERMENTABLE SUGARS FROM MUSHROOMS?

Sugars that are present in the mushrooms and after extraction can be used as carbon source in bioprocesses to promote biomass build-up and production of products of interest such as biopolymers.



## **PROPERTIES**

- Obtainable by simple processes like cold water extraction;
- Alternative to first generation sugars as well as to lignocellulosic sugars in fermentation processes;
- Raw materials for the production of PHA in synergy and not competition with the food agroindustry

## **APPLICATIONS**

- Mushroom waste feedstock is rich in mannitol, a sugar alcohol which could be exploited as co-carbon source in fermentation processes to produce polyhydroxyalkanoates (PHA) and other biobased building blocks;
- Precursors of bioplastic formulations with application as biodegradable soil mulch films, compostable carrier bags, protective films in mushroom growing

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