BIO RESCUE

BIOrescue:
A novel biorefinery concept for mushroom compost

www.biorescue.eu

Deliverable 2.3

Nutrient composition of the aqueous extraction of Spent Mushroom Substrate

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PUBLISHABLE SUMMARY

The BIOrescue project aims to develop and demonstrate a new innovative biorefinery concept based on the cascading use of spent mushroom substrate (SMS) supplemented by wheat straw (and other seasonal underutilised feedstocks). Within this biorefinery concept, there is an overriding two-stage process (separation and fractionation) which aims to fractionate SMS into different components that can be subsequently transformed and/or upgraded into valuable bio-based products. This fractionation process, described in reports D3.1 (Report on extraction results of SMS) and D3.2 (Report on analysis of bioactive enzymes and extractive free solids), generates an aqueous fraction comprised of soluble compounds within the SMS.

This document reports on the study of the nutrient composition of the aqueous extraction of SMS, including the comparison to a commercial liquid fertiliser product and suitability to use in commercial mushroom production.

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