

Food Biotechnology Group (FOODBIOTECH)



Extraction of the bioactive compounds from mushrooms

Hot water extract

Partially purified hot water extract

Purified hot water extract

Hot alkali extract

Methanol extract

Determination of the antioxidant properties of the mushroom extracts

scavenging capability for DPPH radicals, inhibition of lipid peroxidation, ferric reducing antioxidant power assay, chelating ability on ferrous ions, SOD (superoxid dismutase), cupric-ion reducing antioxidant capacity (CUPRAC), ACE (angiotensin I-converting enzyme) inhibitory activity assay, scavenging effect on hydroxyl radical, ESR measurements

Cytotoxicity of the mushroom extracts

MTT assay

Qualitative and quantitative analysis of the protein fractions by electrophoretic techniques

Analysis of the polysaccharide components of the mushroom extracts

determination of total polysaccharides

measurement of glucan content (total, α , β)

Determination of the antimicrobial properties of the mushroom extracts

disk diffusion method,
agar dilution method,
MIC using broth
microdilution method,
kinetics of inactivation
using the broth
macrodilution method

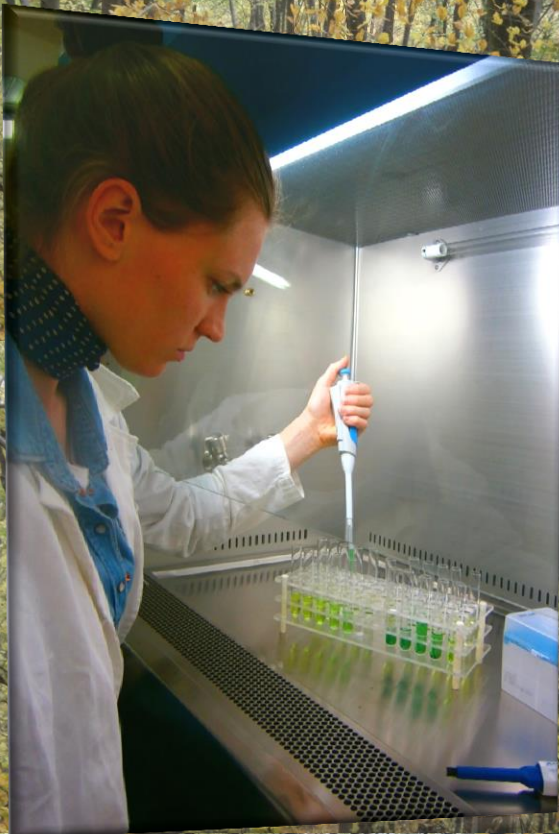
Enzymatic modification of the mushroom extracts

Analysis of the monosaccharide components of the mushroom extracts

Determination and analysis of total phenols of the mushroom extracts

Determination of total proteins

Scanning electron microscopy (SEM) analysis



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