Medicinal mushroom products

Assurance of identity and content

Background

***Inonotus obliquus* (chaga mushroom), *Cordyceps sinensis* (caterpillar fungus), *Hericium erinaceus* (lion's mane mushroom), shiitake mushroom *(Lentinula edodes)* etc. — medicinal mushrooms and extracts are enjoying ever-growing popularity as ingredients in food supplements and, to an increasing extent, in cosmetics. Modern research is unearthing more and more facts about the effects and chemotaxonomy of their constituents, opening up potential for a differentiation in the quality of raw materials and extracts.**

Assurance of identity

As demand increases, there is a growing risk of adulteration and poor quality in the market for mushroom raw materials and extracts. Identification testing is therefore essential to ensure the quality and safety of medicinal mushroom products. Our expert pharmacognosists verify the identity of your samples and extracts reliably on the basis of pharmacopoeia monographs (e.g., Ph.Eur., USP, ChP) and the most up-to-date specialist literature, by means of macroscopy, microscopy and HPTLC fingerprinting.

Precise determination of markers

Intensive research has recently been carried out into the numerous species-specific secondary substances found in medicinal mushrooms. There is evidence, e.g., that **erinacines** and **hericenones** promote the differentiation of nerve cells and protect them against oxidative stress, for example, and the effects described for **ganoderic acids** include anti-inflammatory and tissue-protective properties, while **cordycepin** has demonstrated anti-hyperlipidemic effects in preclinical trials. PhytoLab offers selective methods for quantitative determination of numerous important marker substances in market-relevant mushrooms and is continuously expanding this service spectrum.

Marker	Mushroom
Cordycepin **(3'-deoxyadenosine)** Adenosine Guanosine Uridine	*Cordyceps sinensis* *Cordyceps militaris* (*C. militaris contains significantly higher amounts of cordycepin*)
Ganoderic acids	*Ganoderma lucidum*
Hericene A Hericene D Hericenone C Hericenone D Hericenone E Erinacine A	*Hericium erinaceus*
Beta-sitosterol Campesterol Cholesterol Ergosterol IInotodiol Lanosterol Lupeol + betulin (from host tree birch)	*Inonotus obliquus* *Cordyceps mycella* *Hericium erinaceus* *Ganoderma lucidum* and other species
β-Glucane	Various species

Contact us to find out more about the possibilities PhytoLab offers you as a competent and reliable partner for the analysis of medicinal mushrooms.

Your contact at PhytoLab:

Analysis:
JÜRGEN ENGERT
phone +49 9163 88-5538
juergen.engert@phytolab.de

Sales:
MARTIN MÜLLER
phone +49 9163 88-5534
martin.mueller@phytolab.de

PhytoLab GmbH & Co. KG / Dutendorfer Str. 5–7 / 91487 Vestenbergsgreuth / GERMANY / Tel.: +49 9163 88-330
Sitz / Registered seat: Vestenbergsgreuth / Amtsgericht / Register court: Fürth HRA 6362
Persönlich haftende Gesellschafterin / General Partner: Phytolab Verwaltungs GmbH / Amtsgericht / Register court: Fürth HRB 5151
Geschäftsführer / Managing Director: Reyk Radojewski, Thorsten Spitznagel, Anne Wedel-Klein