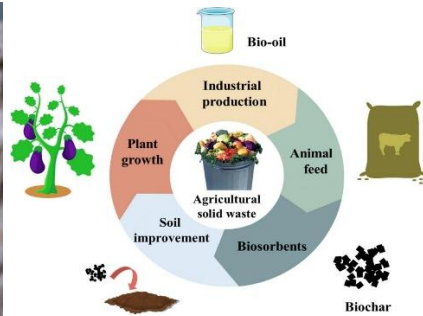


Master's / Bachelor's Thesis in Food Biotechnology (m/f/d)

Location: Campus Laboratory TUM FACIT

Start: Immediately / May 2026



Topic: Investigation of Industrial Side Streams as Substrates for Mushroom Cultivation

The mushroom *Herichium erinaceus* grows on cellulose-rich materials such as deadwood and derives its nutrients from complex organic substrates. Industrial side streams often provide comparable nutrient and structural profiles and can therefore be used in a sustainable and cost-effective way. At the same time, the reuse of spent substrate as fertilizer or as a source of protein contributes to a circular economy approach.

Your Tasks:

- Investigation of industrial side streams as substrates for mushroom cultivation
- Analysis of growth performance, yield, and pesticide contamination
- Development and evaluation of utilization strategies for spent substrate (e.g., residual protein extraction, use as fertilizer, etc.)

Your Profile:

- Interest in mushrooms, circular agriculture, and alternative proteins
- Independent and structured working style
- Initial laboratory experience is an advantage

Study Programs:

Biotechnology, Forestry, Food Technology, Agricultural Sciences, Bioeconomy, etc. (biotech focus)

About Us

We are a young, innovative food/biotechnology startup with our own laboratory located directly on campus. Our focus is on developing sustainable, mushroom-based foods and functional ingredients. We combine modern biotechnology with food innovation and circular production approaches: <https://www.newerafood.de/>

What We Offer:

- Direct application of your research in real product development
- Work at the intersection of biotech, food, and sustainability
- High level of responsibility and creative freedom

Application

We look forward to your application. Please send the following via email to sarah@newerafood.de
Short motivation letter, CV, desired start date & preferred topic