

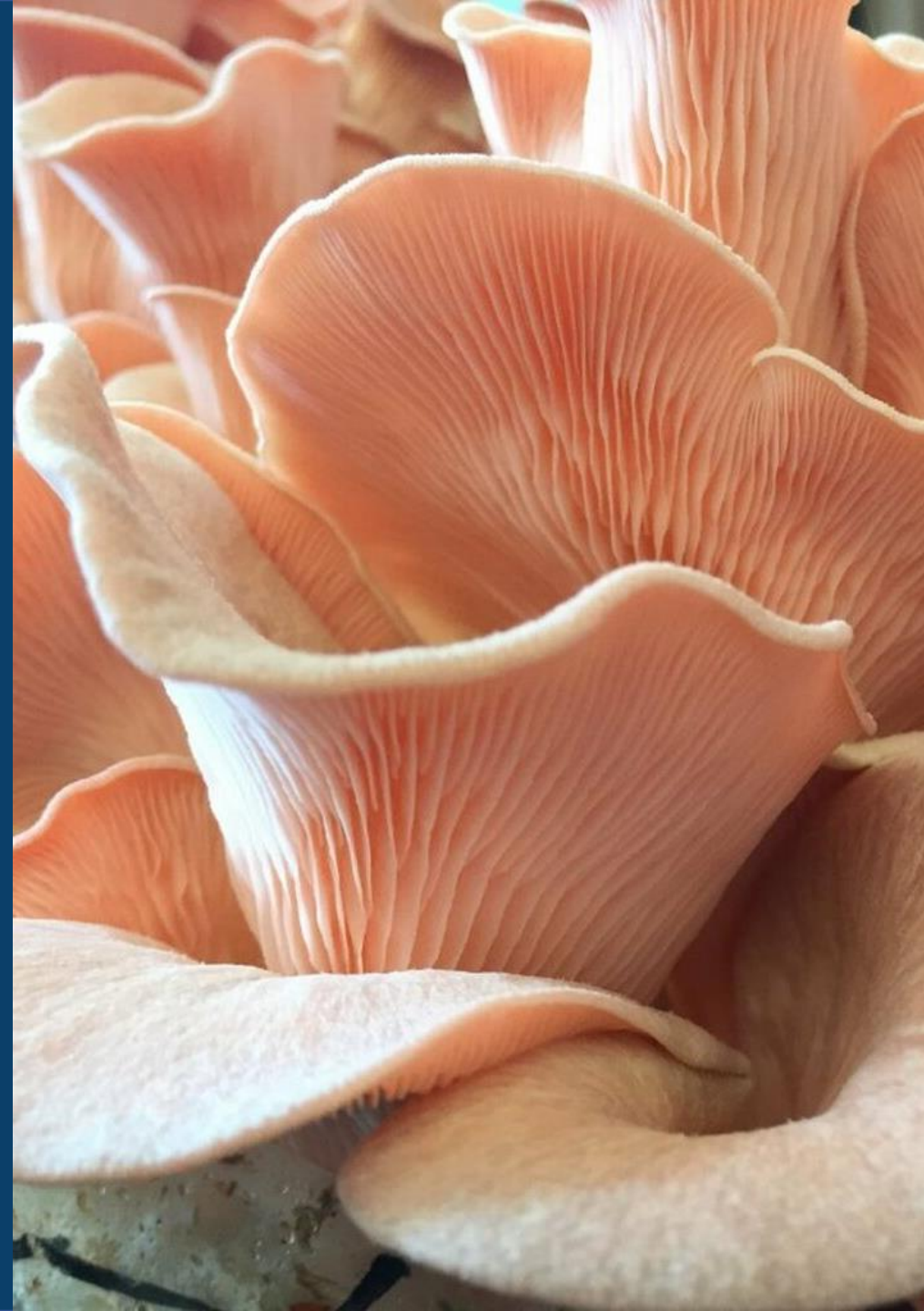
Workshop & Discussion

Swiss Food Research

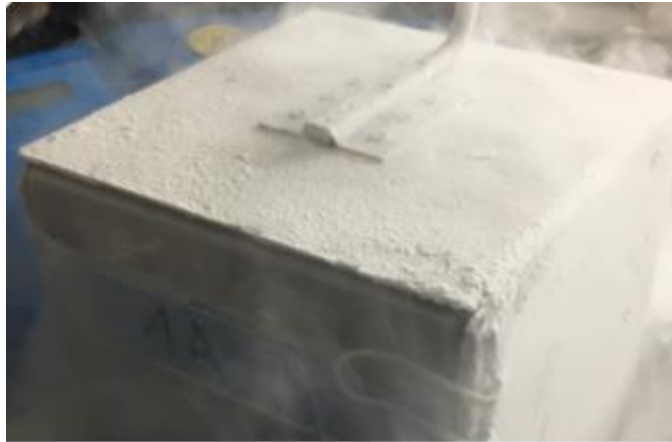
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Workshop & Discussion



In which areas can fungi & fungal systems be used?

Advantages of use?

When not used yet - what is used instead? Why?



What are the barriers to a wider use of fungi & fungal systems in the Agro-Food Segment?

Management of System? Complex?

Supply Chain? Regulatory?



What is necessary to boost the use of fungi & fungal systems in the Agro-Food segment?

In which areas can fungi & fungal systems be used?

Packaging / Textile / Leather (Task: how to package mushrooms and mycelium as material)

Foods (Meat) alternatives

Vitamin additives / Vitamin production

Protein shakes (from mushroom waste)

Home waste disposal kit

Biological sensors (e.g sanitation test)

Mycopesticides

As heavy metal filter

Biggest hurdles:

- Competition
- Awareness



What are the barriers to a wider use of fungi & fungal systems in the Agro-Food Segment?

Supply-side:

High production cost– harvesting technology

Regulatory hurdles

Lack of knowledge sharing

Demand-side:

Culinary skills are missing

Applications of fungi?

Knowledge & Know-how // Image problem



What is necessary to boost the use of fungi & fungal systems in the Agro-Food segment?

Improve Understanding & Know How

- Controlled environment for data gathering and process optimization
- More accessible knowledge for mushroom cultivation / more research
- Simple ways of cultivation from substrate to harvest
- Thematic support of fungi-system research

Infrastructure

- Find and advertise cheap and low energy space for controlled mushroom production
- Underground farming: use old tunnels
- Automate feeding and harvesting
- Open and accessible strain bank with instructions
- Sustainable substrate
- Easy & fast cultivation methods
- Automation of process step – process analysis, what can be automatized?



Products

- Look for new applications not just using fruit bodies
- Fungi in bio quality at a reasonable price (replace or complement meat)
- Use of old substrates as feed and supplements
- Generate use cases for circular systems → reusing substrate feed/fertilizer // products that can carry the costs → high value
- Substrate waste as Phosphorous source
- Interdisciplinary collaboration: zero waste – make connections to other disciplines

Steering & Control elements:

- CO₂ and methane tax on meat
- With ecological efficiency and economic savings
- True cost approach
- Subsidies for fungi to allow for affordable prices
- Novel Food application to be simplified

Communication & Education

- Know-how sharing - everyone can grow fungi - have „volkspilze“
- Information & Training for farmers / consumers / universities / gastronomy