



# FRAXINEA

STEP INTO THE FUTURE WITH MUSHROOM MATERIALS

# ABOUT US



At Fraxinea, our mission is to replace plastics with sustainable fungal materials.

Microplastics are pervasive and harmful. We offer a solution with versatile, eco-friendly fungal biomaterials. Our unique process grows large-scale, rollable materials efficiently. We are starting with the yoga and sports industries, and will expand into automotive, furniture, and electronics.

Join us in creating a healthier, sustainable future with fungal materials.



# WHAT WE BELIEVE

## OUR VISION

To lead the transformation of the materials industry towards sustainability by pioneering the use of fungal biomaterials, creating a world free from plastic pollution.

## OUR MISSION

To replace harmful plastics with eco-friendly fungal materials. Starting with yoga mats, we aim to expand into automotive, furniture, electronics, and more, reducing microplastic pollution and promoting sustainability.

# THE PROBLEM

## 01 ENVIRONMENTAL CONCERNS

Microplastics have infiltrated ecosystems worldwide, from oceans to mountains, and are increasingly present in human bodies. This widespread contamination poses significant environmental and health risks, necessitating urgent adoption of alternative materials to mitigate plastic pollution effectively.



# THE PROBLEM

## 02 REGULATORY FRAMEWORK

Companies gain competitive advantages by adopting sustainable alternatives to plastic. Regulatory frameworks are increasingly rewarding eco-friendly practices, incentivizing businesses that innovate with materials like fungal biomaterials. This trend encourages market leaders to invest in sustainable solutions, enhancing their brand reputation and preparing for future regulatory demands.



# THE PROBLEM

## 03 LACK OF SCALABILITY

Existing methods for producing mycelium materials are slow and costly, restricting their size and scalability. Similarly, animal-based leather faces scaling challenges. This limits adoption in key industries like automotive, sports, and electronics, underscoring the demand for efficient solutions like Fraxinea's fungal materials.



# THE SOLUTION - MUSHROOMS

Mushrooms provide a sustainable alternative to traditional plastics. They can be propagated infinitely from a single cell, making them highly scalable while environmentally friendly. Fungal biomaterials replace plastics in various products, offering advantages like biodegradability, durability, and unique properties that connect users with nature.



# THE SOLUTION - MUSHROOM MATERIALS

## Mushrooms can replace a wide variety of materials.

They can replace styrofoam packaging, insulation materials, PVC mats, faux leather or the bonding agent in MDF boards.



## The future applications

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The future applications include the automotive, building, sports, fashion or electronics industry and many more.





# MUSHROOM MATERIALS TODAY - LIMITED SIZES

Companies around the world are already growing mushroom-based materials, but their methods can only create materials in limited sizes, which slows down the growth and increases the price of the materials. The production technique is therefore not cost-effective and requires large spaces. They can only produce materials the same size as their growing trays.



# FRAXINEA'S MATERIALS - UNLIMITED SIZE

At Fraxinea we developed a unique process. We can grow materials several meters long, that can be rolled up, increasing production efficiency by a large margin. We can grow hundreds of m<sup>2</sup> material in a limited space, thereby solving the size limitation of mushroom-based textiles.



# FRAXINEA'S YOGA MAT - SYMBIOMAT

FRAXINEA MATS OFFER A SUPERIOR ALTERNATIVE!



# FRAXINEA'S YOGA MAT - SYMBIOMAT

## 01 100% Natural and Sustainable Material

SymbioMat™ is made exclusively from mushrooms and plant fibres, an all-natural raw material obtained through environmentally responsible cultivation and manufacturing processes. This offers a completely biodegradable alternative that can be returned to the natural cycle at the end of its life.

## 02 Exceptional comfort and grip

The unique structure of our mushroom material allows it to be extremely soft yet stable enough for a variety of yoga poses. The natural texture provides perfect grip, which helps prevent slipping during exercise, allowing for safer and more comfortable practices.

## 03 Antibacterial properties

The mushroom fabric has naturally antibacterial properties, so SymbioMat™ is easy to keep clean, keeps its freshness for longer and does not require the use of aggressive cleaning agents. This is particularly beneficial for those who are allergic or sensitive to certain chemicals.

## 04 CIRCULAR

Our process, **free from harsh chemicals** or plastics, allows our materials to seamlessly integrate into the natural decomposition of plant waste. They contribute to the cycle, transitioning into soil, than plant fibers and back to mushrooms again.

# YOGA MATS ARE ONLY THE BEGINNING



Yoga mats are only our beachhead market. The need for bio based textiles and foams is growing globally by the day. Mycelium can clean oil spills, filter water, create insulation and soo much more.

We are building a technology that will change the materials of our future, for a healthier, truly sustainable world.

# MEET OUR TEAM



**GERGELY KISS**

has more than 5 years of material development experience



**EMESE TAKÁCS**

has wide experience in textile innovation using biological processes



**RÓBERT PAD**

has 7 years of experience in business development and process planning

# THANK YOU



[fraxinea.fabrica@gmail.com](mailto:fraxinea.fabrica@gmail.com)



[www.fraxinea.com](http://www.fraxinea.com)



@fraxinea



+36202269961 /  
+36702312991

