

# Biotechnology tools for agriculture

acib offers advanced biotechnological solutions for agriculture applications. Let's see what we can do for you!

# BACKGROUND

New technologies like precision farming have started to enable agricultural production to higher effectivity. But there are also several biotechnological tools developed by acib that can support innovation in modern agriculture. Biotechnological tools enable to improve sustainability and efficiency in modern agriculture.

#### TECHNOLOGY

acib researchers developed a biobased coating that can be used for slow fertilizer release. In a comparable manner, there has also been developed a hydrogel for water retention in soil.

Enzymatic degradation of microplastic can enable transformation from agricultural waste to valuable products to ensure bioeconomy. More general, agricultural waste streams can be upcycled using biotechnological tools to become valuable resources for bioproduction.

Intensive studies on plant as well as (animal) gut microbiome resulted in a better knowledge in the composition of microorganism in soil, gut as well as algae. acib provides help by screening for native microorganisms (MOs) able to protect your commercially important crops. acib also developed enzymatic pathways in production of pheromons. We can provide you with customized, cost-effective and efficient routes for manufacturing.

# OFFER

Under protection of a CDA/NDA we provide you with professional strategies for biotechnological solutions for your specific application.

IP developed in such a project would belong to you as our industrial partner or investor.



#### **EXPERTS**

- Dr. Georg Gübitz
- Dr. Matthias Slatner
- Dr. Tomislay Cernaya
- Dr. Harald Pichler

# AVAILABLE FOR

- · Joint Research Project
- · Contract Research
- Funding call Horizon Europe

#### **DEVELOPMENT STATUS**

Status of the project proposal – Technology Readiness Level 2-4

#### IPR

In case there is already a patent

#### KEYWORDS

- Agriculture
- Biobased coating
- Hydrogel
- Biodegradation
- Microbiome
- Pheromons
- Bioreactor

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