

Informationen on the EFRE/JTF-fundet project:

**LiRham - Liamocines und Rhamnolipids for foliar fertilization, plant strengthening, and promotion of beneficial microorganisms**

This project investigates the use of microbial biosurfactants as an alternative to synthetic adjuvants such as EDTA in foliar fertilizers and as means for strengthening plants. The biosurfactants produced and utilized in this project are rhamnolipids and liamocins (polyollipids). These biosurfactants can complex essential trace elements such as iron, zinc, and copper and improve their uptake via the leaf surface. Moreover, biosurfactants promote plant strength and health.

Based on many years of work on biosurfactants, particularly rhamnolipids, at the department of Molecular Phytomedicine at the University of Bonn, comprehensive studies on the effect of rhamnolipids and polyol lipids as well as newly developed foliar fertilizers on plants and plant-associated organisms with particular focus on beneficial rhizosphere bacteria are performed as part of this project. Additionally, the mode of action of rhamnolipids is further elucidated and the impact of polyollipids on plant molecular processes analyzed.

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**Funding program:** EFRE/JTF-Programm NRW 2021–2027, GreenEconomy.IN.NRW

**Implementation period:** 01.04.2024 bis 31.03.2026

**Funding by:** Europäische Union und das Land Nordrhein-Westfalen



**Kofinanziert von der  
Europäischen Union**

Ministerium für Umwelt,  
Naturschutz und Verkehr  
des Landes Nordrhein-Westfalen

