

Scale-up: Pilot Trial for Validating Biobased Fertilizer Coating for Loading, Binding and Slow Release of Micronutrients

Timeline: 05/24 - 11/24
Budget: €40k

Startup



- Name: Bioweg
- Founded: 2019
- Tagline: Fermentation to valorize biobased wastestreams
- Location: Quakenbrück, Germany

Industry partner



- Name: K+S AG
- Founded: 10/1889
- Tagline: Salt, potash & magnesium producer
- Headquarter: Kassel, Germany

The problem

K+S currently markets the Korn-KALI® product in a standard format or with incorporation of specific micronutrients during the granulation process. This process has certain limitations and does not allow for scaling up and diversification of this product line.

The solution

Bioweg develops a biobased coating formulation and explores the loading of micronutrients onto preexisting Korn-KALI® granules, allowing this product line to be sustainably diversified with a range of micronutrient combinations.

In a first pilot project, the proof of concept was already positively validated. This follow-up pilot project aims to validate an industrial scale-up.

Project deliverables

- Trial scale, 20 kg: Application & evaluation of biowegs fertilizer coating solution
- Pilot scale, 1,000 kg: Application & evaluation of biowegs fertilizer coating solution
- Commercial scale: Final definition of parameters of the biobased fertilizer coating



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