Proof of Concept: Development of a Biobased Fertilizer Coating for Loading, Binding and Slow Release of Micronutrients

Timeline: 07/22 - 12/22 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.

After validating the proof of concept, a follow-up pilot project is planned to initiate the industrial scale-up.

Project deliverables

- Loading the surface of existing Korn-KALI® with micronutrients of Zinc and Boron
- Free-flowing and dust reduction: Reach enhanced properties of the new Korn-KALI®
- Finalisiation of a proof of principle coating system
- Result: follow-up pilot project to initiate industrial scale-up



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