

Evaluation of Be-Grow Boost for Accelerated Mining Tailings Dump Cover Systems

Timeline: 03/21 - 08/21
Budget: €40k

Startup



- Name: Be-Grow
- Founded: 2019
- Tagline: Hydrogel for increased water availability
- Location: Neustadt, Germany

Industry partner



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

The problem

The greening of salt mining tailings dumps - an accumulation of unavoidable leftovers from salt production - is important for public acceptance and cost reduction for K+S. With the harsh conditions, due to high salinity and extreme exposure to weather conditions, the greening of the tailing dumps is a huge challenge.

The solution

Be-Grow develops an easy to handle hydrogel that can be mixed with soil and substrates prior planting. Its application improves the plants functions against abiotic stress by increasing plant available water and nutrient uptake. By mixing Be-Grow Boost into the cover substrate of potash mining tailings dumps, the establishment phase of grasses and other plants can be accelerated.

Project deliverables

- Greenhouse and geotechnical experiments
- Analysis of the greenhouse and geotechnical experiments
- Definition of recommendations for a potential subsequent field trial



Be-Grow
Maik Schacht
Founder
maik.schacht@be-grow.com



RootCamp
Dr. Philipp Rittershaus
Head of Corporate Innovation
philipp@root.camp



K+S
Ralf Blessing
Sr. Manager Acceleration Cluster
Ralf.Blessing@k-plus-s.com