

DEGRATEX

BIOBASED, HIGH-PERFORMANCE GEOTEXTILES WITH DEFINED DEGRADABILITY

THE PROBLEM

Non-degradable petro-based geotextiles in underground construction are not recycled and accumulate soil with plastics

THE OBJECTIVE

Development of bio-based, biodegradable geotextiles



Sustainable, biodegradable geotextiles for reinforcement and erosion protection

Serve to reinforce slopes and streets

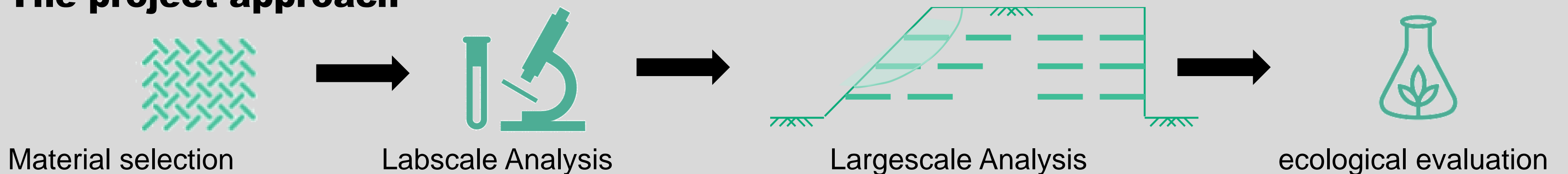
Current Status

- Biopolymers rarely reach the required mechanical properties
- Focus on viscose → requires redefinition of earthen structure
 - Forrest and field environment
 - First sampling (soil and textile)

Approach and Objective

- Focus on temporary structures
- Use of grid structures
- Investigation of degradation of mechanical properties, degradation materials and eco-toxicity

The project approach



Sustainable, biodegradable vegetation protection

Serve to protect young plants from browsing

Current Status

- PLA/Hemp mix
- Field demonstrator installed at FZ Jülich
 - Forrest and field environment
 - First sampling (soil and textile)

Approach and Objective

- Replacing hard plastic covers or non-degradable plastic nets
- Use of nonwovens made from fibre blends of natural fibres and bio-based and degradable plastic fibres
- Investigation of degradation behaviour, degradation materials and eco-toxicity

The project consortium

