

Integrated Strategy for Rehabilitation of Disturbed Land Surfaces and Control of Air Pollution



Biocarpet engineering: cyanobacteria growing on geo-prebiotic polysaccharide supports (jute) improving water availability and growth

















Sustainable rehabilitation of degraded land surfaces, in line with UN goals



Prevention of harmful dust emissions into air and water; health benefits

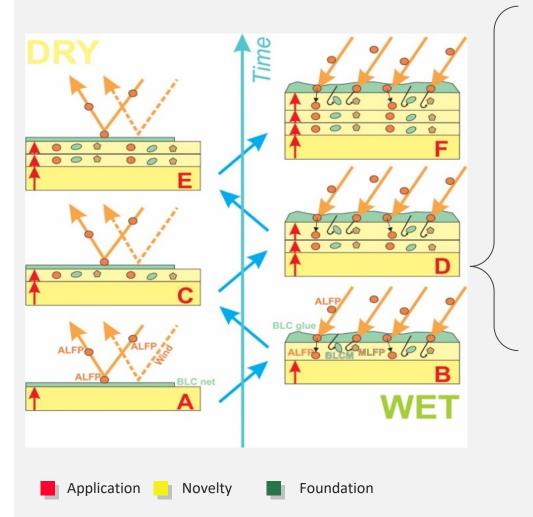


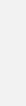
Positive impacts on the beneficiaries (industry, agriculture, tourism...)

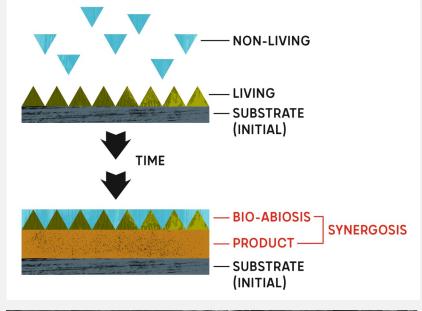
RECAP project, **BLOCDUST** hypothesis and SYNERGOSIS concept

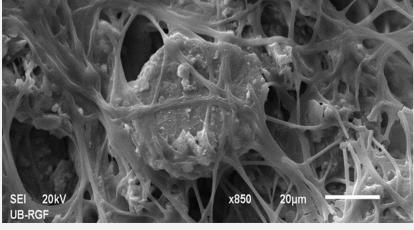
SYNERGOSIS concept

Synergosis is a new term describing the beneficial physical and functional relations between biotic and abiotic components











BLOCDUST hypothesis

Cyanobacteria with their sticky exopolysaccharides capture dust particles during wet conditions. During dry conditions cyanobacterial crusts protect accumulated material from wind and water erosion

=> Biogenic contribution to the origin of loess thought to be aeolian only.

Acknowledgment: This research was supported by the Science Fund of the Republic of Serbia, #7726976, Integrated Strategy for Rehabilitation of Disturbed Land Surfaces and Control of Air Pollution – RECAP, within Program IDEJE.

