

Popular scientific project description for project funded by Ekhagastiftelsen

Popular scientific project description is to be submitted within 2 months of project grant.

Application number:	2015-65
Project title:	Healthy plants from healthy soils: Resilience and stability of organic cropping systems
Receiver of grant (name, address):	Dr Thomas Döring Department of Agronomy and Crop Science Faculty of Life Sciences Humboldt University Berlin Albrecht-Thaer-Weg 5 14195 Berlin-Dahlem Germany
Contact / project manager:	Dr Thomas Döring
Project start: *	2016-02-01
Project end: *	2017-05-31
By Ekhagastiftelsen granted sum:	SEK 1.120.000

Project description: (max 150 words)

Health plays a key role in organic agriculture. A criterion of health recognised for all domains of agriculture is resilience, i.e. the ability to recover after disturbance or stress. This project aims to improve the understanding of resilience in organic cropping systems. We investigate the resilience of the soil's ability to suppress plant diseases and the resilience of annual crops in response to climatic stress factors, using a set of long-term field experiments from three countries with a large eco-geographic range. Our results will help farmers to design more reliable and resilient cropping systems and will improve the understanding of what factors are responsible for system health in ecological farming. By exploring potential links between soil health and plant health, we will widen the currently insufficient scientific basis underlying the principle of health.