Populärvetenskaplig sammanfattning för projekt finansierat av Ekhagastiftelsen

Populärvetenskaplig sammanfattning ska lämnas inom 2 månader efter anslag har beviljats.

Diarienummer:	2015-11
Projekttitel:	Ground cover management in organic apple orchards in South Africa: Trade-offs between above- and belowground ecosystem services
Anslagsmottagare:	Lunds universite Department of Biology Sölvegatan 37 223 62 Lund
Projektledare/Kontaktperson:	Klaus Birkhofer
Projektstart:	2016-07-01
Projektslut:	2017-12-31
Totalt av Ekhagastiftelsen beviljade medel:	1.480.000:_

Sammanfattning: (max 150 ord)

The global demand for organically farmed products is increasing, as consumers become aware of the lower environmental impact of organic farming. Organic growers have to rely on the simultaneous provision of multiple natural processes (e.g. biological control) as artificial inputs are not allowed (e.g. synthetic pesticides). The provision of these ecosystem services in organic production systems can be actively supported by management decisions, but it remains unknown to what extent individual management practices affect the relationships between multiple above- and belowground ecosystem services. Here we aim to understand the ecological mechanisms that underlie the simultaneous provision of above- and belowground ecosystem services resulting from different ground cover management options in organic apple orchards in South Africa. Ultimately, our study will help growers to make informed decisions about ground cover management in organic orchards that will lead to synergies between multiple services at the lowest possible management intensity.

Table 1 Updated Gantt chart (2015-11) summarizing the schedule for major activities over the 18 months project period. Abbreviations for task leaders and contributors are given in the previous section.

			2016		2017			
Task	**Leader**	**Contributors**	**III**	**IV**	**I**	**II**	**III**	**IV**
1st project meeting (South Africa)	KB	MA	■					
Field site selection	MA	KB	■					
Establishment of treatments	MA	KB	■	■				
Vegetation survey	MA	RL	■	■				
Soil properties	WS	JB	■	■				
Belowground biodiversity	WS	JB, AM		■	■			
Belowground processes & services	WS	JB, KB		■	■			
Aboveground biodiversity	MA	DC, SL		■	■			

Aboveground processes & services	PA	KB						
Grower Interviews	RL	GC						
2nd project meeting (Sweden)	KB	JB, RL						
Assessment of production	RL	GC						
Synthesis report	KB	All						
Writing manuscripts	All							
Dissemination	MA	KB						