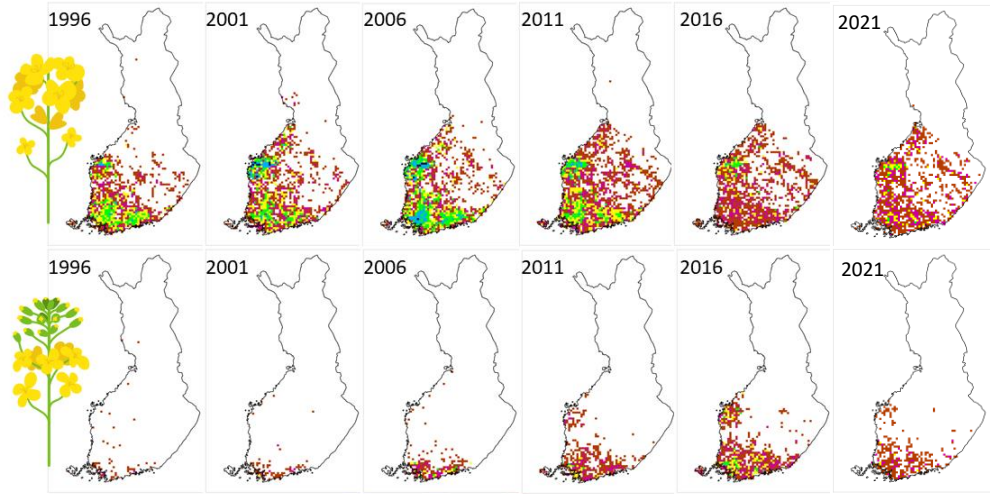


Behovet och möjligheten att diversifiera växtodlingen

Pirjo Peltonen-Sainio

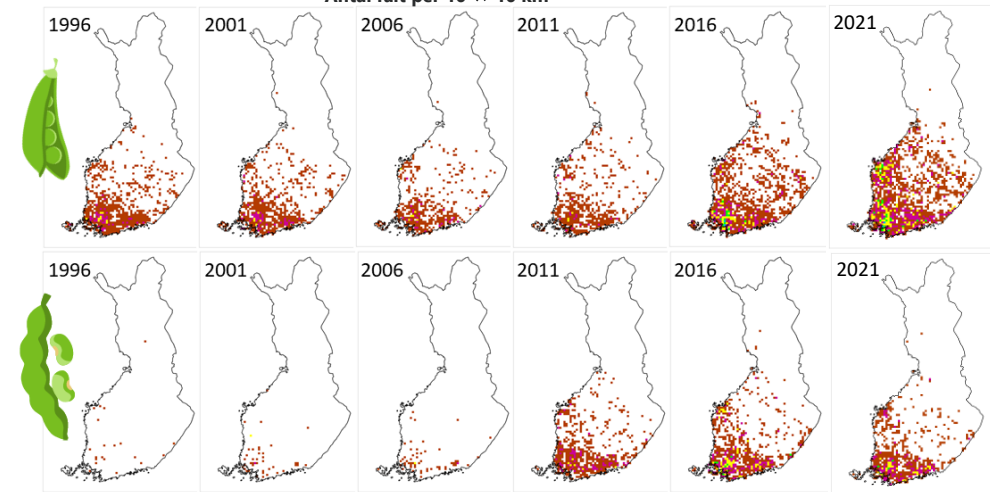
VÄXTER
I FÖLJD



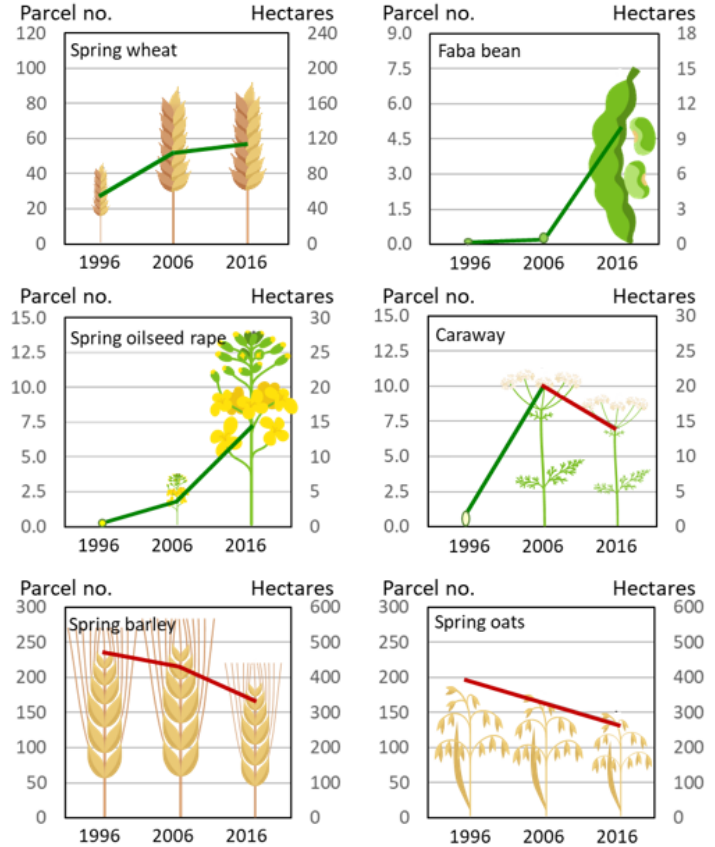


1-9 10-19 20-39 40-79 80-160 >160

Antal fält per 10 × 10 km



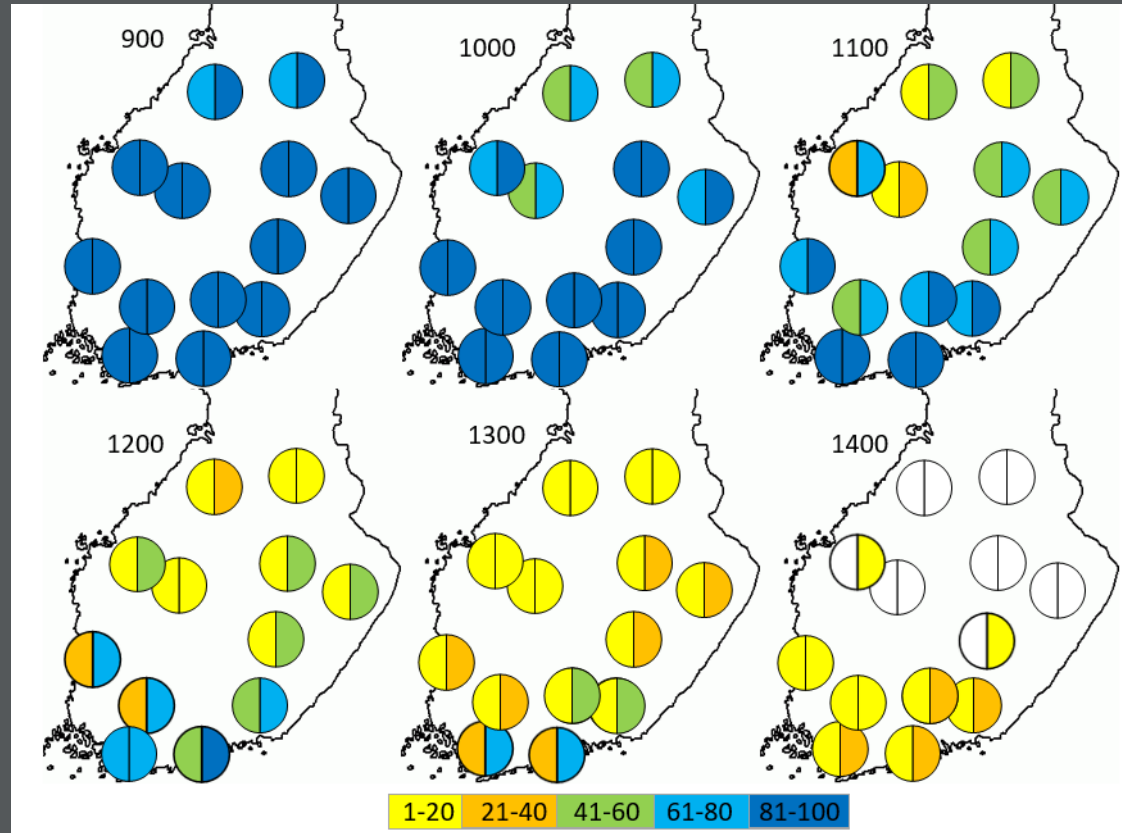
Shifts in crops in the total number of parcels (lines) and hectares (crop icons) in Finland (both × 1000)

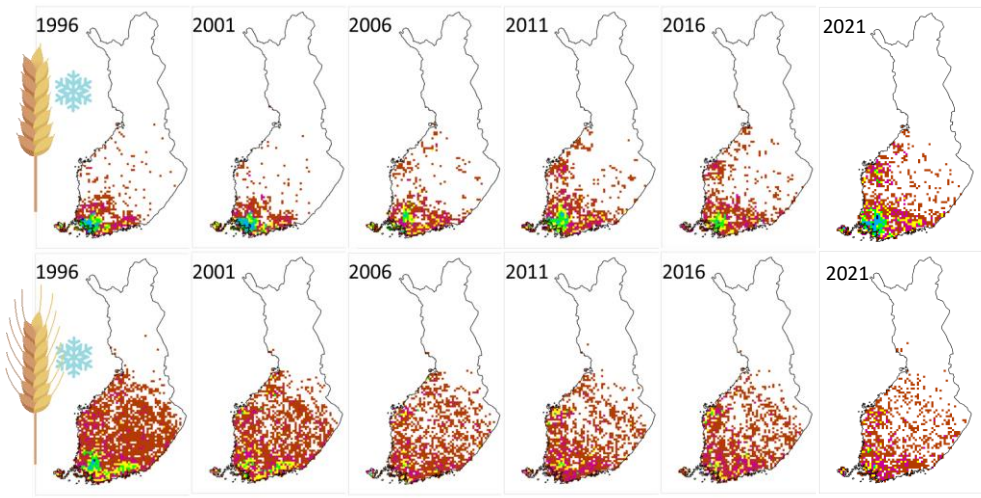


Förlängning av vegetationsperiod

Akkumulering av effektiv värmsumma (900, 1000, 1100, 1200, 1300 och 1400 grader) från sådd till mitten av september

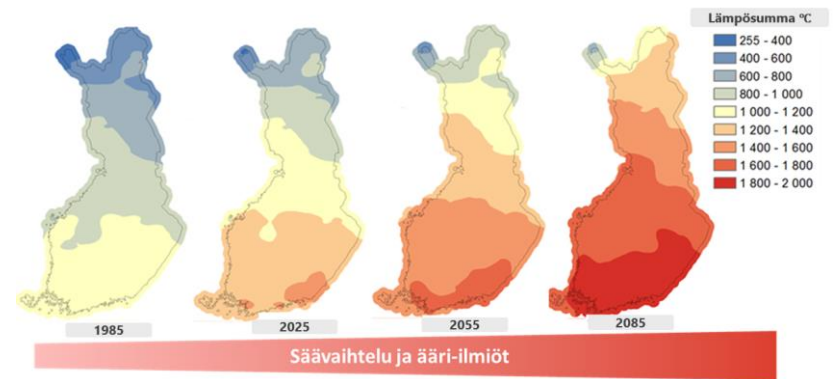
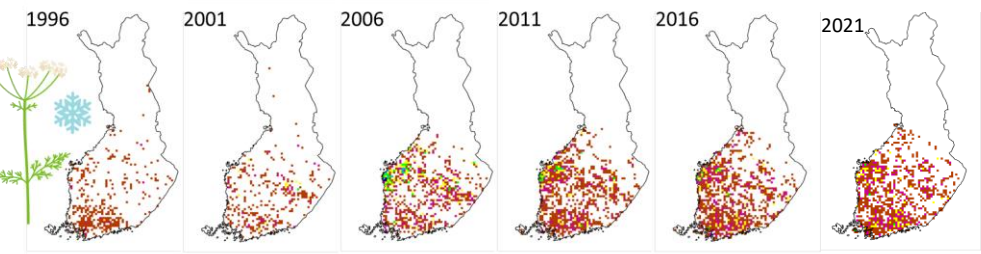
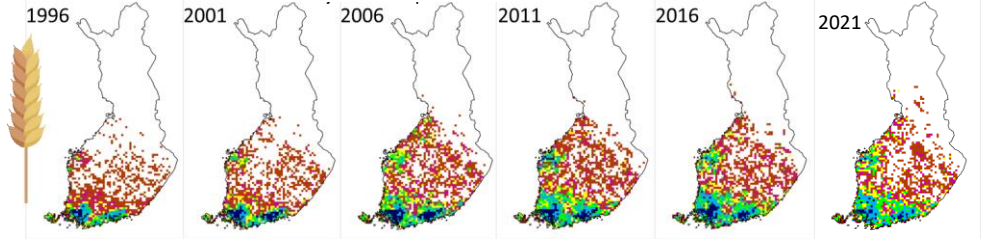
Den vänstra halvan av cirkeln är realisering under perioden 1970–2000 och den högra 1993–2023



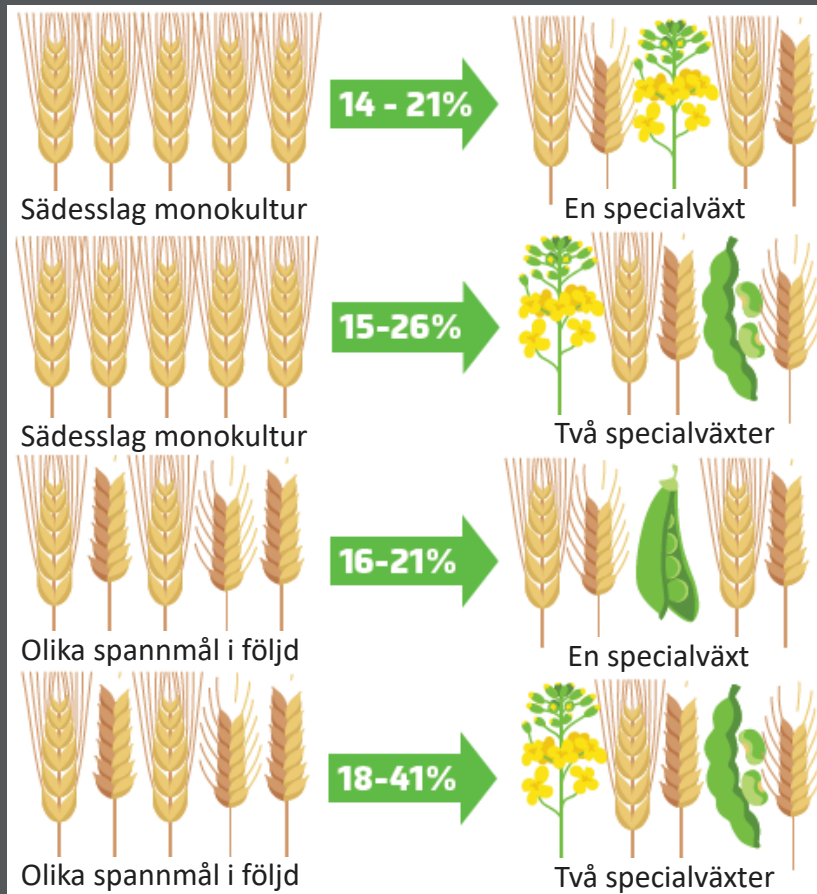


1-9 10-19 20-39 40-79 80-160 >160

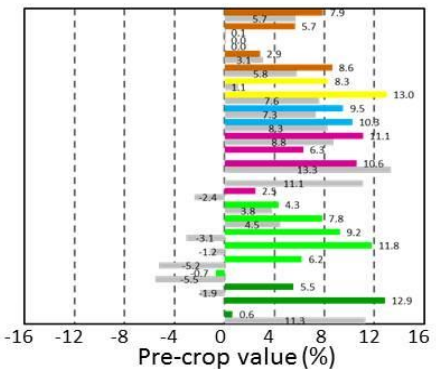
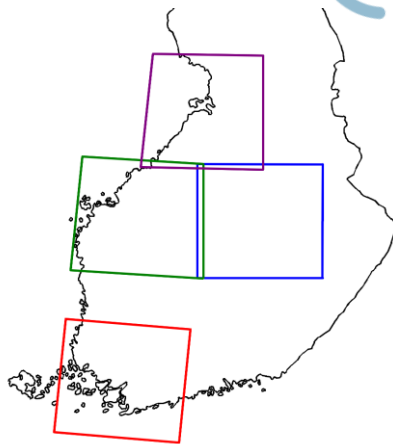
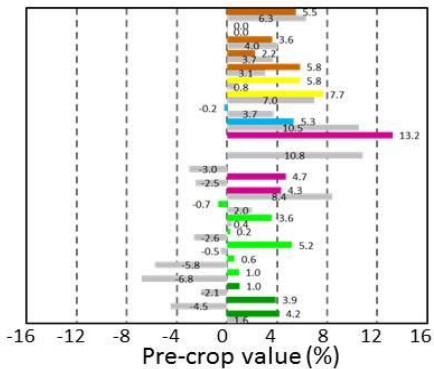
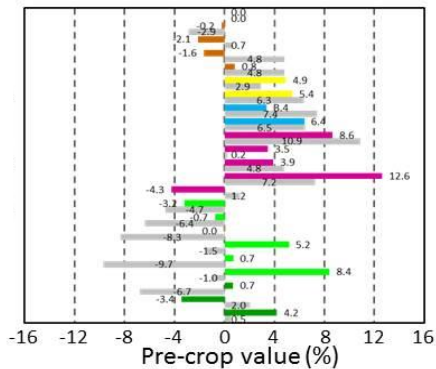
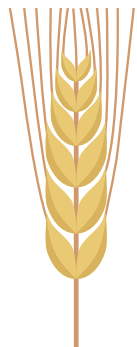
Antal fält per 10 × 10 km



Peltonen-Sainio, P. & Jauhiainen, L. 2020. Large zonal and temporal shifts in crops and cultivars coincide with warmer growing seasons in Finland. *Regional Environmental Change* 20: 89, <https://doi.org/10.1007/s10113-020-01682-x>



Nyttan av förgrödor - 1.8 miljoner fält

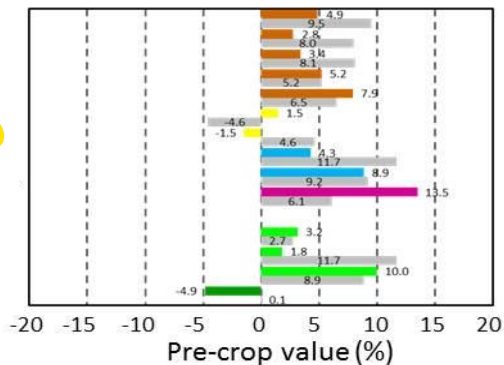
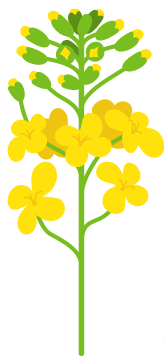
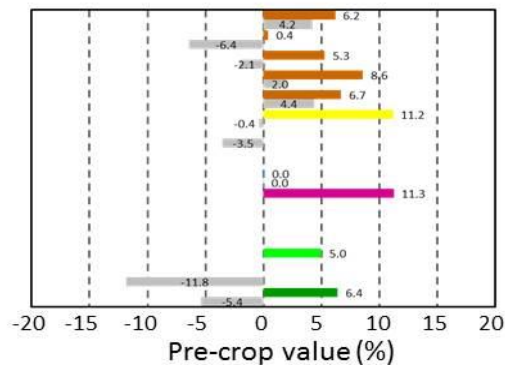
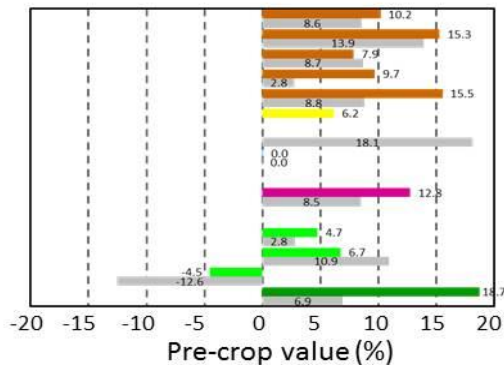


- The order of crops in graphs
- Spring barley
 - Spring oats
 - Spring wheat
 - Winter wheat
 - Winter rye
 - Spring turniprape
 - Spring oilseed rape
 - Peas
 - Faba bean
 - Sugar beet
 - Potatoes
 - Caraway
 - Linseed
 - Oilseed radishes
 - Bare fallow
 - Stubble fallow
 - Green fallow
 - Green manuring
 - Nature managed field
 - Diverse game field
 - Perennial grassland
 - Perennial pasture
 - Annual grassland

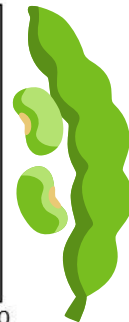
Peltonen-Sainio, P., Jauhiainen, L., Honkavaara, E., Wittke, S., Karjalainen, M. & Puttonen, E. 2019. Pre-crop values from satellite images for various pre- and subsequent crop combinations. *Frontiers in Plant Science* 10: 462, <https://doi.org/10.3389/fpls.2019.00462>

Peltonen-Sainio, P., Niemi, M. & Jauhiainen, L. 2024. Legacy effects of crop sequencing on biomass and their variability on farmers' fields in Finland are shaped by weather, farm conditions and rationales for land use. *Agricultural Systems* 215, 103850. <https://doi.org/10.1016/j.agys.2023.103850>

Nyttan av förgrödor - 1.8 miljoner fält



- The order of crops in graphs
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Nyttan av förgrödor

>8%

4-8%



Peltonen-Sainio, P., Jauhiainen, L., Honkavaara, E., Wittke, S., Karjalainen, M. & Puttonen, E. 2019. Pre-crop values from satellite images for various pre- and subsequent crop combinations. *Frontiers in Plant Science* 10: 462, <https://doi.org/10.3389/fpls.2019.00462>

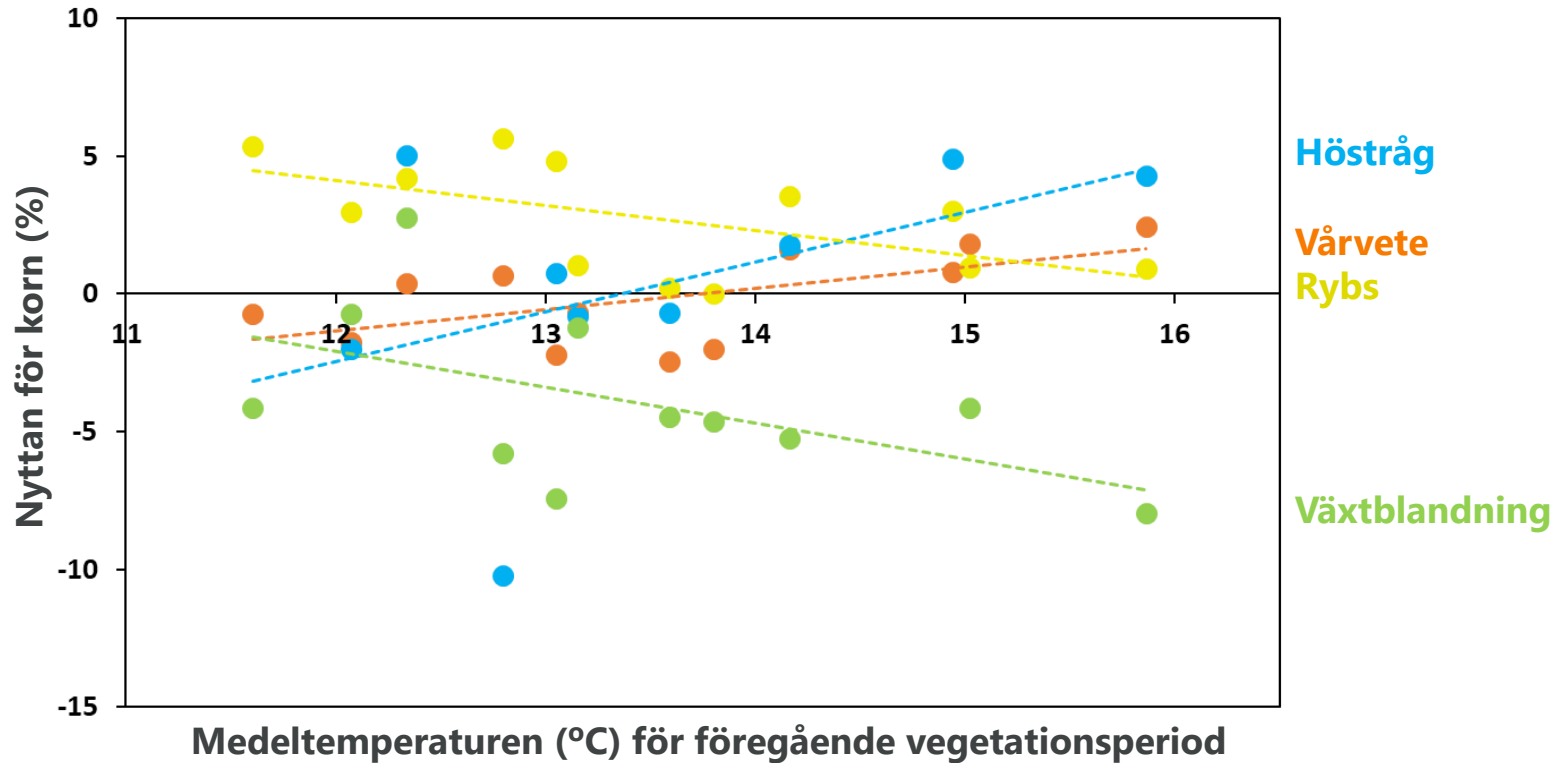
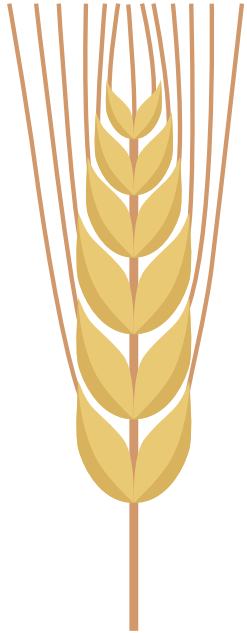
Nyttan av förgrödor

>8%

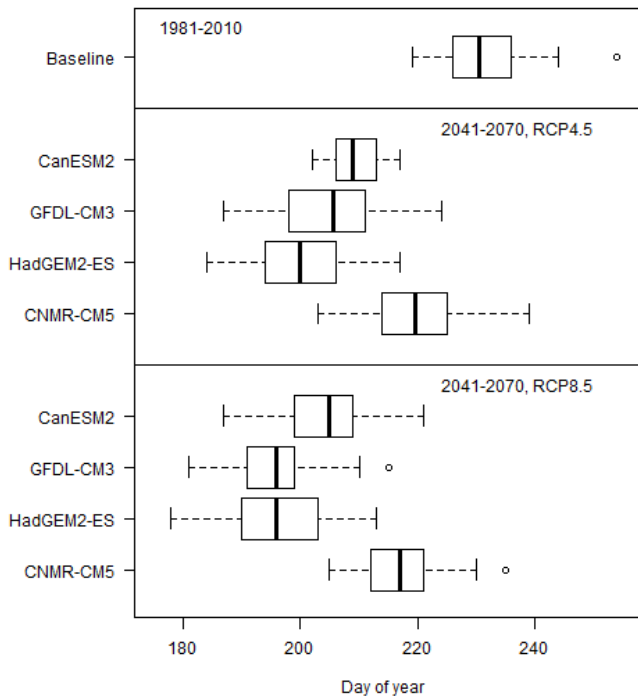
4-8%



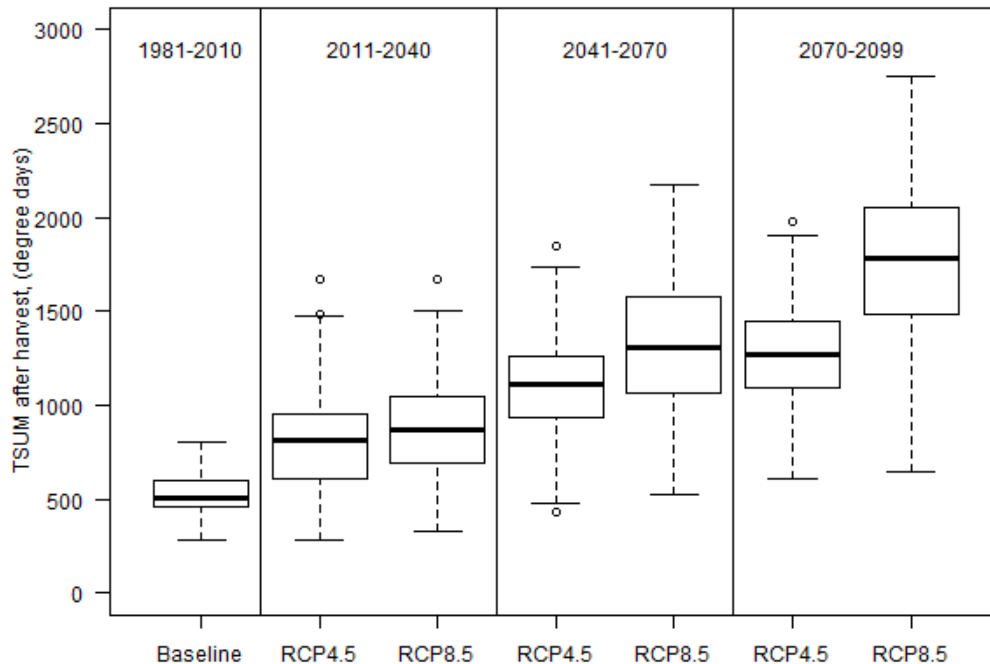
Nyttan av förgrödor



Förändring i skördetid

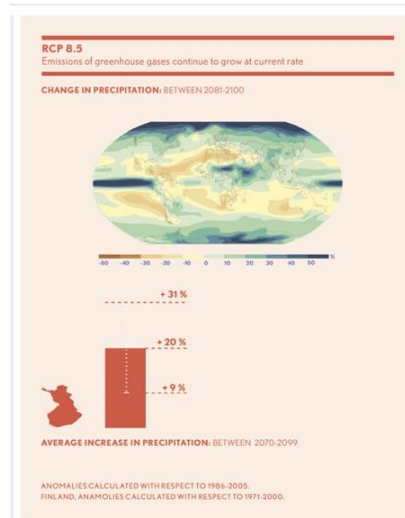
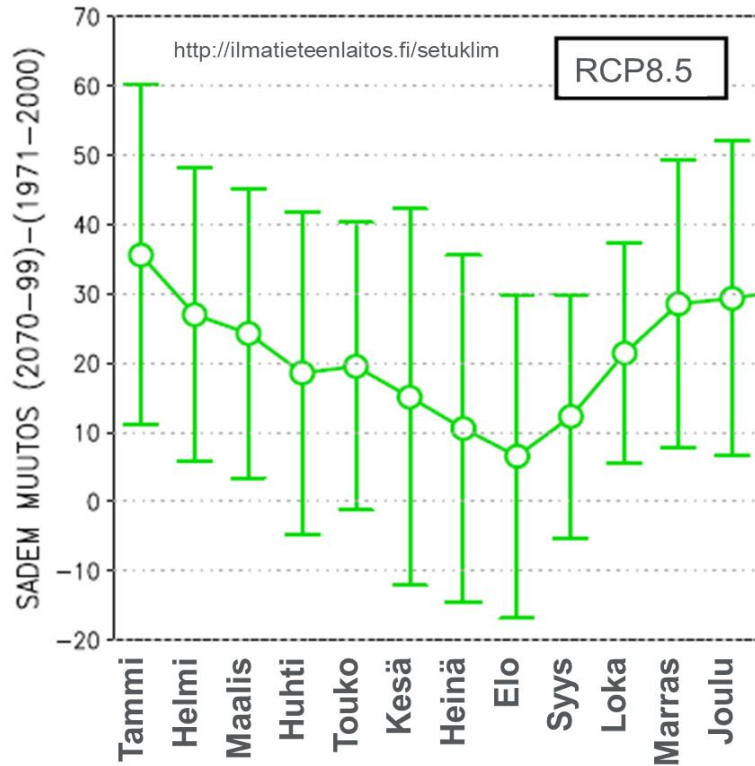


Vårvede skördas tidigare när klimatet värms upp

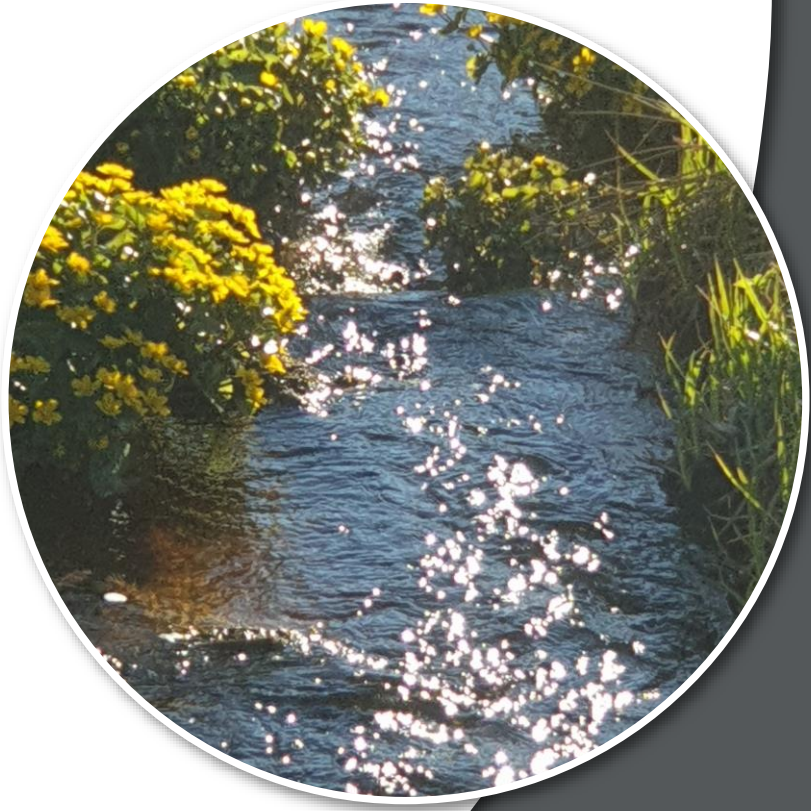


Värmesumma ackumulerad efter tröska av vårvede (>0°C)

Nederbörden ökar särskilt på hösten och vintern



Utmaningar för jordstruktur och miljö



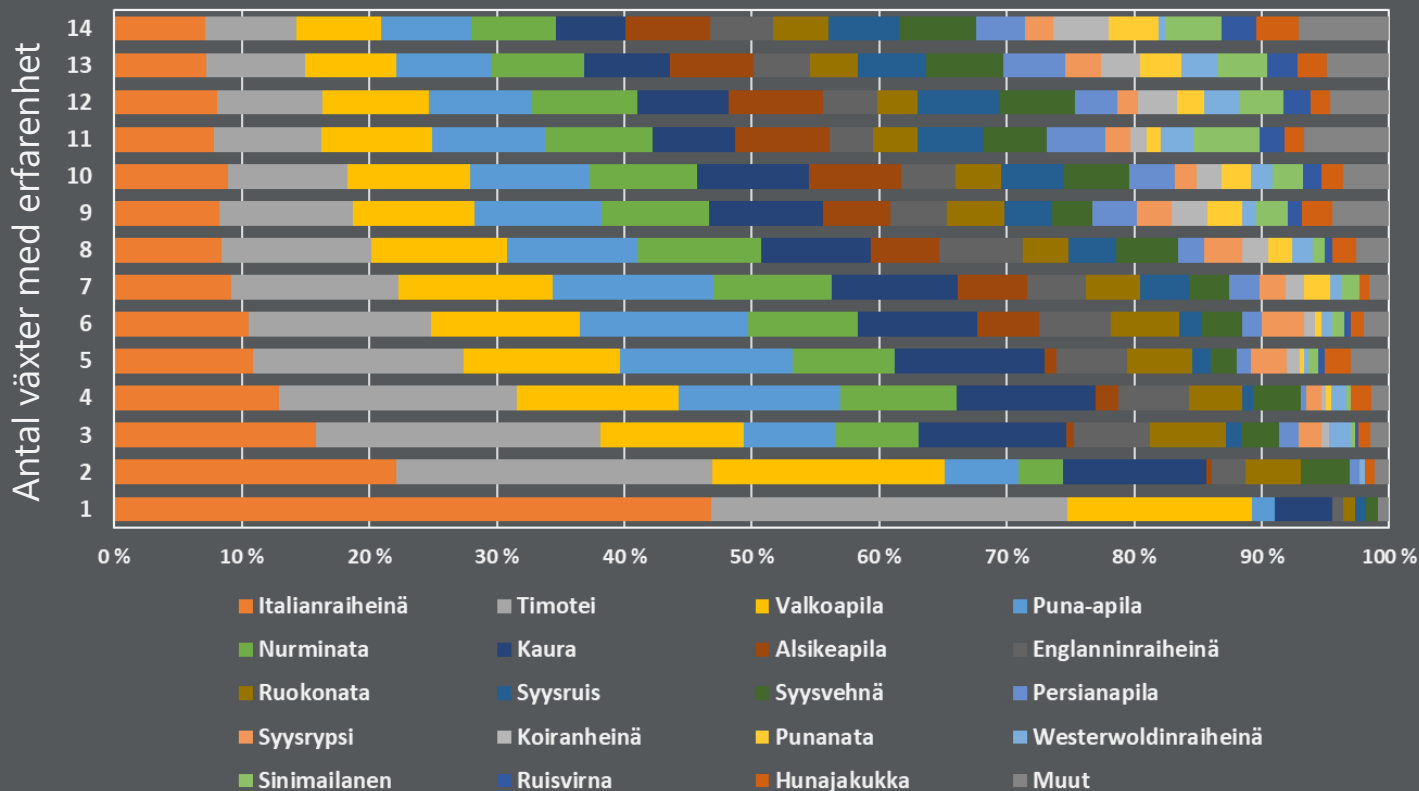
Riskhantering med höstgrödor – utvintring?



Marktäckande växter



Erfarenheter av olika marktäckande växter (n=1130)



TACK!

VÄXTER I FÖLJD



Majsfält i landskapet?

