





**Weed mapping activities in  
Scandinavia and Finland**

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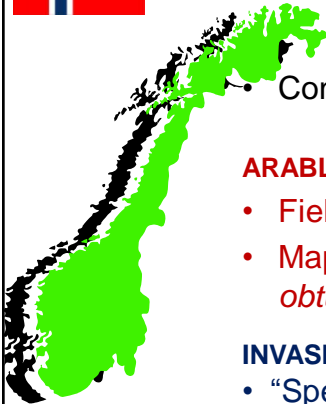
## Denmark



- Contact person: Christian Andreasen
- Latest survey 2001-2004
- No new activities
- Publications:
  - Andreasen C & Stryhn H, 2008. Increasing weed flora in Danish arable fields and its importance for biodiversity. *Weed Research* 48:1-9.
  - Andreasen C & Skovgaard IBM, 2009. Crop and soil factors of importance for the distribution of plant species on arable fields in Denmark. *Agriculture Ecosystems & Environment* 133: 61-67.
  - **Andreasen, C & Streibig JC 2011. Evaluation of changes in arable fields of Nordic countries – based on Danish long-term surveys. *Weed Research* 51: 214-226.**



## Norway



• Contact person: Kirsten Semb Tørresen

### ARABLE WEEDS

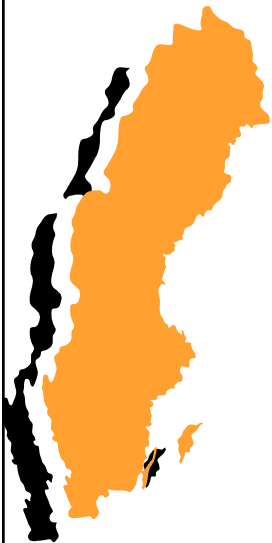
- Field trials 1947-1973 vs. 1983-1997
- Mapping of *Rumex* species (*longifolius*, *obtusifolius* and *crispus*) at regional scale

### INVASIVE SPECIES

- “Speciesdatabank” ([www.artsdatabanken.no](http://www.artsdatabanken.no))
  - Red list and Black list species
  - In 2011 mapping of invasive species on roadsides
- SMILEX-programme
  - Spatial distribution of invasive species
  - Applying cell phones and GPS-techniques



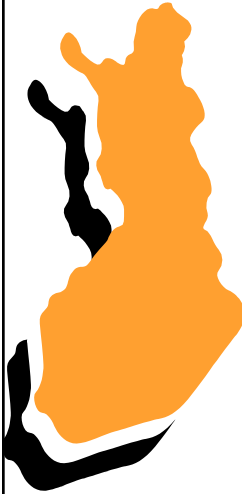
## Sweden



- Lars will give a talk



# Finland



## Spring cereals (2007-2009)

- 595 fields sampled (conventional and organic)
- 148 species recorded
- Most common species:
  - *Chenopodium album*, *Stellaria media*, *Viola arvensis*, *Elymus repens*, *Galeopsis* spp. and *Galium spurium*
- Next step: more detailed analysis on the changes between 1990s and 2000s

## Oilseed crops (2007-2009)

- 429 fields sampled
- 1-6 most harmful species recorded (40 species altogether)
- Most common species:
  - *Chenopodium album*, *Galeopsis* spp., *Galium spurium*, *Sonchus arvensis*, *Tripleurospermum inodorum* and *Elymus repens*



# Finland

## Biodiversity mappings

- **Field margins:** Monitoring study on the effects of the Finnish agri-environment support scheme (2001, 2005, 2010)
  - Number of vascular plants: 303, 291 and 308, respectively
  - University of Helsinki (Prof. Juha Helenius)
- **Set-asides:** mappings in 2010-2011 (two projects)

## Alien species

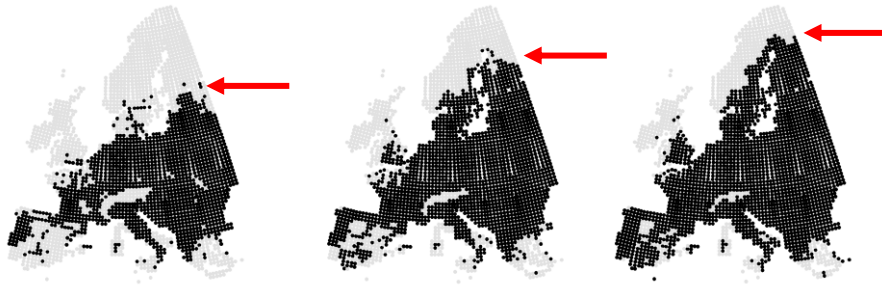
- Finnish Strategy of Alien Species
- Special Issue: “**Alien pest species in agriculture and horticulture in Finland**” in *Agricultural and Food Science* (online access: [https://portal.mtt.fi/portal/page/portal/mtt\\_en/mtt/publications/AFS](https://portal.mtt.fi/portal/page/portal/mtt_en/mtt/publications/AFS))
  - “Alien Weed Species in Finnish Weed Flora”
- Impact of climate change on alien weed distribution

Predicted change of the distribution of *Amaranthus retroflexus*

Current climate

B2-scenario (+2.1 C)

A2-scenario (+2.8 C)



Hyvönen et al. Assessment of weed establishment risk in a changing European climate. *Weed Res.* (in prep.)