



COST

Sustainable management of *Ambrosia artemisiifolia* in Europe (SMARTER)

FA1203

Start date: 01/02/2013

End date: 31/01/2017

Year: **1** (2013)

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Scientific context and objectives (1/2)

Background / Problem statement:

- The alien invasive plant ‘common ragweed’ is
 - (i) highly allergenic, and
 - (ii) an important crop weed in Europe
- Lack of measures to control population growth & spread



Brief reminder of MoU objectives:

- Initiate, coordinate and evaluate new long-term management options against ragweed for Europe
- Develop a template for the European control of other alien invasive species

Scientific context and objectives (2/2)

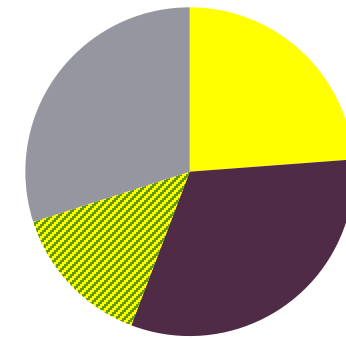
Research directions:

- Study new long-term management options (biological control, vegetation management) and their integration with existing short-term measures
- evaluate ragweed control measures at all levels from the plant to the agricultural, health and economic sectors.

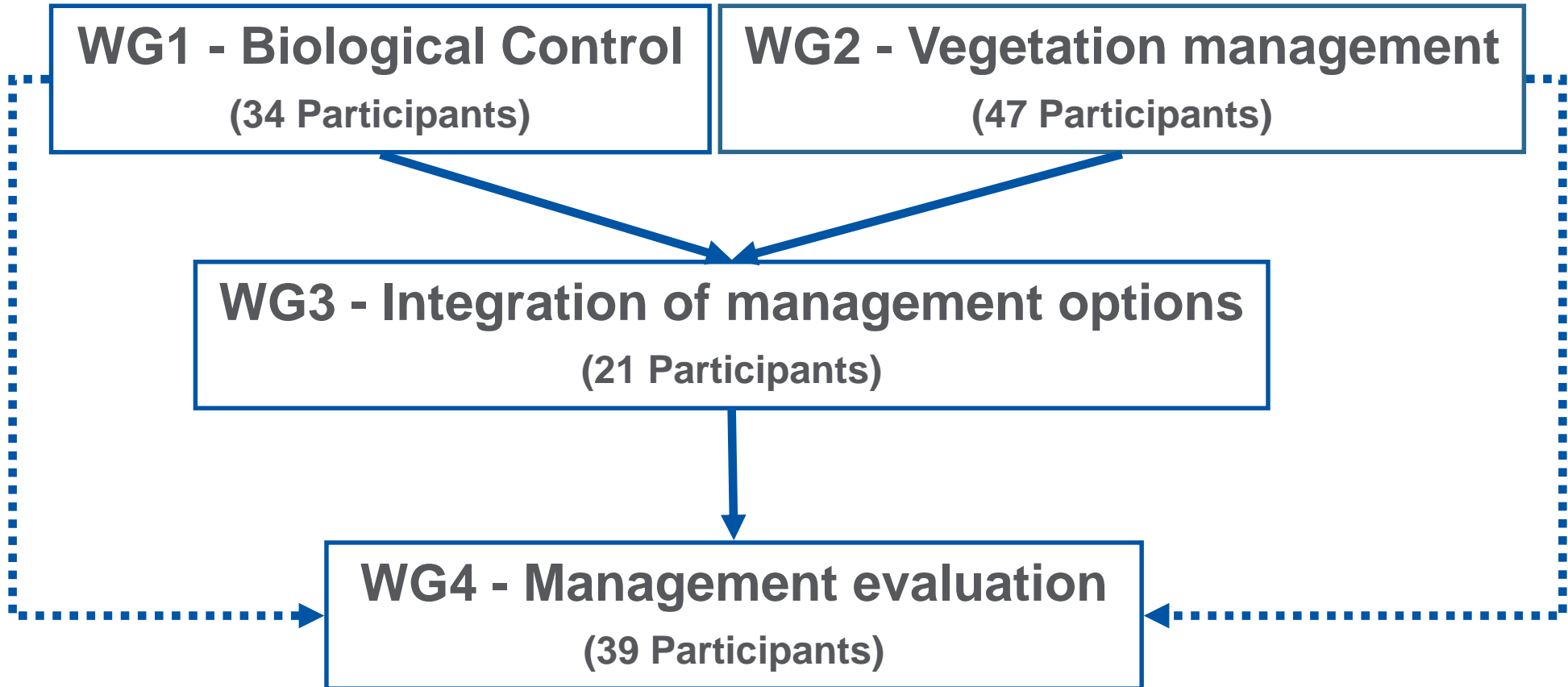
Innovation

- collaboration between biologists, medicals, agronomists, economists and stakeholders to combat the most prominent plant invader across Europe (in line with the EU strategy against IAS)

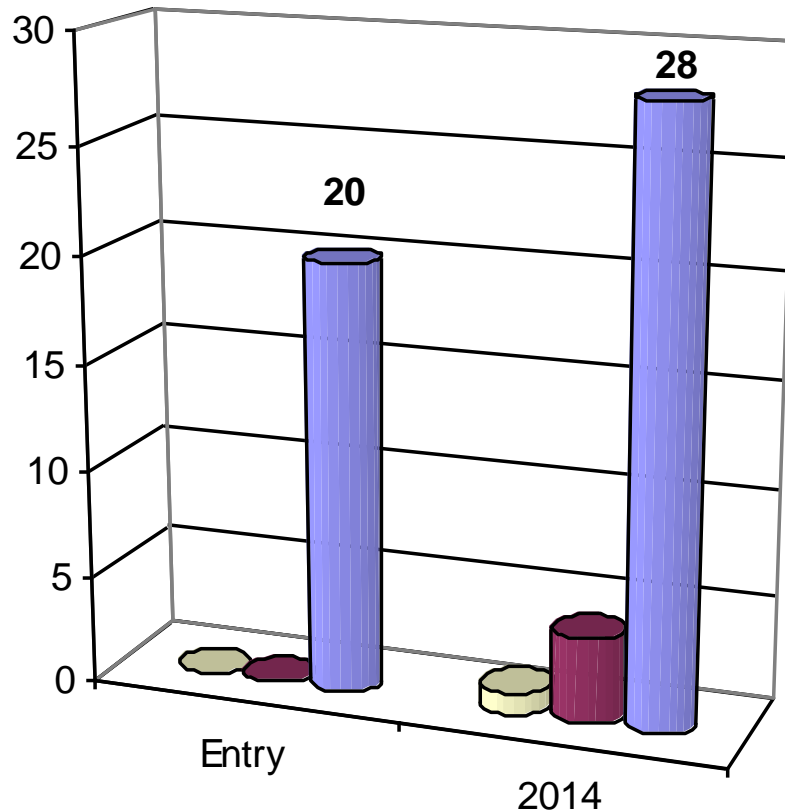
Working groups



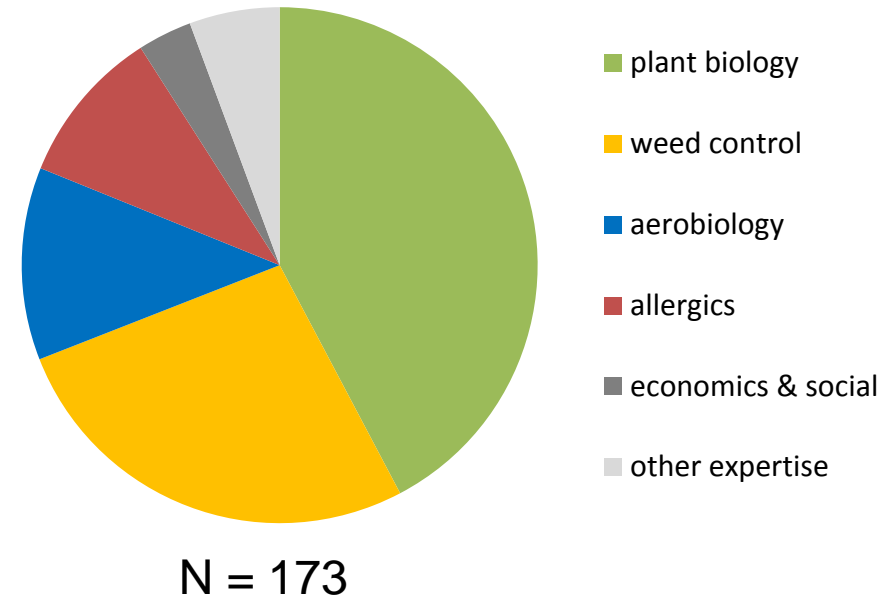
- WG1
- WG2
- WG3
- WG4



Action Parties



Non Cost
 Near Neig.Coun.
 Parties



Grant Holder:

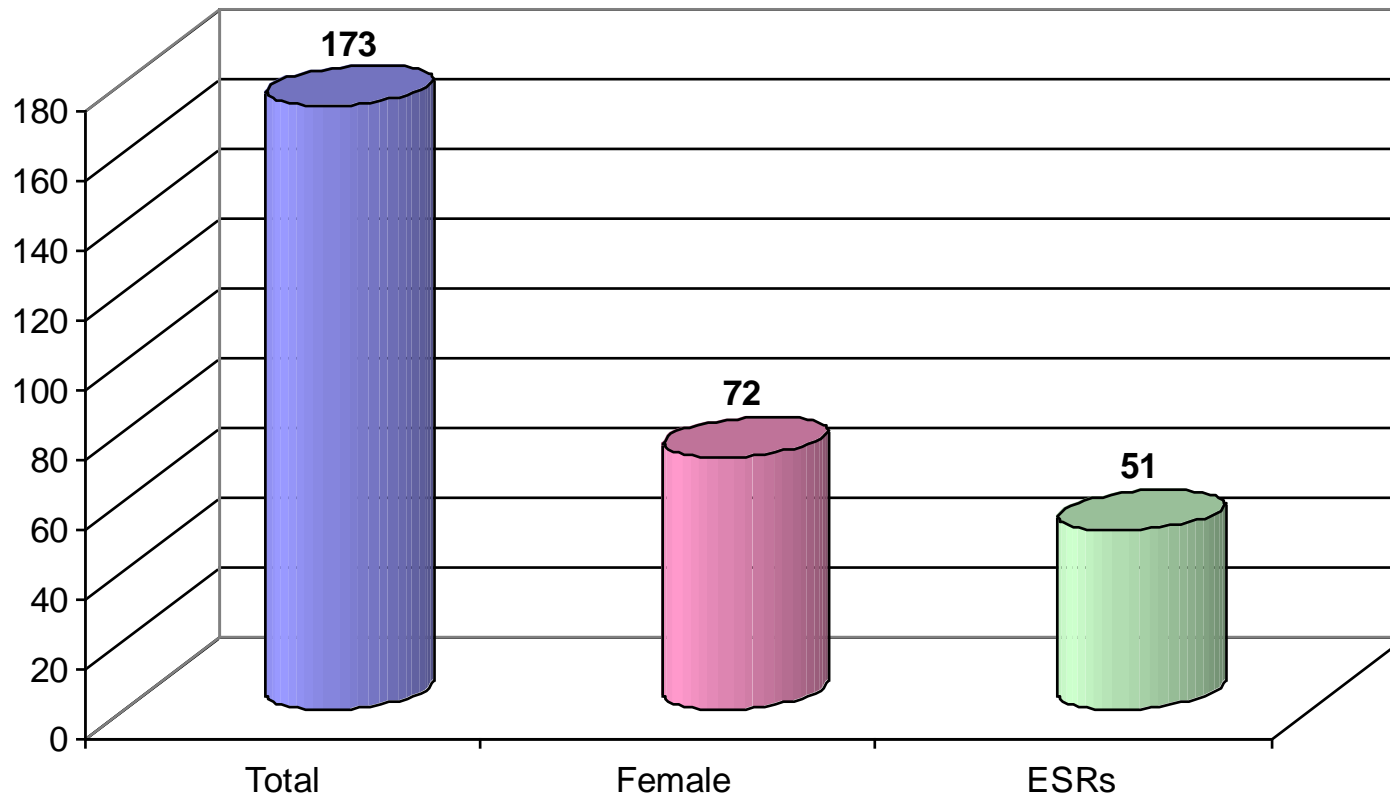
University of Fribourg

Scientific Representative:

Prof. Guido Vergauwen

Country: Switzerland

SMARTER participants



Female = 42% - ESRs = 29%

Use of COST Instruments



| SMARTER - YEAR 1 | |
|----------------------------------|--------------------|
| Activity | No. |
| MC Meetings | 1 |
| Core Group Meetings | 2 |
| Working Group Meetings (all WGs) | 1 |
| WG Meetings (specific WG) | 2 |
| Special Meetings | 1 |
| STSMs | 6 |
| Training Schools | 0 |
| Workshops or Conferences | 0 |
| Joint Publications | 12 (+ 4 abstracts) |

Results vs. Objectives

Main Results

- ✓ Internal and public Action website created
- ✓ Action information disseminated
- ✓ Scientific program of WG developed

Main Scientific Achievements

- ✓ Extension of the Network to other countries
- ✓ Collection of information about current status and management of *Ambrosia* in each country
- ✓ New iPhone App, developed for data collection on *Ambrosia*
- ✓ Protocols for the data collection of *Ambrosia* population dynamics
- ✓ Production of an impressive number of publications that acknowledge COST-SMARTER

Added value of networking

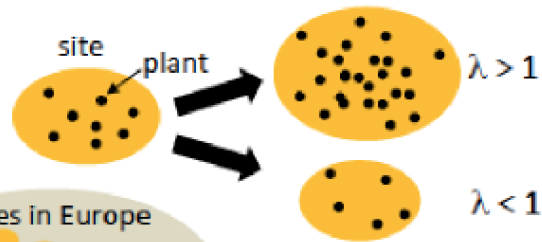
- ✓ Connections with all major European initiatives related to the Action topic
- ✓ Development of an integrated approach that combines field experiments with models
- ✓ Strong increase of the number of national (20) and international (2) projects on the topic submitted and approved since the beginning of the Action
- ✓ Interdisciplinary collaboration (e.g. *Ophraella* Task Force)



Significant Highlights in Science or Networking (1/2)

Start of a large-scale field campaign to find the Achilles' heel in the population dynamics of ragweed

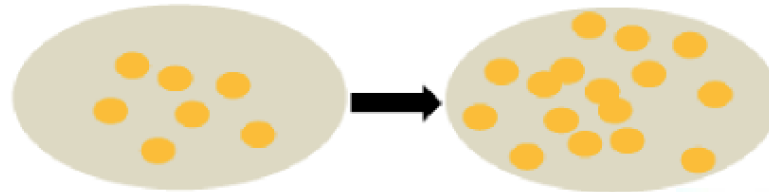
- population growth...



- distribution...



- spread...



... across different

- habitat types
- regions / climates (current and future)



Significant Highlights in Science or Networking (2/2)

WEED RESEARCH

PRIORITY PAPER

Ophraella communa, the ragweed leaf beetle, has successfully landed in Europe: fortunate coincidence or threat?

The SMARTER Ambrosia Reporter can also be used to report *Ophraella* occurrences



Challenges

- Administrative challenges in relation to changes in procedures and reporting during the Action
- The diversity of the scientific challenges in relation to ragweed management
- Lack of scientific funding that relates to ragweed and main SMARTER objectives from a number of countries.
- Reconcile stakeholder interests and activities

