



Schweizerische Eidgenossenschaft  
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Federal Department of Economic Affairs,  
Education and Research EAER

Agroscope

## **R4D Proposed project:**

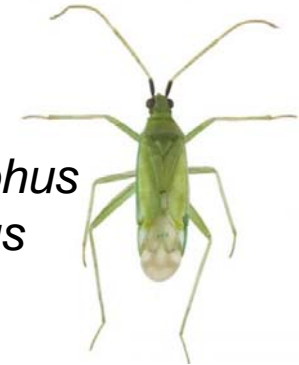
# **Sustainable management of arthropods in African vegetable production systems: *Fighting old foes and facing the challenge of a new invasive pest***

**Jana Collatz, Jörg Romeis**

November 26<sup>th</sup>, Addis Ababa

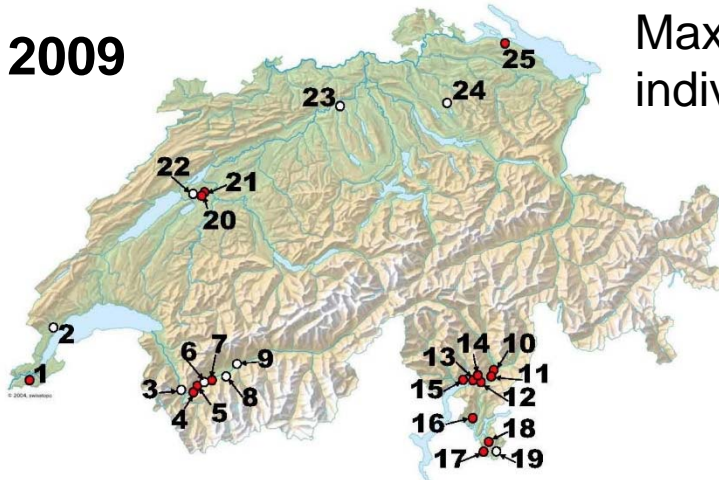


# Tuta absoluta in Switzerland



*Macrolophus pygmaeus*

2009

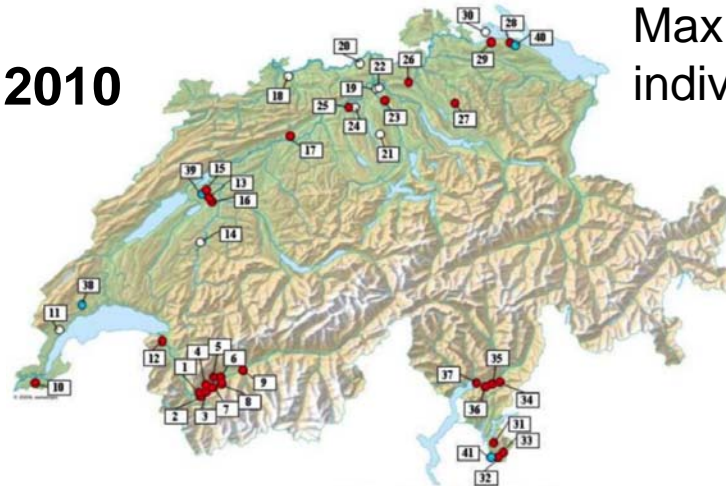


Max 490  
indiv./trap

2009

First detection with pheromone traps by Agroscope researchers

2010



Max 1400  
indiv./trap

2010

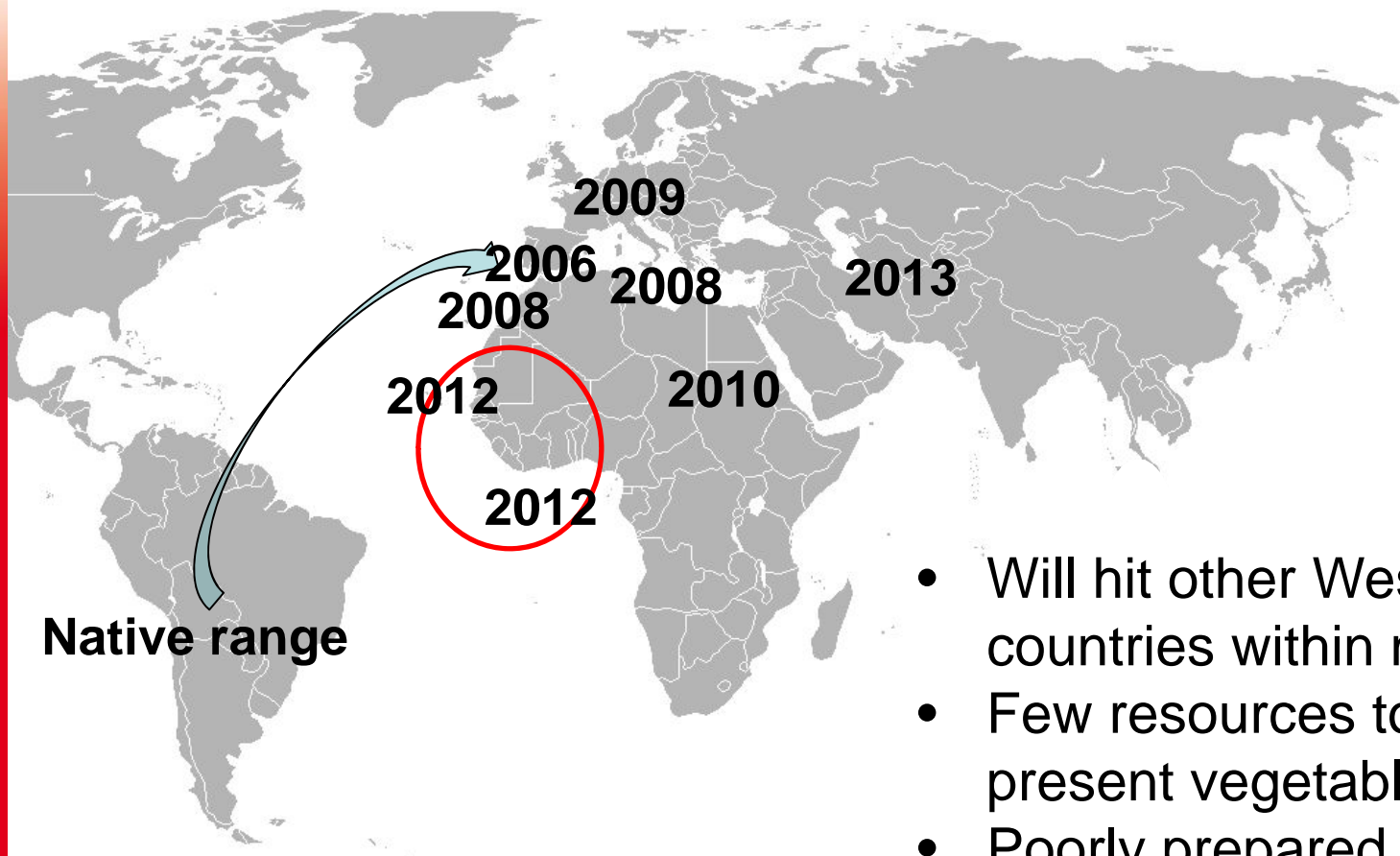
Higher numbers and resulting concern

2013

Damage much lower than expected due to cultural praxis and use of natural enemy



# *Tuta absoluta* - A global problem



Native range

- Will hit other West African countries within next years
- Few resources to combat present vegetable pests
- Poorly prepared for the new invasive



# Research in a global perspective: R4D

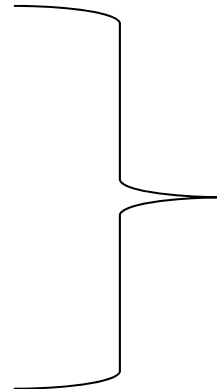


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FONDS NATIONAL SUISSE  
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SWISS NATIONAL SCIENCE FOUNDATION



Swiss Programme for Research  
on Global Issues for Development

Supports relevant research for development aimed at solving global problems and alleviating poverty

**Specific goal:** Employing agro-ecological approaches to sustainably intensify agricultural production



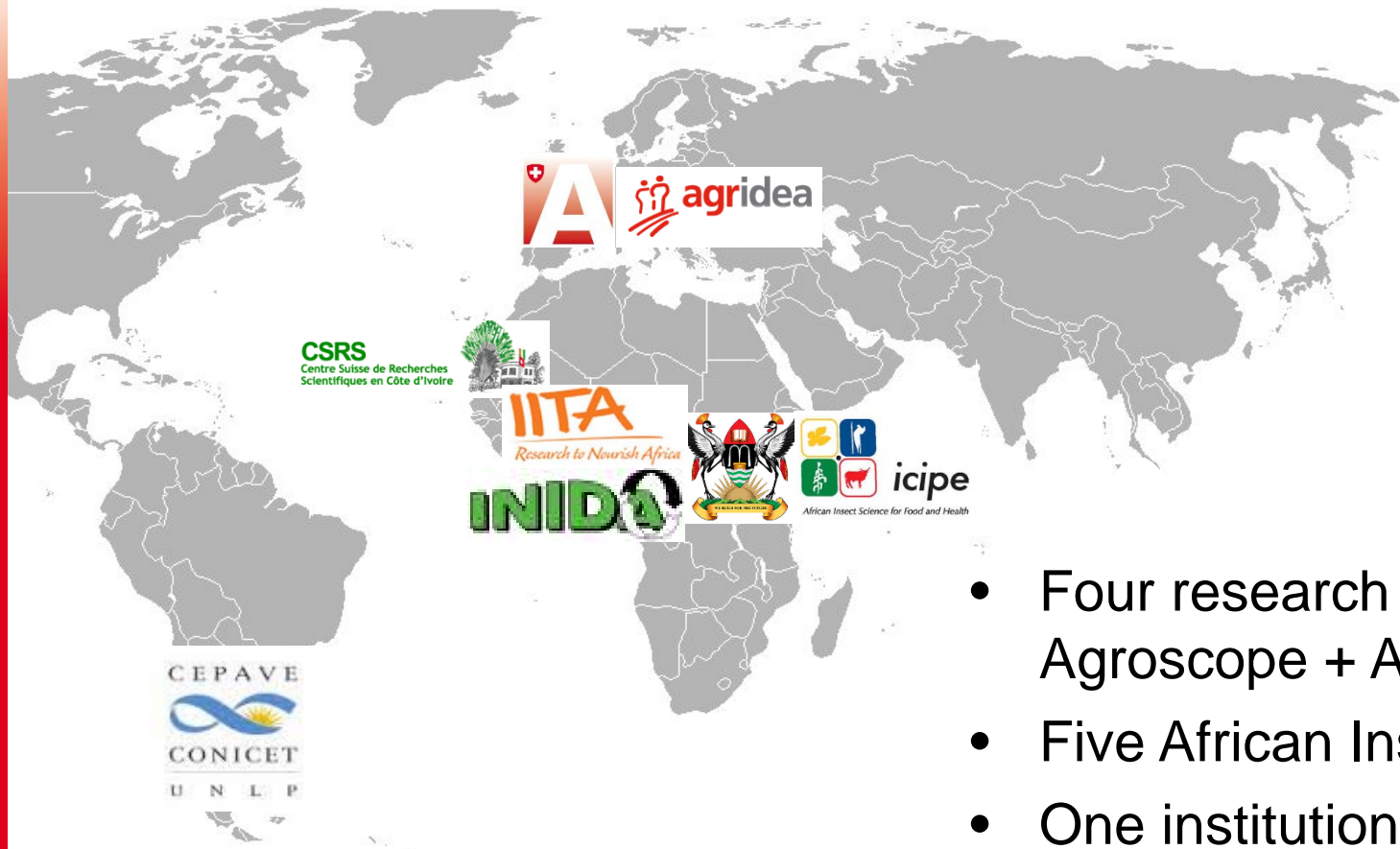
# Contents of the proposal

- **Acquire baseline data on:**
  - farmer's situation
  - key pests and their current management
  - *T. absoluta* invasion
- **Agroecosystem assessment to:**
  - predict range of *T. absoluta* invasion
  - evaluate options for habitat management
- **Develop specific control options:**
  - Classical Biological Control
  - (Bio)-pesticides
  - Post control surveys

} Accompanied by biosafety assessments
- **Implementation by:**
  - Dissemination
  - Monitoring acceptance and socioeconomic impacts
  - Capacity building



# Participating institutions



- Four research groups from Agroscope + AGRIDEA
- Five African Institutions
- One institution in the native range of *T. absoluta*



# Thank you for your attention



**ART – Research for  
Agriculture and Nature**