Invasive Alien Species in EU countries

International Workshop

6-8 October 2009,
Hotel Mercure Budapest Korona

Dr. János Molnár

International Workshop

- Invasive Alien Species – Plant health aspects
  - EU countries experiences
- Common Ragweed (*Ambrosia artemisiifolia* L.)
  - Morphology, biology
  - Distribution, monitoring
  - Allergy to pollen
  - Control and legal regulation
- Western Corn Rootworm (*Diabrotica virgifera virgifera* LeConte)
  - Hungarian experiences

Invasive Alien Species

- 14 EU countries + EPPO
- 26 foreign + 14 local = total 40 experts
- 20 Ambrosia + 10 Diabrotica = 30 presentations
- 20 foreign + 10 local = 30 presentations
- Opening: Dr. Gellért Gólya, HU PP inspector
- Ambrosia Session Moderator: Michael Kurzweil
- Diabrotica Session Moderator: Lajos Szabó
- Round Table Moderator: Jens-Georg Unger

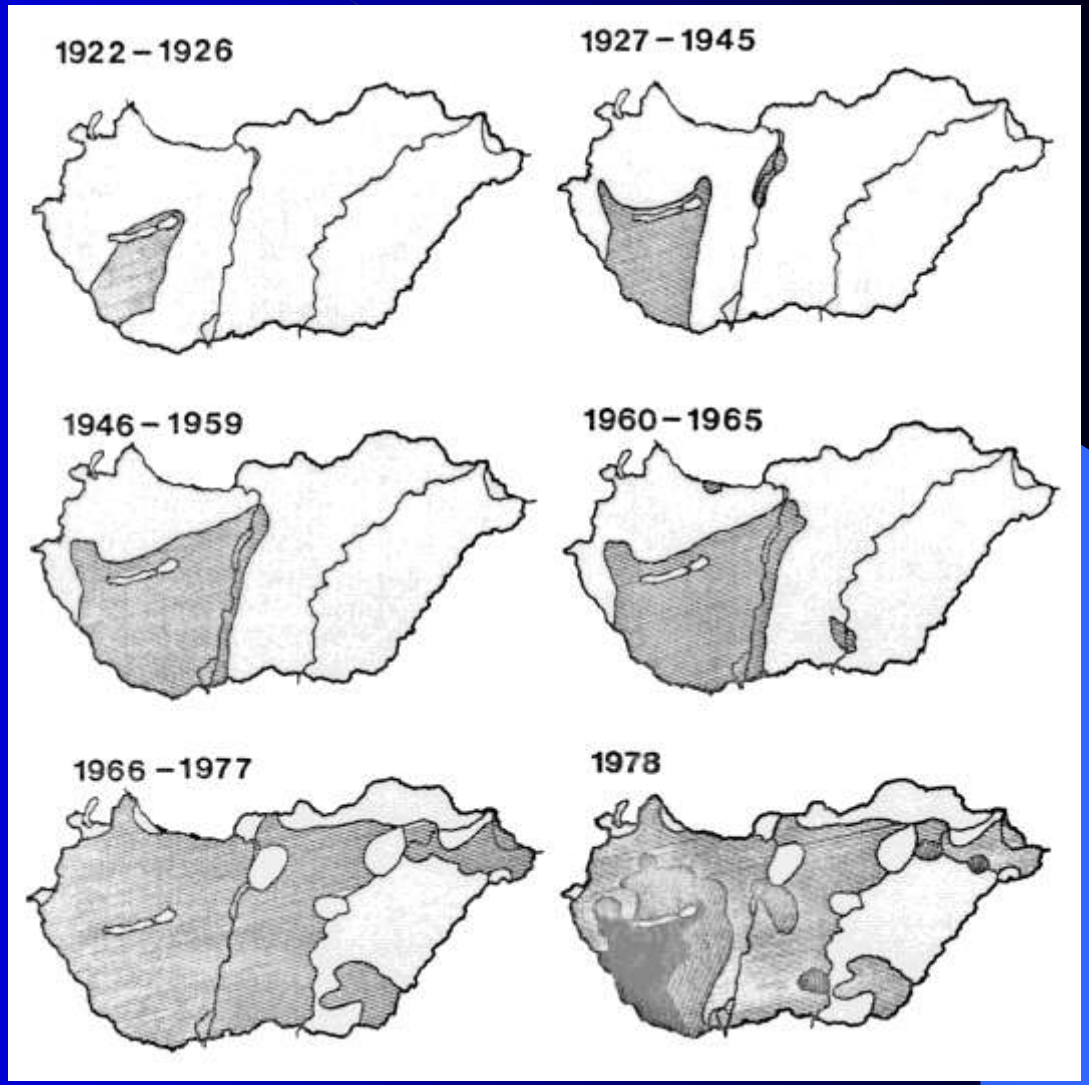
Interactive meeting

- Hungarian Agmin, PP Dept – admin workers
- Interactive – participants active involvment
  - 10’ presentation + 5’ discussion
  - Ambrosia + Diabrotica session
  - field visit – Ambrosia: field, fruit, buildings
  - brainstorming: surprising but realistic
  - roundtable: conclusions and proposals
  - Docs: PP presentations, publication made from summaries, conclusions and proposals
  - Access to docs: Website of Agmin, Hungary

Outcomes of the Workshop

- Milestone to Ambrosia & Diabrotica control
- Compass helping to find the right way
- Invasive Alien Species => EU priorities in 11?
- Preparation to Hungarian EU Presidency

Ambrosia distribution in Hungary



Ambrosia in Cereals

Ambrosia in Stubble

Ambrosia in Maize

Ambrosia in sunflowers

Heavy Ambrosia infestation

Protection

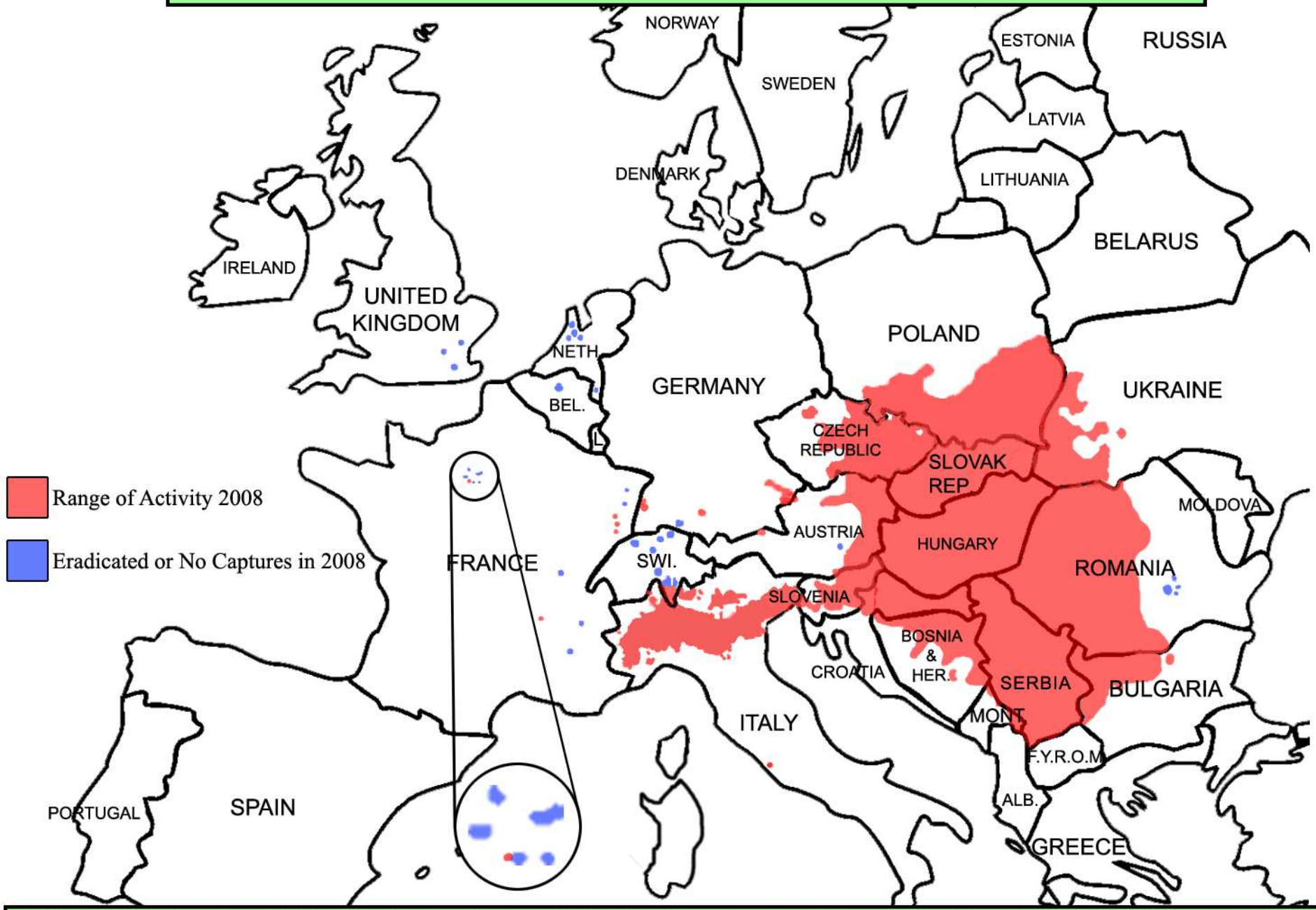
- After 4-5 years *A. artemisiifolia* populations can be considerably reduced with the application of the integrated weed management methods *(chemical, agrotechnical, mechanical, biological)*
- The main propose:

  To reduce *Ambrosia* seeds in the soil seed bank

  To prevent its flowering and seed ripening

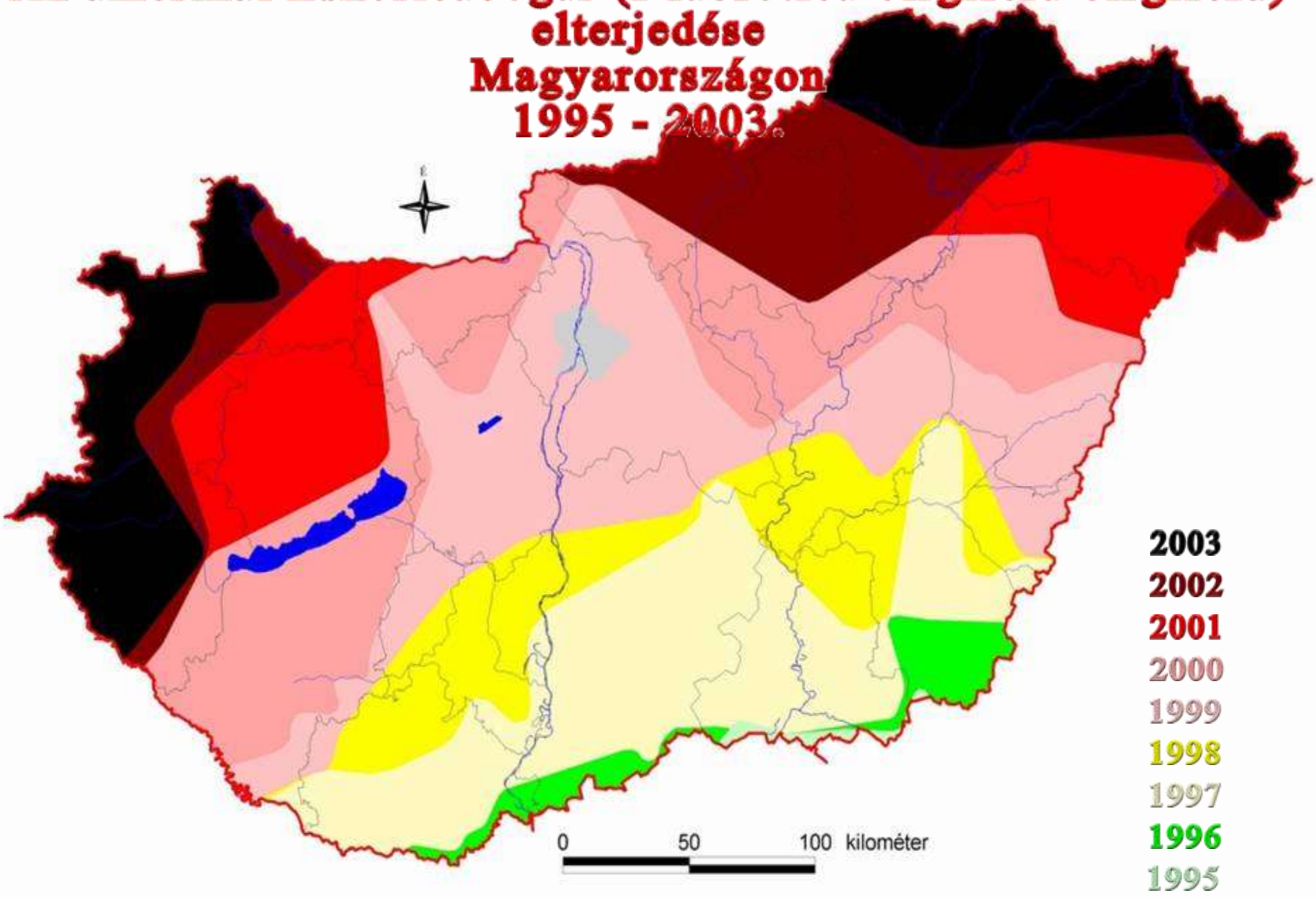
Infested sites (agricultural crops, ruderals, natural conservation areas, along the roads, districts of towns) determine the technologies

Diabrotica virgifera virgifera LeConte in Europe 2008



IWGO by C.R. Edwards and J. Kiss, based on data from Baufeld, Bažok, Bertossa, Boriani, Cean, Cobos, Cota, Eyre, Furlan, Grabenweger, Ivanova,

Az amerikai kukoricabogár (Diabrotica virgifera virgifera) elterjedése Magyarországon 1995 - 2003.



Possibilities of the control measures

- **Larval control**
  -Crop rotation
  -Soil treatment
    ⇒ at sowing (planting)
    ⇒ postemergence (in crop)
  -Seed treatment
- **Adult control**
  - Foliar spray
    ⇒ aerial application
    ⇒ high clearance tractor

Crop rotation

- It is required by the low (7/2001 (I. 17.) FVM): on field where the presence of *Diabrotica* larvae is detected the corn growing is prohibited in the next year

Main advantages:

- The most effective control
- Environment friendly – no pesticide use
- Economical

Main disadvantage:

- Corn is the most profitable field crop in Hungary

Acknowledgements:

- I express my sincere thanks to:
  - Dr. Gabriella Kazinczi for Ambrosia slides
  - Dr. Géza Ripka for Diabrotica slides

Thank You for the attention!