Phytoplasma research in The Netherlands

Pest Risk Assessment

Diagnostics

Plant Protection Service of The Netherlands

A. Roenhorst & K. Verhoeven

Diagnostics

Dutch Inspection Service for Horticulture

E. Meekes
Phytoplasma research in The Netherlands

K. Pham & M. de Kock
• Focus on Flower bulbs, Nursery stock plants and Fruit
• sheet 3 and 4

Research

A.Dullemans & M.Verbeek
• Determination of the vector for apple proliferation phytoplasma in The Netherlands.
• Detection of phytoplasmas in Strawberry.
Phytoplasma research at WUR-APR

- **Pear Decline**
  - Tritrophic interaction *Pyrus* ↔ psylids ↔ phytoplasma
  - Resistance/tolerance of cultivars, interstocks and rootstocks
  - Location of phytoplasma (in *Pyrus*) during Dutch annual seasons
  - Optimization of sampling and diagnostics

- **Sr16-l infections in hyacinth, gladiolus, hortensia, primula and scilla**
  - Symptom description
  - Molecular diagnostics
Phytoplasma research at WUR-APR

- Recent years increased disease incidence 16Sr-I
  - Climate change?
  - New vectors or increase survival rate during mild winter?
  - High risk production fields are identified

- Activities 2009-2010
  - Cicadellidae monitoring
  - Morphological determination
    - *Macrosteles sexnotatus* present
    - Several putative vector species identified
  - COI sequencing
  - Molecular detection phytoplasma in vector
  - Screening of alternative hosts (trees, boscage)