Phytoplasma research in The Netherlands

Pest Risk Assessment Diagnostics



and food quality

Plant Protection Service of The Netherlands

A. Roenhorst & <u>K. Verhoeven</u>

Diagnostics



Dutch Inspection Service for Horticulture

E. Meekes



Phytoplasma research in The Netherlands



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

Research



<u>A.Dullemans</u> & 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-I infections in hyacinth, gladiolus, hortensia, primula and scilla
 - Symptom description
 - Molecular diagnostics







Phytoplasma research at WUR-APR

- Recent years increased disease incidence 16Sr-l
 - 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)



