

# Presentations

- *P. infestans* and *P. andina* in the Andes
- Late blight in Heilongjiang province China
- Diversity of Vnt1 and Smira1 effector in Polish and Norwegian Pi populations
- Selection for fungicide tolerance in Sweden, indications for selection of resistance (*sensu lato*) under high dose rates
- Resistance to LB fixed in hybrid clones in Russia
- Effect of fungicides on local Pi populations in Ireland
- Fungicide sensitivity of EU Pi from IPMBlight2.0
- Monitoring sensitivity to CAA, Qil and fluazinam in France

# Pathogen and host resistance

- Collaboration between networks:
  - Harmonisation of protocols
  - Integration and sharing of data and results
    - Access to data and toolbox, IP and data ownership
    - USA Blight data will become available in Euroblight database
    - Publish reference dataset → public use
    - Euroblight hackathon?
    - Availability of data for local analysis for local use of PoppR

# Pathogen and host resistance

- **2017 Monitoring**

- We will continue!
- No major changes, prices may go up
- Increase input from other regions  
small budget necessary → many results
  
- Take monitoring on board in national projects
- Repository of standardized protocols
- Phenotyping!
  
- Europe, increase geographic coverage
- South America
- Asia
  - Breeding companies active in these new markets
  - Personal contacts with clients
  - Crowd sourcing
- USA
- Africa
- Sampling strategy:
  - What are we interested in?
    - General population for practical purposes  
(framers/breerders/Agchem companies)
    - Trap nurseries → rare events/Pi
    - Consensus on “few samples from many fields”.

# Pathogen and host resistance

- New Initiatives:
  - Publication of results
    - Highly necessary!
    - Bits and pieces have been published
    - A book? “The story of Euroblight”
    - Special issue  
EAPR journals Potato Research, PAA, Am. Journal of potato research
    - What data to include? 4 years of EU sampling?
    - Rise and fall of clones, sexual populations, ...
    - (Selection) Pressure needed ..
    - Euroblight session at ICPP 2018

# Pathogen and host resistance

- IPMBlight2.0
  - Geo referenced database on virulence based on trap nurseries linked to pathogen database
  - Updated diff set: R0, R1-R11 + commercially available resistant cultivars.
  - Difficult to export to other continents
  - How to implement results in DSS
  - How much variation for virulence within Pi clones
  - Quantitative resistance versus R gene based resistance
  - Agronomic measures (mixtures) to slow down epidemic development

# Pathogen and host resistance

- Euroblight statement:
  - Stewardship of host resistance
  - Monitoring of host resistance levels
  - Matched with information on pathogen population