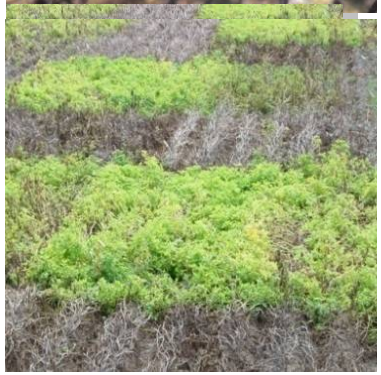
EuroBlight
A potato late blight network for Europe

Early blight subgroup



activities

18 different “lab protocols” –

+ qPCR

+ Artificial inoculation

+ Long-Term Storage

+ Growth and conidia production

+ Isolation

+ Characterization of Cytb mutations

activities

18 different “lab protocols” - **update**

+ qPCR

+ Artificial inoculation

+ Long-Term Storage

+ Growth and conidia production

+ Isolation

+ Characterization of Cytb mutations

+ **Characterization of SDHI mutation**

activities

- protocols: download EUROBLIGHT homepage

EuroBlight
A potato late blight network for Europe

Home
EuroBlight workshop 10-13 May, 2015
About EuroBlight
Pathogen characteristics and host resistance
Control strategies
Alternaria
What are the problems?
Alternaria Subgroup - organisation and activities
Protocols
Publications
Late blight Survey Mapper
News
Workshop proceedings 1996-2013

You are here: EuroBlight » Alternaria » **Protocols**

PROTOCOLS

The first early blight subgroup meeting brought together 19 Euroblight members on 19-20 march at Freising, Germany. Over the two days EB field experiments and fungicide ratings were discussed along with increasing problems associated with losses in fungicide sensitivity. In order to improve and standardize the monitoring and diagnostics of EB relevant species lab protocols for testing and comparison are now available on the EuroBlight website. Protocols collated by the Alternaria sub-group is organized according to different topics and they will be further elaborated and new ones will appear whenever appropriate.

Protocol title	Contact person	Download
qPCR		
Qualitative PCR diagnostics of *A. solani* and *A. alternata*	Andrea Volz, a.backhaus@wzw.tum.de; Jürgen Leiminger, juergen.leiminger@lfl.bayern.de Lehrstuhl für Phytopathologie, Wissenschaftszentrum Weihenstephan Emil-Ramann-Str. 2 85354-Freising	June 2014 Download
Artificial inoculation		

activities

→ Decimal rating of EB fungicides

update of the harmonised protocol for testing eb fungicides

Protocol lay-out

+ Susceptible variety

+ Control PLB with a.i. not effective on EB

+ Randomized block design, including an eb untreated plot

+ Untreated is part of the field experiment (spreader ~~/ plot)~~

+ Preferably natural infection,
however inoculation with infested grain kernels is permitted

+ Misting is permissible

+ Yield is not required

~~+ Reference treatments~~
~~Mancozeb weekly from approx. begin flowering~~
~~Mancozeb every 14 days from flowering~~

+ Spray frequency is every 7 days (+/- 1 day) or every 14 days (+/- 1 day), to be chosen by the participants. The efficacy of the EB fungicide is compared to one of the two reference treatments accordingly.

+ Dose rate is highest dose registered in Europe

+ First spray 6-8 weeks after crop emergence or when the first symptoms appear

+ Assessment: every week by rating the % infected leaf area,
as long as possible (EPPO-guideline PP 1/263 (1)).

+ Calculation of ratings
Calculation comparable to late blight calc., reference is the eb untreated control = 0
0-5 scale
Two categories (7 days interval, 14 days interval)

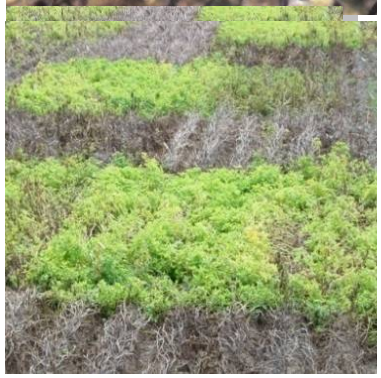
future activities

- IPM to control EB

IPM to control eb (check the yield loss of eb)

- Cultivar resistance (maturity group)
- Healthy seed tuber
- Crop rotation
- Controlling weeds and volunteer potatoes
- Nutrition deficiency (Nitrogen, …..)
- Fertilization (Calcium cyanamide→ soil born inoc.)
- Reduction of biotic and abiotic stress

  (e.g. Aphids, drought, ….)
- Diagnostic
- DSS
- biologicals
- Chemical application



fungicide application to control eb

in progress

- Use of fungicides according to FRAC
- (Alternating)
- Anti-resistance strategy (QoI, SDHI and DMI)
    - limit the number of application
    - dosage
- Use also multi-site fungicides

activities

- subgroup meeting 09 May 2016 in Amsterdam, NL

- 31 participants
- 11 presentations

activities

subgroup meeting 09 May 2016

Neil Gudmestad: Current Status of QoI and SDHI Mutations in *Alternaria* Species in the United States

Birgit Adolf & Hans Hausladen: Results of the F129L Monitoring 2015 in Germany, Austria and Poland

Alison Lee: Results of the Monitoring in UK

Bent Nielsen & Annemarie Fejer Justesen: Monitoring data (F129L – *A. solani*) from Denmark

Bert Evenhuis: Results of the Monitoring in NL

Sofie Landschoot (Ugent), et al.: Fungicide sensitivity, QoI and SDHI resistance in the Belgian *Alternaria* population

Erland Liljeroth: sensitivity tests in *A. solani* and field efficacy data from Sweden

Birgit Adolf & Hans Hausladen: SDHI resistance in Germany

Kwesi Abuley: Varietal Resistance Classification & Control with Forecasting models

Bert Evenhuis: Results Alternaria-EUROBLIGHT trials 2015

Hans Hausladen: Discussion Alternaria EUROBLIGHT trials 2016 and EUROBLIGHT EB Project 2016

activities

- subgroup meeting 09 May 2016 in Amsterdam, NL

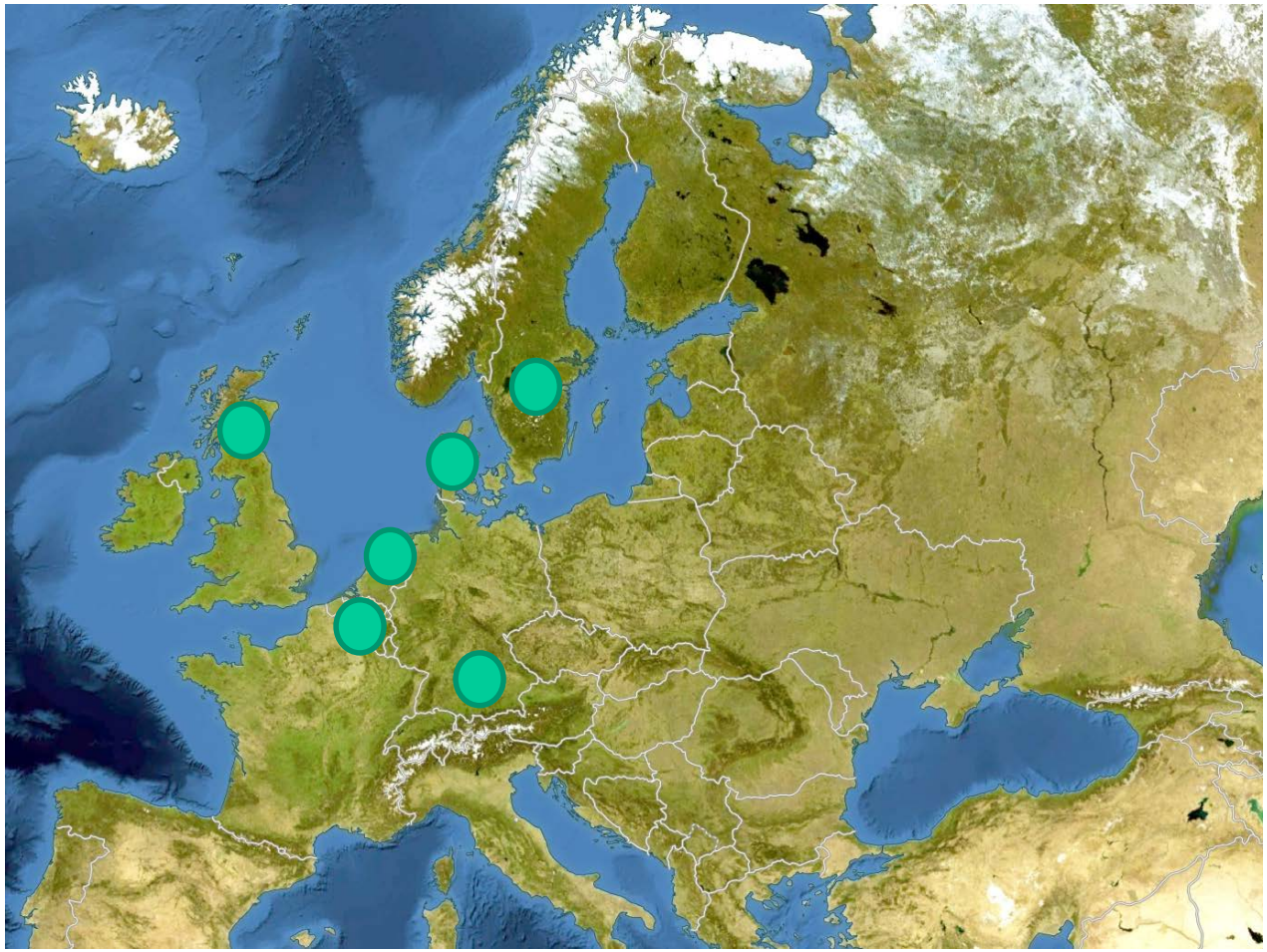
- 31 participants
- 11 presentations online: www.euroblight.net

EuroBlight
A potato late blight network for Europe

activities

- Monitoring F129L mutation in *A. solani* in Europe 2015 and 2016

Activities: lab involved in the F129L Monitoring



6 labs:

Alison: UK

Erland: Sweden, Norway, Finnland

Bent: Denmark, Estonia, Lithuania,

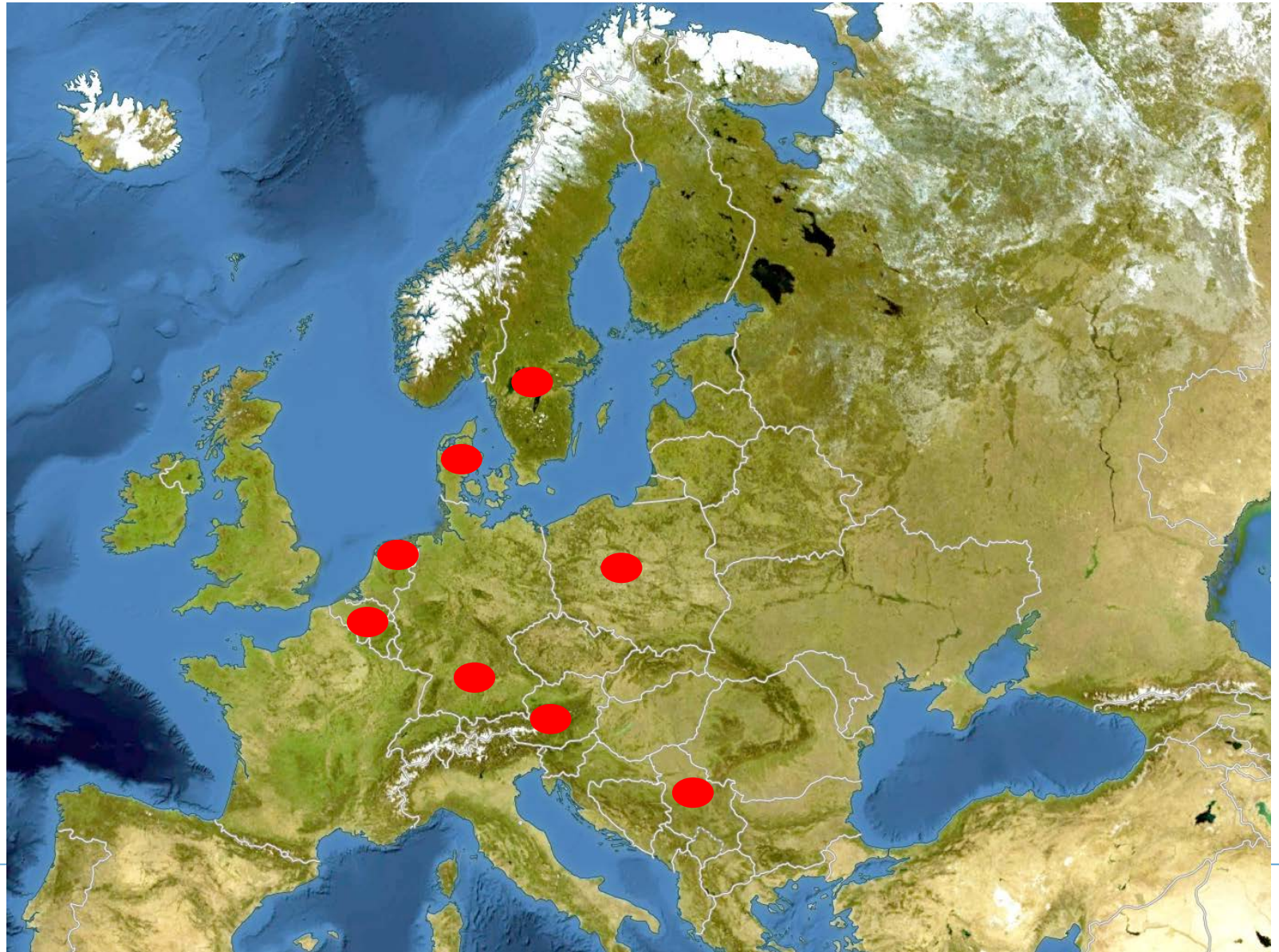
Bert: Niederland, Russia

Pieter: Belgium, France

Birgit: Germany, Austria, Poland

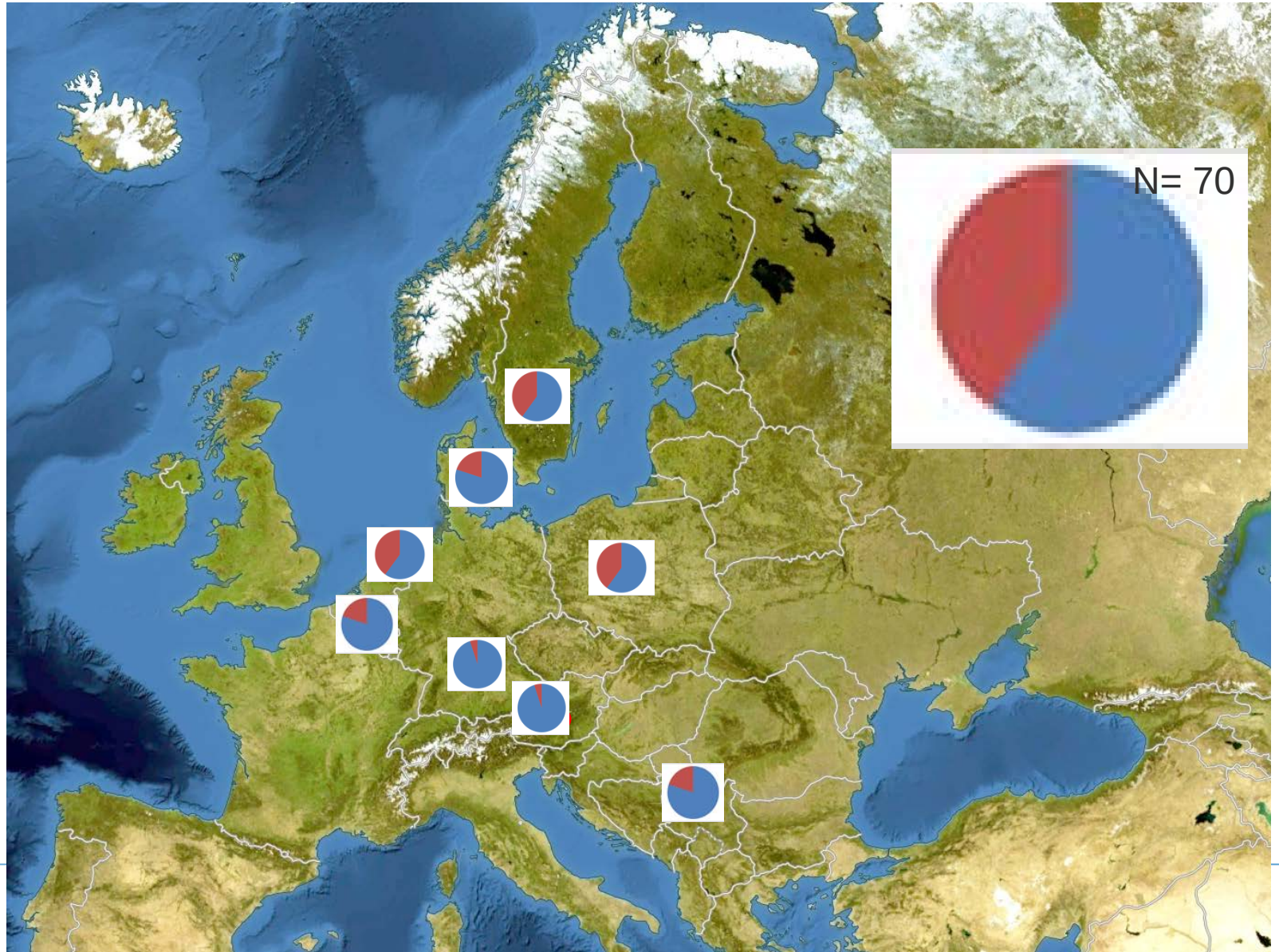
occurence of F129L isolates

F129L



occurence of F129L isolates

2016



future activities

- publication of the monitoring data QoI F129L 2015-2016

“Prevalence of QoI Resistance in European *Alternaria solani* population”

future activities

- 2017: Monitoring SDHI mutation in A. solani in Europe

EuroBlight
A potato late blight network for Europe

Thanks to

Early blight subgroup