Outlook from the pathogen and host characterisation session Updated from Arras outlook

4 presentations

- **Simon White** Case for focus on resistance as a management tool based on success of Sarpo germplasm and varieties discussion of the reliability of current 'official' blight resistance scores and need for these to be reliable. Also of use of a resistance score of fungicide protected crop.
- Roselyne Corbière P. infestans popn in Algeria, increase of A2, metalaxyl resistant strains but A1 types still present SSR analysis suggest 13 present. Differences in temp. sensitivity on agar lead to discussion of this.
- Steven Kildea displacement of previous A1 lineages from Ireland by 13_A2 and also 6_A1. Discussion of the origins of this new popn seed
- **Lina Grönberg** Stratified sampling of Nordic P. infestans popn. With much diversity observed. Lead to discussion of the differences in aetiology of disease and the practical differences differences to Nordic growers in responding to the population. (no obvious host r failures or issues with fungicides. Could other areas have images/descriptions of typical late blight outbreaks from this source?

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- Expand the EucaBlight database beyond Europe.
- This was requested at the GILB conference in Beijing, April 2009. The database and P.exe are ready to be used by countries outside Europe after minor adaptations. P.exe is currently being used in CIP, both in Peru and Ecuador.
- Update: ongoing US applications; data coming from Argentina and Chile; see previous discussions re Chinablight/Latinblight
- Define and make a combined set of SSR markers available (David Cooke, SCRI and Theo van der Lee, WUR) write a protocol for use of reference isolates and for calibration of equipment and methods between labs (worldwide).
- Standardised protocol to be uploaded to euroblight website following meeting with PRI in June; deadline July 2010 (David Cooke)

Continued

- We need a facility to identify a genotype and search for it in the database.
- We have implemented a specific search for the Blue 13_A2 genotype, but this is only available after login. A generic search feature has to be developed.
- Diagnostic alleles, link allele combinations, convert to nomenclature (EU-13), look at prevalence. Profile of 13 A2 on the web for comparison

 David will upload profiles of most common genotypes as excel and Pdf versions by end May. Possibility for searching genotype characteristics in DB?
- Include maps for local spatial analysis and analysis of changes over countries and years
 Maps generated in stem rust work can be used to display isolate/region/country views
- Linking phenotype to genotype tool does not currently exist, but could be there, relies on entry of all available data

- Standard methods for generating temperature sensitivity data required
- Aggressiveness data (Nordic, UK and France) discussion
- Host resistance data (update status re contact person and links with GILB
- 500+ effector genes to screen should we harmonise to a sub-set few to provide wide geographic coverage or spread the load and compare notes later? How to decide which ones impt? Need to talk more to the molecular breeders.
- P.exe user group meeting to agree how to progress with data entry