



# Pathology Section Meeting 2010 Potato Pests and Diseases: Old Enemies, New Threats

Carlow, 13<sup>th</sup> - 16<sup>th</sup> September

jointly organised by



and incorporating the Autumn Scientific Meeting of the  
Society of Irish Plant Pathologists



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# Programme

Only the presenting author is named below (full details of all authors and affiliations will appear in the Proceedings).

## Monday 13<sup>th</sup> September

Arrival and Registration

**19.00**            *Opening Reception*

## Tuesday 14<sup>th</sup> September

09.00–09:10    Welcome: Steven Kildea

### **Session 1: Potato late blight**

**Chairperson: Denis Griffin**

09.10-09.30    *Potato Genome Sequencing and its potential for resistance breeding in potato*  
Dan Milbourne, Teagasc, Ireland

09.30-09.50    *Assisting in the fight against Phytophthora infestans: gene transfer into Solanum tuberosum via Rhizobium spp.*  
Ewen Mullins, Teagasc, Ireland

09.50-10.10    *The potato blight population in Ireland*  
Steven Kildea, Teagasc, Ireland

10.10-10.30    *Aggressiveness of isolates of newly emerging genotypes of Phytophthora infestans in Ireland*  
Moses Nyongesa, Teagasc, Ireland

### **10.30-11.00**    *Coffee break*

11.00-11.20    *Recent changes in Nordic potato diseases and pathogens*  
Asko Hannukkala, MTT, Finland

11.20-11.40    *Characterization of Phytophthora infestans populations in North America from the 2009 late blight epidemic*  
Ken Deahl, USDA-ARS, PSI, USA

11.40-12.00    *Impact of changes in the GB late blight population on the resistance of potato cultivars to foliar late blight*  
Stuart Carnegie, SASA, Scotland, UK

12.00-12.20    *Response of Sárpo and other varieties of potato to new strains of late-blight, Phytophthora infestans*  
Dave Shaw, Sárvári Research Trust, Wales, UK

12.20-12.40    *Evaluation of late blight control in potato cultivars for reduced input production in Northern Ireland*  
Louise Cooke, AFBI Belfast, UK

**12.40-14.00**    *Lunch; Registration for Society of Irish Plant Pathologists' members*

### **Session 2: Invited papers**

**Chairperson: Louise Cooke**

14.00-14.30    *The importance of phytosanitary controls for sustainable potato production*  
Lars Christoffersen, Head of Sector (Plant Health), Food and Veterinary Office, European Commission

14.30-15.00    *Emerging nematode threats*  
Colin Fleming, AFBI Belfast, UK

15.00-15.30 *New variants of Dickeya and Pectobacterium causing increasing problems with blackleg*  
Jan van der Wolf, PRI, The Netherlands

**15.30-16.00** *Tea break*

### **Session 3: Bacterial potato diseases**

**Chairperson: Jan van der Wolf**

16.00-16.20 *Monitoring Dickeya spp. in potato seed tubers and the association between seed infection and disease incidence in the field under warm climate conditions*  
Leah Tsrur, Agricultural Research Organization, Gilat Research Center, Israel

16.20-16.40 *Population dynamics of Streptomyces species in relation to common scab incidence and severity in potato crops*  
John Elphinstone, FERA, UK

16.40-17.00 *Field survey and monitoring of Dickeya and Pectobacterium spp. in Northern Ireland*  
Gillian Young, AFBI Belfast, UK

**19.00-late** *Conference Dinner, Seven Oaks Hotel*

### **Wednesday 15<sup>th</sup> September**

### **Session 4: Fungal potato diseases**

**Chairperson: Stuart Carnegie**

09.10-09.30 *Fusarium graminearum as a potato dry rot pathogen*  
Gary Secor, Department of Plant Pathology, North Dakota State University, USA

09.30-09.50 *Alternaria and Alternaria-like lesions on potato crops in the Netherlands in 2009*  
Lod Turkensteen/Jan Spoelder, Hilbrands Laboratory for Soil diseases, The Netherlands

09.50-10.10 *Sensitivity of Alternaria solani populations in Idaho to commonly used fungicides and its effect on potato early blight management in Idaho*  
Phillip Wharton, Department of Plant, Soil and Entomological Sciences, University of Idaho, USA

10.10-10.30 *Genetic diversity and population biology of Colletotrichum coccodes in the United States using amplified fragment length polymorphism analysis*  
Neil Gudmestad, Department of Plant Pathology, North Dakota State University, USA

**10.30-11.00** *Coffee break*

### **Session 4: Fungal potato diseases cont'd**

11.00-11.20 *Blemish diseases on potato - inoculum source, importance and control*  
Leah Tsrur, Agricultural Research Organization, Gilat Research Center, Israel

11.20-11.40 *Real-Time PCR, a risk management tool for skin spot in potato*  
Glyn Harper, Potato Council, UK

11.40-12.00 *Effect of Rhizoctonia solani inoculum from soil and from seed tubers on the quality of harvested tubers: controlling disease by seed and soil treatment*  
Serge Duvauchelle, Laboratory of Phytopathology de Loos -en-Gohelle, France

12.00-12.20 *Spatial distribution of soil-borne pathogens to inform disease risk prediction*  
Jeff Peters, FERA, UK

12.20-13.00 **Poster Session**

13.00-14.15 **Lunch, departure of Society of Irish Plant Pathologist members**

14.15 **Excursion**

Visits to Oak Park Research Centre and VISUAL Centre for Contemporary Art followed by dinner at the Sha Roe Restaurant in the village of Clonegal

### **Thursday 16<sup>th</sup> September**

9.00-10.00 **Poster Session**

Further opportunity to view posters and hold discussions

#### **Session 5: Potato pests**

**Chairperson: Dan Milbourne**

10.00-10.20 *Flea beetles in Portugal, damages on potato tubers: old or new enemies? New threats for sure!*

Catherine Chatot, Germicopa, Quimper, France

10.20-10.40 *Development of diagnostic genetic markers for resistance to *Globodera pallida* in cultivated potato*

Denis Griffin, Teagasc, Ireland

12.30 **Conference close and Lunch**

## Posters

1. *Occurrence of stem blight caused by latent infections of seed tubers with *Phytophthora infestans* (Mont.) de Bary*  
M. Zellner *et al.*, Bavarian State Research Centre for Agriculture, Freising, Germany
2. *Development of real time quantitative PCR assays for detection and identification of *Dickeya* species pathogenic to potato*  
J.G. Elphinstone *et al.*, FERA, UK
3. *Biofumigation for controlling *Streptomyces* spp. and *Rhizoctonia solani* of potatoes and factors that impact its effectiveness*  
K. Bouchek-Mechiche *et al.*, INRA, France
4. *The use of natural plant volatile compounds for the control of the potato blemish pathogens*  
P. S. Wharton *et al.*, Department of Plant, Soil and Entomological Sciences, University of Idaho, USA
5. *Search for molecular markers linked to the late blight resistance of potato cultivar *Sárpo Mira**  
I. Tomczyńska and J. Śliwka, Plant Breeding and Acclimatization Institute, Młochów Research Centre, Poland
6. *Selection of potato breeding clones resistant to potato nematode *Globodera rostochiensis* Ro1 using artificial inoculation and adaptation of molecular markers assisted selection in State Priekuļi Plant Breeding Institute, Latvia*  
G. Ūsele *et al.*, State Priekuļi Plant Breeding Institute, Latvia
7. *Incidence of skin blemish diseases in Poland*  
J.S. Kapsa *et al.*, IHAR- PIB Radzików, Department of Potato Protection & Seed Science in Bonin, Poland
8. **Phytophthora infestans* in Ireland – an evolving pathogen*  
L.R. Cooke *et al.*, AFBI Belfast, UK
9. *The current Japanese population of *Phytophthora infestans* was formed through migration from other countries and domestic mutation*  
S. Akino *et al.*, Hokkaido University, Sapporo, Japan
10. *Post-harvest development of black dot (*Colletotrichum coccodes*) on potato*  
G. Stroud *et al.*, Potato Council, UK
11. *Antioxidant activity and its relation to the content of phenolic compounds in seven varieties of potato*  
J. Valcarcel *et al.*, Teagasc Kinsealy Research Centre, Dublin, Ireland