Training School on Molecular Detection and Population Genetics of Dothistroma Needle Blight Pathogens

(COST Action FP1102)

3rd to 7th March 2014, Uppsala, Sweden

Local organizer:

Hanna Millberg, SLU, Sweden

Lecturers and demonstrators:

Jan Stenlid, SLU, Sweden

Irene Barnes, FABI, South Africa

Rein Drenkhan, EMU, Estonia

Piotrek Boron, Krakow, Poland

Ania Lenart, Krakow, Poland

Katherine Tubby, Forest Research, United Kingdom

Malin Elfstrand, SLU, Sweden

Magnus Karlsson, SLU, Sweden

Monday 3rd March 2014

Time	Group I and Group II
Whole day	Arrival of participants Accommodation: Kvarntorget vandrarhem
17.00	Meeting of Training School steering group
18.30	Welcome speech and organisational issues
	Dinner: own arrangement

Tuesday 4th March 2012

Time	Group I and II
08:00	Meet at hostel reception to catch bus to BioCenter
08:30-09:00	**Katherine Tubby** Registration of participants **Venue:** BioCenter C216
09:00-09:15	**Jan Stenlid and Irene Barnes** Welcome speech and organisational issues Introduction to lecturers and demonstrators
09:15-09:45	**Katherine Tubby** An introduction to the DIAROD COST ACTION
09:45-10:15	**Katherine Tubby** Background to DNB Symptom development of Dothistroma on different hosts
10:15-10:30	COFFEE BREAK
10:30-11:00	**Věra Tomešová** Introduction to the DNB Geo-database
11:00-12:00	**Irene Barnes** Isolation techniques Culture storage and maintenance
12:00-13:00	LUNCH @ Ultunaresturangen
13:00–17:00	Practical: Isolation of Dothistroma **All Trainers** **Venue:** BioCenter BÖL 4
17:00	Travel back to accommodation Dinner: own arrangement

Wednesday 5th March 2014

Time	Group I	Group II
8:30-9:15	**Irene Barnes** **Venue:** BioCenter C213 An overview of molecular methods used for Dothistroma species identification	
9:15-10:00	**Magnus Karlsson** **Venue:** Biocenter C213 Real time PCR	
10:00-12:00	**Practical** **Venue:** BioCenter BÖL 4 **Rein, Kalev, Piotr, Ania,** ITS PCR ITS-RFLP Mating type PCR Conventional PCR	**Theory** **Venue:** BioCenter C213 **Irene** Introduction to microsatellites Practicalities of using microsatellite markers (PCR setup, design, controls)
12:00-13:00	LUNCH @ Ultunaresturangen	
13:00-14:00	**Demonstration** **Venue:** Mykopat computer room **Malin Elfstrand** Real time PCR	**Theory Group 2 continue…** Fragment analyses Data scoring using GeneMapper (panels, allele detection, scoring, bins)
14:00-14:20	COFFEE BREAK	
14:20-17:00	**Practical Group 1 continue…** **Venue:** BÖL 4 Gel electrophoresis Blast searches in GenBank	**Theory Group 2 continue…** File formats PopGene Multilocus Structure GenAlex
17:00	Travel back to accommodation Dinner: own arrangement	

Thursday 6th March 2014

Time	Group I	Group II
9:00-10:00	**Jan Stenlid** **Venue:** BioCenter C216 Population genetics for plant pathologists	
10:00-12:00	**Theory** **Venue:** BioCenter C216 **Irene** Introduction to microsatellites Practicalities of using microsatellite markers (PCR setup, design, controls)	**Practical** **Venue:** BioCenter BÖL 4 **Rein, Kalev, Piotr, Ania,** ITS PCR ITS-RFLP Mating type PCR Conventional PCR Gel electrophoresis
12:00-13:00	LUNCH @ Ultunaresturangen	
13:00-14:00	**Theory Group 2 continue…** Fragment analyses Data scoring using GeneMapper (panels, allele detection, scoring, bins)	**Demonstration** **Venue:** Mykopat computer room **Malin Elfstrand** Real time PCR
14:00-14:20	COFFEE BREAK	
14:20-17:00	**Theory Group 2 continue…** File formats PopGene Multilocus Structure GenAlex	**Practical Group 1 continue…** **Venue:** BÖL 4 Gel electrophoresis Blast searches in GenBank
17:30	Travel back to accommodation	
19:00	DIAROD DINNER (venue TBA)	

Friday 7th March 2014

Time	Group I and Group II
08:00 –13.00	Final discussions and training workshop closure **Venue:** BioCenter C216 Departure of participants