



COST Action FP1202: Strengthening conservation: a key issue for adaptation of marginal/ peripheral populations of forest trees to climate change in Europe (MaP-FGR)



ForMaP TRAINING SCHOOL and PhD COURSE (4 ECTS)

Analysis of genetic structure within and among populations with focus on marginal populations of woody species

18 January 2016 – 22 January 2016,

Host: Forest Genetics and Diversity (FGD), University of Copenhagen

Venue: Nødebo (Grib Forest), Fredensborg, Denmark

Deadline for applications is December 6, 2015

Map FGR COST Action

MaP FGR COST Action aims to bring together experts in forest genetic resources (FGR) to collect knowledge on FGR in Marginal and Peripheral (MaP) populations throughout Europe. The effects of climate change are likely to be stronger and more rapid in MaP populations than elsewhere. MaP forest populations are at the edges of species ranges where conditions are less suitable for survival. Studying adaptive processes in these populations is crucial and of mutual interest for European and neighboring countries for understanding the evolution of species and developing gene pool (FGR) conservation and management strategies and networks to cope with global changes. These populations are not only threatened by modern climate changes but also by other disturbances arising from human pressures and they may prove invaluable for adapting the European forestry sector. For more information on the COST Action FP1202 MaP-FGR see the dedicated website on <http://map-fgr.entecra.it/>.

ForMaP TRAINING SCHOOL and PhD COURSE

The training school focuses on how to analyze data on genetic structures developed as results of the interplay between local adaptation (response to selection), genetic drift and gene flow. The training school targets PhD students and other young scientists involved in on-going studies of genetics of woody plant species. MSc students can also benefit from the course provided if they already have some background knowledge in population genetics or quantitative genetics, and are working with genetic analysis of populations in their MSc thesis.

The trainings school will consist of a combination of lectures, exercises, field visits and supervised student discussion of selected articles. Active participation is therefore a requirement of all students, and the students must have read the literature before the course. After the course, the student will submit a small report to document their learning outcome.

Training schools are not intended to provide general training or education. Those attending a Training School are typically – but not exclusively – young researchers from across Europe and neighboring partners interested by the key topics developed in this COST Action FP 1202 MaP-FGR.

COST supports the participation of both trainers (including external experts) and trainees selected for the TS on the basis of the relevance of their requests.

Application and approval

To apply, send by email:

- ✓ *curriculum vitae*
- ✓ full address
- ✓ motivation letter (which includes current position and research interests)

to **Valentina Garavaglia** (valentina.garavaglia@fao.org) and **Nicolas Picard** (nicolas.picard@fao.org).
Email subject line: "2015 Training School Cost FP1202 MaP FGR".

Selected trainees

Selected trainees will receive information about registration and background literature.

Financial support to trainees

The financial support is an individual grant for each trainee. It should normally cover only travel and subsistence. For more information please refer to the Vademecum of Cost Actions. **The exact amount will be decided based on the number of participants.**

Trainees eligible for reimbursement:

1. Trainees from COST countries;
2. Trainees from approved NNC institutions;
3. Trainees from approved European RTD Organisations.

Trainees not eligible for reimbursement:

1. Trainees from approved IPC institutions;
2. Trainees from approved International Organisations and European Commission;
3. Any other trainees not specifically mentioned as being eligible.

Location and accommodation

The Venue is the Forest and Landscape College located in the North Eastern part of Denmark. (<http://ign.ku.dk/english/about/organisation/sections/forest-landscape-college/folder-about-the-forest-college/welcome-folder-forest-college.pdf>). More details on the logistic will be provided after the selection of participants.

Deadlines

All applications must be submitted by email to Valentina Garavaglia (valentina.garavaglia@fao.org) and Nicolas Picard (nicolas.picard@fao.org), by **December 6, 2015**. Applicants will be informed about the application result by **December 16, 2015**.

Whilst every effort is made to avoid changes to our programme, Cost Action FP1202 MaP FGR reserves the right to cancel the training school in case of low enrollment. In this case the communication about the cancellation will be provided via e-mail and on the dedicated webpage.

	18 january	19 january	20 january	21 january	22 january
09:00	Arrival	Welcome and introduction: genetics of tree populations	<i>Exercise</i> Follow up and discussions	Field visit to field trials with species provenances and clones	<i>Exercise:</i> Common garden tests
10:30		Coffee	Coffee		Coffee
10:50		<i>Lecture:</i> Landscape genetics	Journal club: Student presentations and discussion on selected papers (1-3)	Study of dynamics of local adaptation in relation to climate change	<i>Exercise:</i> Follow up and discussions
13:00		Lunch	Lunch	Lunch	Lunch
14:00		<i>Exercise:</i> Landscape genetics	<i>Lecture:</i> Fitness traits, genetic variation, heritability and response to selection	<i>Lecture:</i> Genetic analysis of complex traits related to fitness	Students report, discussions and conclusions
15:30		Coffee	Coffee	Coffee	Coffee
15:45		<i>Exercise:</i> Landscape genetics	Student presentations and discussion 4-6	<i>Exercise:</i> Common garden tests	Departure
18:00		Dinner	Dinner	Dinner	Dinner

Confirmed trainers:

- Erik Dahl Kjær (Professor, Forest, Nature and Biomass), University of Copenhagen
- Kehlet Hansen (Associate professor in quantitative forest genetics), University of Copenhagen
- Anders Ræbild (Associate professor in Forest ecophysiology), University of Copenhagen
- 2/3 more international experts will join the TS.