



COST Action FP1202

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

2013 TRAINING SCHOOL

**Genetic, ecological properties of marginal populations
and their importance for conservation and use under climate change**

**15 July - 19 July 2013,
Chania, Greece**

Deadline for submission is June, 23 2013

Map FGR COST Action

MaP FGR 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 non European countries for understanding the evolution of species and developing gene pool (FGR) conservation and management strategies and networks to cope with the global change. These populations are not only threatened by modern climate changes but also by other disturbances arising from human activities and they may prove invaluable for adapting the European forestry sector. For more information on the COST Action FP1202 MaP FGR see http://www.cost.eu/domains_actions/fps/Actions/FP1202.

2013 training school on “Genetic, ecological properties of marginal populations and their importance for conservation and use under climate change”

Training Schools within the framework of the Action topic are aimed at:

- Widening the knowledge of the Action activities.
- Providing intensive training on a new and emerging subject.
- Offering familiarisation with unique equipment or know how in one of the laboratories of the Action.

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. Furthermore, Training Schools may also cover appropriate re-training as part of life-long learning. A Training School can also take the form of an Early Stage Researchers (less than PhD + 8 years) network created as a "think tank".

COST support covers organisation of the school and participation support to both trainers (including external experts) and trainees.

Main topics of the 2013 training School of Cost Action FP1202 Map FGR:

- Definition of “population” and “marginal-peripheral (MaP) population”
- Ecological aspect of marginal-peripheral populations
- Genetic aspects of marginal-peripheral populations
- Conservation genetics in marginal, peripheral and small populations
- Lectures and field trip
- Presentation of the participants own research

Participants

Students belonging to any institution participating in the Cost Action FP1202 MaP FGR are welcome to participate and are eligible to request a travel grant.

The travel grant will be granted to cover travel costs and accomodation. **The exact amount will be decided based on the number of participants.**

A maximum of 15 persons can participate.

Financial support

The financial support is an individual grant for each trainee. It should normally cover only travel and subsistence.

Trainers

Paraskevi Alizoti, Aristotle University of Thessaloniki, Training School Coordinator

Filippos Aravanopoulos, Aristotle University of Thessaloniki

Bruno Fady, Institut National Français de Recherche Agronomique

Julián Gonzalo, University of Valladolid

Annette Menzel, Technical University of Munich

Giovanni Giuseppe Vendramin, University of Florence

Application and approval

To apply, send an email with your:

- short cv;
- full address;
- research interests;
- actual position;
- Subject "Training School Cost FP1202 MaP FGR" to: **Valentina Garavaglia**,
valentina.garavaglia@fao.org

Selected trainees will receive information about registration and presentation of their own research (details about abstract and presentation form)

Location and accommodation

The training School will be hosted by:

International Centre for Advances Mediterranean Agronomic Studies Mediterranean Agronomic Institute of Chania (Crete, Greece) Mediterranean Agronomic Institute of Chania.

Alsyllo Agrokepiou, PO Box 85

Chania 73100

Crete, Greece

<http://www.maich.gr/>

The dormitory complex of MAICH has a capacity of 55 single and 73 double rooms with private facilities fully air conditioned, fully wired for TV, telephone and computer network access. Specially designed rooms for the disabled are available.

The training school is organized in collaboration with Aristotle University of Thessaloniki.

Deadlines

All applications must be submitted by email to **Valentina Garavaglia** (valentina.garavaglia@fao.org), by **June, 23 2013**. Applicants will be informed about the application result by **June, 28 2013**.

**Provisional detailed programme - 2013 TRAINING SCHOOL Cost Action FP1202 Map FGR
Genetic, ecological properties of marginal populations and their importance for conservation and use under climate change**

	Intro to genetics of MaP pops	Structure and conservation of MaP pops	Ecology of MaP pops	Adaptation and Evolution of MaP pops	Adaptation and evolution of MaP pops / Practical techniques
	Mon 15-Jul-13	Tues 16-Jul-13	Weds 17-Jul-13	Thurs 18-Jul-13	Fri 19-Jul-13
9.00-10.30	Welcome Introduction to the TS Programme of the week Roundtable presentation of trainers/trainees	Genetic conservation of marginal populations	Climate constraints in species distribution models	Field trip	Molecular basis of adaptation in marginal populations
10.30-11.00	<i>Coffee break</i>	<i>Coffee break</i>	<i>Coffee break</i>		<i>Coffee break</i>
11.30-13.00	Distribution of genetic diversity in Mediterranean species and populations	Genetic monitoring and conservation genetics in marginal, peripheral and small populations	Applications of Ecological Niche Modeling for forest trees species delimitation and MaP populations dynamics	Lunch	Molecular markers and Bayesian clustering approaches
13.00-14.00	<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>		<i>Lunch</i>
14.00-16.00	Genetic consequences of being at the ecological and geographical margins	Spatial genetic structure in marginal versus core populations	What shapes the geographic limits of the species? The ecological, the evolutionary and the adaptive plasticity questions	Population, landscape and adaptive genetics / genomics in marginal and peripheral populations (incl. case studies from Greece)	Computer lab/SAS or SPSS software
16.00-16.30	<i>Coffee break</i>	<i>Coffee break</i>	<i>Coffee break</i>	<i>Coffee break</i>	<i>Coffee break</i>
16.30-18.00	Presentation of the trainees (10' each)	Presentation of the trainees (10' each)	Open discussion/questions of trainees	Effects of abiotic stresses (climatic change and environmental pollution) in the evolutionary genetics of forest tree populations	Open discussion/questions of trainees Closing