Forester-Researcher Workshop

Century old Oriental beech introductions in Western Europe: an opportunity to study the risks and benefits of assisted migration

Venue: <u>Hotellerie L'Etoile</u>, Wasselonne, France

About the event

The workshop will be a forum for presenting and discussing results of research on a network of 11 Oriental beech stands across France, Germany, and Switzerland. On the first day, talks given by researchers will cover comparative analysis of European and Oriental beech regarding their phenology, growth and wood anatomy, physiology, and genetics. In particular, extensive research will be presented on the hybridization of the two species and its consequences for the long-term survival of the stands. We will also discuss if remote sensing can be used to track the spread of Oriental beech in a European beech forest. Foresters managing forests with planted Oriental beech will be invited, as well as responsible administrative bodies of the three countries. During the workshop session, foresters and researchers will think together about the potential risks and benefits of using Oriental beech for assisted migration in Western Europe. On the second day, a field trip will take place to the forest of Allenwiller, where Oriental beech was introduced over 100 years ago. The event will close with talks introducing future projects on assisted migration in Europe and a discussion on the development of a protected network of sites.





Tuesday, 10 June 2025

10:30-11:00 Welcome coffee

11:00-12:30 Why a workshop on assisted migration with Oriental beech?

When	Title	Speaker
11:00 - 11:10	Welcome and information about the program	Katalin Csilléry
11:10 - 11:30	Beech die-back in Europe	Jürgen Bauhus (TBC)
11:30 - 11:50	How many Fagus species in Eurasia?	Thomas Denk
11:50 - 12:10	Biogeography of Oriental beech from the Balkan to the Caucasus	Dušan Gömöry
12:10 - 12:30	The difference between assisted migration and assisted gene flow and the network of Oriental beech introductions and tracing their origin	Katalin Csilléry

12:30 - 14:00 Lunch

14:00 - 16:00 What is the difference between European and Oriental beech?

When	Title	Speaker
14:00 - 14:15	Radial growth of Oriental and European beech in response to drought	Martin Kohler
14:15 - 14:30	Wood anatomy of Oriental and European beech in response to drought	David Andermahr
14:30 - 14:45	Controlled drought experiments	Oliver Brendel
14:45 - 15:00	Differences between European and Oriental in the timing of bud break and leaf senescence	Camilla Stefanini
15:00 - 15:15	Remote sensing Oriental beech and its hybridization with European beech – contact measures	Petra D'Odorico
15:15 - 15:30	Remote sensing Oriental beech and its hybridization with European beech – upscaling using satellite images	Gordana Kaplan
15:30 - 15:45	Using genetic markers to detect hybridization and the direction of gene flow	Katharina Birgit Budde (online)
15:45 – 16:00	Simulating hybridization between European and Oriental beech: understanding the past and predicting the future	Camilla Stefanini

16:00 - 16:30 Coffee break

16:30 - 18:00 Forester-Researcher Workshop session

Upon arrival all participants receive a questionnaire, where different management scenarios are proposed to minimize the risks and maximize the benefits of introducing Oriental beech, including a null scenario of no introductions at all. Different scenarios will be proposed for the management of the

existing of network of Oriental beech introductions across the three countries as well. During the talks, participants will have the opportunity to formulate their opinion. During this workshop, we will discuss the different point of views in groups and then contrast them all together.

The four discussion groups:

- France: animation by Didier le Thiec (INRAe Nancy)
- Germany: animation by Jürgen Bauhus and Martin Kohler (University of Freiburg)
- Switzerland: animation by Luis Muheim and Christoph Sperisen (WSL)
- Researchers from other countries: animation by Katalin Csilléry (WSL)

19:00 Dinner at the hotel

Wednesday, 11 June 2025

07:30 - 08:30 Breakfast at the hotel (for those who stay overnight)

09:00 - 12:30 Field excursion to the forest of Allenwiller and its Oriental beech trees

- Introducing the forest representative of the village of Allenwiller
- Participants can visit four workshops to get insights to the work of researchers
 - Observing traits that distinguish the two beeches (Camilla Stefanini)
 - Optimal sampling design to detect hybridization (TBC)
 - Coring trees and measuring their growth (Martin Kohler)
 - "Guessing game": participants will be presented with trees/leaves and they have to guess if it was European or Oriental beech. Genetics will reveal the answer! (TBC)

13:00 - 14:00 Lunch

14:00 - 16:00 Looking to the future: new emerging projects on Oriental beech and other tree species

When	Title	Speaker
14:00 - 14:15	ORIENT-BUCHE	Katharina Liepe, Markus Muller
14:15 - 14:30	Forest genomics in the Caucasus through the lens of its dominant tree species – Fagus orientalis	Thibaut Capblancq
14:30 - 14:45	MigFoRest	Nicolas Dassonville
14:45 - 15:00	HybOakAdapt	TBC
15:00 - 15:15	MyGardenOfTrees – The macro-gardens	Katalin Csilléry
15:15 - 15:30	Test plantations in Switzerland	Kathrin Streit (TBC)
	Discussion: Barriers to synchronized assisted	
15:30 - 16:00	migration decisions across Europe	
	with coffee and snacks	