ISTA Tree Seed Germination and Tetrazolium Testing Workshop

Hosted by the Department of Agriculture, Food and Marine,
DAFM laboratories, Backweston campus, Kildare, Ireland

25th to 28th of May 2027

Agenda

Tuesday 25th May 2027.		
Time	**Subject**	**Details**
09:00 - 09:15	Welcome.	• Welcome message and housekeeping.
09:15 - 09:30	History of Irish laboratory.	• Short overview.
09:30 - 10:00	Workshop Introduction.	• Workshop overview.
10:00 – 10:30	Seed lot sampling.	• Theory and practice.
10:30 - 11:00	**Coffee Break**	
11:00 - 11:30	The tetrazolium test explained.	• Theory and practice.
11:30 – 12:30	Tetrazolium testing. ***Fagus sylvatica.***	• Seed anatomy. • Seed preparation.
12:30 -13:30	**Lunch**	
13:30 - 14:30	Tetrazolium testing. ***Crataegus monogyna.***	• Seed anatomy. • Seed preparation.
14:30 - 15:30	Tetrazolium testing. ***Fraxinus excelsior.***	• Seed anatomy. • Seed preparation.
15:30 – 18:00	**Field trip to historic tree collection.**	

Notes:

Wednesday 26th May 2027.		
Time	**Subject**	**Details**
08:30 – 09:30	Moisture testing.	• Theory and Practice.
09:30 - 10:30	Introduction to the seedling evaluation handbook.	• Theory and practice.
10:30 - 11:00	**Coffee Break**	
11:00 - 11:30	Tetrazolium testing. ***Fagus sylvatica.***	• Evaluation.
11:30 - 12:00	Tetrazolium testing. ***Crataegus monogyna.***	• Evaluation.
12:00 – 12:30	Tetrazolium testing. ***Fraxinus excelsior.***	• Evaluation.
12:30 - 13:15	**Lunch**	
13:15 - 14:00	Tour of laboratory.	• Tour of Seed Testing Laboratory.
14:00 - 14:30	The germination test explained.	• Theory and practice.
14:30 - 15:00	Quality checks.	• Substrate quality checks. • Substrate preparation.
15:00 - 15:30	The double germination test.	• Theory and practice.
15:30 - 16:00	**Coffee Break**	
16:00 - 16:30	Germination testing. ***Pseudotsuga menziesii.***	• Sample preparation. • Planting seeds - PP.
16:30 – 17:00	Germination testing. ***Pinus contorta.***	• Evaluation of pre - planted samples.
17:00 – 17:30	Germination testing. ***Picea sitchensis.***	• Evaluation of pre - planted samples.

Notes:

Thursday 27th May 2027.		
Time	**Subject**	**Details**
08:30 - 09:00	Viable seeds per kilogram.	• Theory and practice.
09:00 – 09:30	Tolerance testing.	• Theory and practice.
09:30 -10:30	X-Ray analysis of seed.	• Theory and practice.
10:30 - 11:00	**Coffee Break**	
11:00 - 11:45	Tetrazolium testing. ***Sorbus aucuparia.***	• Seed anatomy. • Seed preparation.
11:45 - 12:30	Germination testing. ***Alnus glutinosa.***	• Evaluation of pre-planted samples.
12:30 - 13:30	**Lunch**	
13:30 – 20:00	**Field trip and workshop dinner.**	

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Friday 28th May 2027.		
Time	**Subject**	**Details**
09:00 - 09:30	Germination testing. ***Betula pubescens.***	• Seed preparation. • Planting of weighted replicates.
09:30 - 10:00	Germination testing. ***Betula pubescens.***	• Evaluation of pre-planted samples.
10:00 - 10:30	Germination testing. ***Picea abies.***	• Evaluation of pre-planted samples.
10:30 - 11:00	**Coffee Break**	
11:00 - 11:30	Tetrazolium testing. ***Sorbus aucuparia.***	• Evaluation.
11:30 – 12:30	Germination testing. ***Pinus sylvestris.***	• Evaluation of pre-planted samples.
12:30 -13:30	**Lunch**	
13:30 – 15:00	Excised embryo test.	• Theory and practice.
15:00 - 15:30	**Coffee Break**	
15:30 – 16:30	Workshop discussion and award of certificates.	• Discussion on workshop content. • Award of workshop certificates. • Workshop closing.