



COPYTREE | **NEWSLETTER**

No. 7, April 2025

CA 21157 www.copytree.eu

“European Network for Innovative Woody Plant Cloning”

Collaboration on a European level between experts for sharing and applying innovative in vitro technology on woody plants



Enjoy your reading!

1. CopyTree Activities

4th

T
R
A
I
N
I
N
G
S
C
H
O
O
L

{ 1.1 }

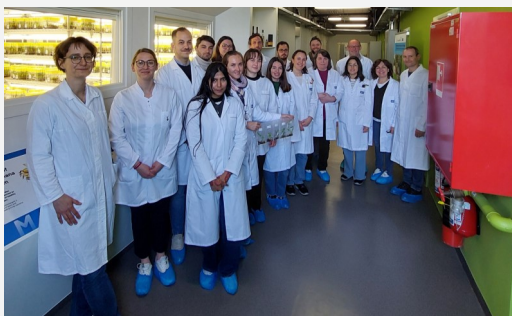
Cryopreservation technologies for trees

March 31 to April 2, 2025, Leuven, Belgium

Local organizer: Bart Panis

This event represented a key milestone for our community. The training school offered participants theoretical and practical insights into how biological material can survive extremely low temperatures.

Students gained hands-on experience with various cryopreservation techniques applied to different types of explants, including droplet vitrification of in vitro shoots, dormant bud freezing, slow freezing of embryogenic cultures, and fast freezing of seeds and embryonic axes.



We extend our special thanks to the local organizers - Natalia Fanega, Edwige André, and Bart Panis from the Alliance of Bioversity International and CIAT, KU Leuven - for their excellent coordination and hospitality.

A heartfelt thank-you also goes to our invited specialists, Terezia Salaj (Slovak Academy of Sciences), Alois Bilavcik (Crop Research Institute, Prague, Czech Republic), and Carolina Sánchez Romero (University of Malaga), whose guidance enriched the training with valuable theoretical and practical knowledge.

{ 1.2 }

800-year-old oaks from *in vitro* culture planted in Poland



In vitro clones of monumental oaks, some about 800-year-old, are planted near a mother tree, schools, parks or other institutions on the occasion of special events. Next to the planted tree, a plaque is placed and the confirmation of authenticity is given.

They contain informative text about the planted seedling as well as the logos of the institutions involved (Institute of Dendrology Polish Academy of Sciences, Committee of Forestry Sciences and Wood Technology of the Polish Academy of Sciences, the European COST Action 'COPY TREE', The State Forest). As of 2019, more than 50 *in vitro* clones of five monumental oaks (500-800 year-old) have been planted in Poland.



{ 1.3 }

Projects involving CopyTree members

CRYOCONNECT—A Regional Initiative for a Cross-Border Cryobank in the Western Balkans and the Caucasus – A case study based on a sample of fruit tree and grape local accessions

Activity Coordinator: Tatjana Vujović tatjanal@ftn.kg.ac.rs

The CryoConnect Activity, submitted by the Cryopreservation Working Group for funding under the Second Call of the Phase XI ECPGR Activity Grant Scheme, was selected by the Executive Committee and approved in March 2025

CopyTree members involved:

- Tatjana Vujović (Serbia)
- Darko Jevremović (Serbia)
- Zvezdana Marković (Croatia)
- Valbona Sota (Albania).

READ MORE

1.4

Publications from CopyTree members

Trontin, J.F., Sow, M.D., Delaunay, A., Modesto, I., Teyssier, C., Reymond, I., Canlet, F., Boizot, N., Le Mett , C., Gibert, A., Chaparro, C., Daviaud, C., Tost, J., Miguel, C., Lelu-Walter, M. A., & Maury, S. (2025). Epigenetic memory of temperature sensed during somatic embryo maturation in 2-yr-old maritime pine trees. *Plant physiology*, 197(2), kiae600. <https://doi.org/10.1093/plphys/kiae600>

Sandoval, K., Castander-Olarieta, A., Moncale n, P., & Montalb n, I.A. (2025). Assessment of alternative freezing methods for preservation at -80 C of radiata pine embryogenic cultures: A six-year study. *Cryobiology*, 105217. <https://doi.org/10.1016/j.cryobiol.2025.105217>

1.5

RINGTEST—Testing of New Compounds

RING TEST

One of the goals of our Action is to set up joint experiments (ring trials), share the results, write joint publications, and encourage collaborations.

One mechanism regulating the local cytokinin homeostasis in plants is their degradation by cytokinin oxidase/dehydrogenase (CKX).

Dr. Jaroslav Nisler from the Institute of Experimental Botany of the Czech Academy of Sciences, developed a new class of potent inhibitors of these enzymes, mainly derived from diphenyl urea. There were synthesized more than 100 compounds and the best ones were selected by Dr. Nisler to be tested in the Ring test.

These compounds can promote the development of adventitious shoots, somatic embryogenesis and root formation. In this context Ring test is aimed at determining the effect of cytokinin oxidase/dehydrogenase inhibitors on woody plants.



At the Institute of Dendrology of the Polish Academy of Sciences in K rnik (Poland), the effect of cytokinin oxidase/dehydrogenase (CKX), provided by Jaroslav Nisler as part of the RING test, on the various SE stages of Norway spruce by **Dr. Teresa Hazubska-Przyby ** and team is being tested.

The germinating emblings obtained from the previous treatment of embryogenic tissues with the four components (19, 20, 52 and 77) were transferred for acclimatisation to *ex vitro* conditions.



2. Upcoming Events & Activity Calls

{ 2.1 }

3rd CONFERENCE OF COPYTREE Trees for the future: Cloning and beyond

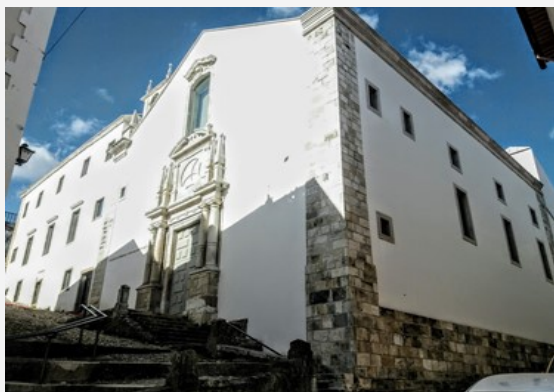
12-14th May, 2025
University of Coimbra, Portugal

Local Organizers:
Jorge Canhoto; Sandra Correia

READ MORE

The third conference of this Cost action will be organized by the Centre for Functional Ecology of the Department of Life Sciences of the University of Coimbra.

During the three-day event, recent advances in cloning and other tree biotechnologies will be discussed. The five working groups will have strong interactions that will bring mutual benefits. Five keynote speakers related with each of the Working Groups will present an overview of the subject.



Poster sessions, meetings and social activities will complete the program.

A post conference tour to the Douro valley and to the National park of Gerês is planned for May 15-16th 2025.

Contact:

jorgecan@uc.pt; sandraimc@ci.uc.pt

{ 2.2 }

Management Committee meeting

14th May, 2025 - University of Coimbra, Portugal

The Management Committee (MC) meeting will take place during the conference days.

Agenda highlights include: Updates from the Core Group, Grant Holder, and (if present) COST Association; Action membership and participation updates; Review of Working Group progress and the Science Communication Plan; Planning of upcoming activities and budget revisions; Monitoring, reporting, and other topics.

The MC decisions will be uploaded as meeting minutes in the *Internal Community Area* of the CopyTree website.

2.3

10th Call of STSMs

Who can apply?

PhD students, postdocs, or permanent researchers from an institution affiliated in a COST member country or Near Neighbour Country, and who are members of Cost Action CA21157.

**Submission of applications:
24.03.2025 - 26.05.2025**

**Missions during the period
16.06.2025 – 06.10.2025**

READ MORE

2.4

2nd Call for Conference Grants

Would you like to present your research results in an international scientific conference, but need support to participate the event?

Conferences during the period 17th February – 6th October 2025

Call will be open until the funds allocated to this have been exhausted.

Submission of applications in e-COST from 9th February 2025

READ MORE

2.5

WEBINAR SERIES

Interested in learning more about *in vitro* culture of woody plants?

We are excited to announce our upcoming Webinar Series, where you will gain valuable insights on the following topics: Overcoming recalcitrance in woody plants; Tools for diagnosis, sanitation, and storing clean stocks; Scaling up the production of elite clones at an affordable price; Understanding the real risks associated with this technology; Raising awareness and providing information tools to improve public acceptance; Encouraging foresters and landowners to invest in planting poly-clonal forests.

CopyTree is currently looking for speakers for the webinar series!

The webinars will run for 60 minutes, with 5 minutes for introduction, 45 minutes for presentation, and 10 minutes for addressing participants' questions.

If you would like to submit a topic for consideration, please contact the CopyTree Webinar Coordinator, at tobias.bruegmann@thuenen.de

READ MORE

2.6

Call for Training School Organizers

We're also looking for members who want to design and deliver a training school during upcoming Grant Periods.

If you wish to organize a training school or workshop focused on a relevant theme where your institute holds expertise, let us know!

We kindly request you to submit a motivation letter outlining your proposal.

**Click here to
apply**

2.7

ForX – Conference for the New Generation of Forest Researchers

Organized by the Croatian Forest Research Institute

November 13–14, 2025

Hotel Princess, Jastrebarsko, Croatia

The conference welcomes engineers, assistants, research associates, postdoctoral researchers, and all early-career researchers working in forestry or forest-related fields. This could be a great opportunity for early-career researchers to connect with others, share their experiences, and maybe even spark some new collaborations.

READ MORE

2.8

The 5th Training School of CopyTree

*Get ready for an exciting
event!*

***Don't miss the 5th Training
School of CopyTree***

**Using robotics for scaling up
somatic embryogenesis**

17– 18 September, 2025

**Natural Resources Institute Finland
(Luke)**

**Stay tuned for more detailed information,
coming soon on the CopyTree website!**

Invited specialists:

- Elmar Bernhardt (South-Eastern University of Applied Sciences, Finland)
- Jana Krajnakova (Scion, New Zealand)

Local organizers and Instructors:

- Tuija Aronen, Mikko Tikkinen, Sakari Välimäki, Saila Varis (Natural Resources Institute Finland)

3. Communication platforms

WEBSITE & SOCIAL MEDIA PAGES

- ◇ **COST Website:** <https://www.cost.eu/actions/CA21157/>
- ◇ **CopyTree Website:** www.copytree.eu

Please follow us on social media pages:



INTERNAL AREA OF COMMUNICATION

Are you already an approved CopyTree member?

Join our community area by signing up in this link:

<https://www.copytree.eu/join-us>

After signing up, join different working groups in interactive discussions.

CONTRIBUTORS:

Content providers:

COPYTREE MEMBERS

Graphic & Design:

VALBONA SOTA

Science Communication Coordinator

valbona.sota@fshn.edu.al

GENERAL CONTACT:

copytree21157@gmail.com



Acknowledgements:

This newsletter is based upon work from COPYTREE—CA21157, supported by COST (European Cooperation in Science and Technology).

COST (European Cooperation in Science and Technology) is a funding agency for research and innovation networks. Our Actions help connect research initiatives across Europe and enable scientists to grow their ideas by sharing them with their peers. This boosts their research, career and innovation.

www.cost.eu