

PLANT MATERIAL FOR THE FUTURE OF NUT PRODUCTION IN THE MEDITERRANEAN REGION

CIHEAM Zaragoza (Spain) | 25-26 September 2024



BACKGROUND AND OBJECTIVES

The cultivation of nuts in the Mediterranean region relies heavily on the quality of plant material and genetic resources. This area, with its favourable climate, is ideal for growing nuts; however, future challenges require advances in plant breeding and genetic improvement. The development of new, resilient varieties is crucial to withstand climate change, pests, and diseases and to match the growing and changing demands of these fruits. Ongoing research focuses on identifying and conserving valuable genetic material to enhance breeding programmes. Access to diverse genetic resources allows breeders to select traits for improved yield, drought resistance, and pest tolerance. Moreover, biotechnology and genomic tools can play a significant role in accelerating the selection process, enabling the creation of superior cultivars. Ensuring the sustainability of nut cultivation in the Mediterranean region depends on these efforts in genetic improvement and the continuous adaptation of plant material to meet environmental and market demands.

This seminar aims to:

- Assess the current situation of the plant material (varieties, ecotypes, rootstocks - commercially available or in collections) of the main nut species with the greatest potential for the Mediterranean region: **almond, hazelnut, chestnut, walnut, pecan, stone pine, and pistachio.**
- Draw up a list of existing plant materials in Mediterranean countries and their situation in terms of protection and commercial availability.
- Establish the main lines that should guide the identification, conservation, genetic improvement and selection of these plant materials to meet the needs of Mediterranean nut production in the future.
- Identify needs on research, innovation and knowledge exchange to support the development of the sector for more adapted plant materials.

The seminar will be held over two days:

- Day 1: a keynote lecture on the challenges of the industry to guide nut tree plant material of the future, followed by presentations per species, a general discussion, and conclusions.
- Day 2: a field trip to the area of Caspe (near Zaragoza) where we will have the opportunity to see plantations and nurseries working with several species.

ORGANISATION

The Seminar is organised by CIHEAM Zaragoza (Mediterranean Agronomic Institute of Zaragoza, Spain) and the Agri-Food Research and Technology Centre of Aragon (CITA, Spain), with the collaboration of El Vivero de Abel (nursery) and Afruccas (Association of fruit growers of Caspe). English will be the working language.

The working sessions of Day 1 (25 September) will be open to participation in person (upon registration and limited to 60 available places) and/or via streaming. The registration details are available [here](#).

The field trip of Day 2 (26 September) will be restricted and upon invitation due to limited availability of places.

PROGRAMME

Day 1 – Wednesday 25 September	
Opening - Raúl Compés, Director of CIHEAM Zaragoza - María Aitziber Lanza Goicoechea, Director General for Food Quality and Safety, Government of Aragon - Maria José Rubio-Cabetas, Agri-Food Research and Technology Centre of Aragon (CITA)	09:00-9:30
Keynote lecture: Future prospects for the nut industry and the needs of plant material to satisfy production and consumption demands Antonio Pont – INC and SAT Crisol (Spain)	09:30-10:30
<i>Coffee break</i>	<i>10:30-11:00</i>
Current situation and needs of plant material in Mediterranean nut production Moderators: Maria José Rubio-Cabetas (CITA) and Ramzi Belkhodja (CIHEAM Zaragoza) - Almond (45') Gaetano Distefano, Univ. Catania (Italy) - Pistachio (45') Mohammed Ghrab, Institut de l'Olivier (Tunisia) - Hazelnut (45') Nadia Valentini, Univ. Torino (Italy)	11:00-11:45 11:45-12:30 12:30-13:15
<i>Lunch</i>	<i>13:15-14:45</i>
Current situation and needs of plant material in Mediterranean nut production (cont.) Moderators: Maria José Rubio-Cabetas (CITA) and Antonio López-Francos (CIHEAM Zaragoza) - Walnut (45') Fabrice Lheureux, CTIFL (France) - Chestnut (45') José Gomes Laranjo, UTAD (Portugal) - Stone Pine and Pecan (60') Neus Aletà, IRTA (Spain)	14:45-15:30 15:30-16:15 16:15-17:15
Debate and conclusions Maria José Rubio-Cabetas (CITA) and Antonio López-Francos (CIHEAM Zaragoza)	17:15-18:15
Day 2 – Thursday 26 September	
Field trip (full day) around the area of Caspe (Zaragoza province) to see experimental and commercial orchards, and nurseries	08:00-18:30

LIST OF CONTRIBUTORS

Contributor	Role	Species	Country	Institution
María José Rubio-Cabetas	Scientific Coordinator	–	Spain	CITA Aragón
Antonio López-Francos	Technical Coordinator	–	Spain	CIHEAM Zaragoza
Antonio Pont	Keynote speaker	–	Spain	INC (International Nut Council)
Mohammed Ghrab	Focal point	Pistachio	Tunisia	Institut de l'Olivier
Nadia Valentini	Focal point	Hazelnut	Italy	University of Turin
Fabrice Lheureux	Focal point	Walnut	France	CTIFL, Centre Technique Interprofessionnel des Fruits et Légumes
José Gomes Laranjo	Focal point	Chestnut	Portugal	Univ. Trás-os-Montes e Alto Douro
Neus Aletà	Focal point	Stone Pine	Spain	IRTA
Gaetano Distefano	Focal point	Almond	Italy	Univ. Catania
Ignasi Batlle	Expert	Almond	Spain	IRTA
Mehdi Ben Mimoun	Expert	Almond	Tunisia	INAT
Federico Dicenta	Expert	Almond	Spain	CEBAS-CSIC
Henry Duval	Expert	Almond	France	INRAE
Ossama Kodad	Expert	Almond	Morocco	ENA Meknes
Iban Eduardo Muñoz	Expert	Almond	Spain	IRTA
Raquel Sánchez-Pérez	Expert	Almond	Spain	CEBAS-CSIC
Ana Wunsch Blanco	Expert	Almond	Spain	CITA Aragón
Burak Akyüz	Expert	Chestnut	Turkey	Ondokuz Mayıs University
Gabriele Beccaro	Expert	Chestnut	Italy	University of Turin
Santiago Pereira Lorenzo	Expert	Chestnut	Spain	University of Santiago de Compostela
Veronica Casadó	Expert	Hazelnut	Spain	Unió de pagesos de Catalunya
Veli Erdogan	Expert	Hazelnut	Turkey	University of Ankara
Daniela Farinelli	Expert	Hazelnut	Italy	University of Perugia
Julien Toillon	Expert	Hazelnut	France	ANPN
Azza Chelli-Chaabouni	Expert	Pistachio	Tunisia	INRAT
Bekir Erol Ak	Expert	Pistachio	Turkey	University of Harran
Esaú Martínez	Expert	Pistachio	Spain	CIAG-El Chaparrillo
Georgios Zakyntinos	Expert	Pistachio	Greece	UNIWA (West Attica University)
Youssef Ammari	Expert	Stone pine	Tunisia	INRGREF
Alexandra Pires Correia	Expert	Stone pine	Portugal	INIAV
Carlos Guadaño	Expert	Stone pine	Spain	CIFOR-INIA/CSIC
Erica Di Pierro	Expert	Walnut	Italy	Fondazione Edmund Mach
Mehmet Sütyemez	Expert	Walnut	Turkey	Kahramanmaraş Sutcu Imam University
Eloïse Tranchand	Expert	Walnut	France	IRFEL-Station Creysse