



LIFE FROSTDEFEND

Newsletter # 6

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LIFE20 CCA/GR/001747

Dissemination and Networking Activities



The LIFE FROSTDEFEND project team continues to advance its outreach activities, ensuring wide dissemination of the project's goals and results.

In the framework of its communication and dissemination strategy, the project team carries out targeted awareness-raising and information activities, engaging both key stakeholders (such as farmers, agronomists, relevant authorities, and scientific partners) and the general public.

By presenting and participating in relevant events, the project aims to enhance the understanding of the environmental challenges that frost events pose to agricultural production, as well as to demonstrate the innovative solutions the LIFE FROSTDEFEND project develops.



13th International Plant Cold Hardiness Seminar, France



✓ During the 13th International Seminar on Plant Frost Resistance held in Clermont-Ferrand from August 26-30, 2024, the LIFE FROSTDEFEND consortium organized a session on microorganism-induced frost risks: 'Living on the Plant Frontier: Psychrophilic Microbes'.

✓ The International Plant Cold Hardiness Seminar is a triennial conference that brings together the world's leading specialists in plant and microbial adaptation to cold stress and frost effects. The conference aims to share recent advances in understanding cold-related stress. In the context of a changing climate, understanding and integrating these mechanisms into predictive models is necessary to support the adaptation of crop production.

✓ The LIFE FROSTDEFEND project was represented by Dr. Guillaume Charrier and Dr. Nicolas Dusart (INRAE PIAF Unit, Clermont-Ferrand), with additional participation from Dr. Pierre Amato and Dr. Lia Lamacque.



Lecture at the Agricultural University of Athens



On Friday, January 10th, 2025, the LIFE FROSTDEFEND consortium hosted an insightful lecture to students by Professors Georgakopoulos & Papadakis at the Agricultural University of Athens.

They Introduced the FROSTDEFEND Tool to the audience, highlighting its innovative features and applications.

The audience gained valuable knowledge on how to utilize the FROSTDEFEND Tool for crop protection and improving yields.

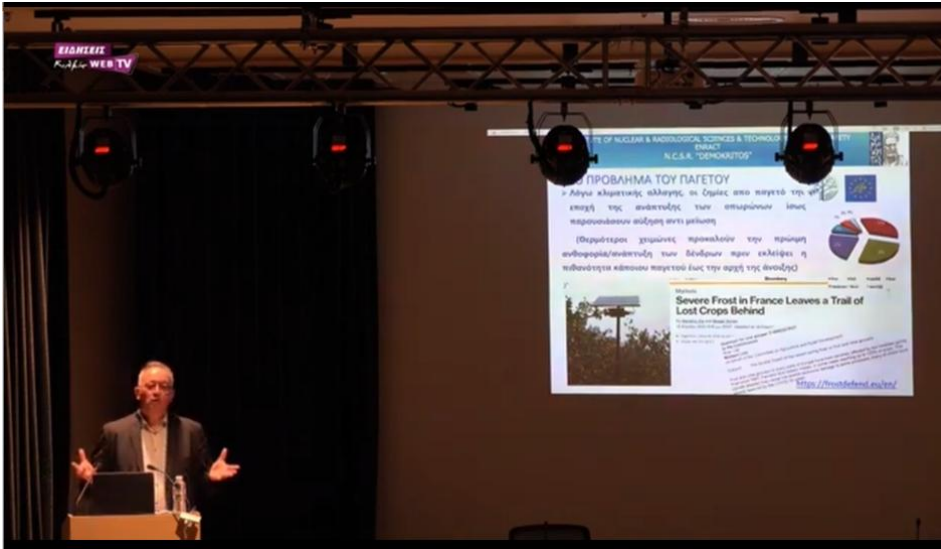
The event showcased how the project's results can be applied to real-world case studies, offering a comprehensive understanding of the topic.

The presentation began with Prof. Georgakopoulos, who introduced the concept of biological ice nucleation and demonstrated how the project is revolutionizing the field by delivering accurate and reliable data for frost protection and management.

This was followed by a lecture from Prof. Papadakis, titled “Frost and Citrus: Vulnerability of Cultivated Species, Damage, and Protection Measures”, where he presented case studies highlighting the Tool’s effectiveness and practical applications across different scenarios.



“Climate Change: Every Action Counts”



During his visit, Dr. Eleftheriadis presented the initiative to establish an Atmospheric and Climate Research Station at the Balkan Botanic Garden of Kroussia, highlighting its role in supporting sustainable regional development through climate data.

He also spoke to students about EU-funded projects addressing climate change, including FROSTDEFEND. He explained how the project uses sensors to help farmers mitigate frost damage through timely, proactive measures like copper spraying.

Climate Change: Every Action Counts

On Friday, March 14, 2025, Dr. Konstantinos Eleftheriadis, coordinator of FROSTDEFEND, visited his hometown, Kilkis, in his capacity as Research Director and Director of the Institute of Nuclear and Radiological Sciences, Technology & Safety at NCSR-Demokritos.

His visit was hosted by the 2nd Experimental General Lyceum of Kilkis as part of the conference “Climate Change: Every Action Counts”, which focused on the thematic area of Environment & Climate Change. The event was organized under the “EPAS Schools – Ambassadors of the European Parliament” programme.

[Link to the event \(GR only\).](#)

Stakeholder Engagement



On Monday, May 26, 2025, the Agricultural University of Athens (AUA) presented the LIFE-FROSTDEFEND project during a teleconference with two key stakeholders: the Hellenic Agricultural Insurance Organization (ELGA) and the Geotechnical Chamber of Greece (GEOTEE).

Participants included ELGA President Mr. Andreas Lykourantzou, Board Member Dr. Spyros Rizos, GEOTEE President Mr. Menelaos Gardikiotis, and Eastern Sterea Branch President Mrs. Anastasia Sarchosoglou, along with other members from both organizations.

Prof. Dimitris Georgakopoulos (AUA) and Dr. Maria Gini (NCSR-Demokritos) presented the project's innovative approach to frost risk forecasting, combining microbiological, atmospheric, and meteorological data with citrus acclimatization to cold. Early results showed that timely copper applications significantly reduced frost damage in experimental orchards.

Dr. George Sarigiannidis and his team from MSensis S.A. introduced the design and functionality of the FROSTDEFEND app, developed for use by producers and stakeholders.



Following the presentations, attendees discussed the broader challenges of frost-related crop damage in Greece and explored opportunities to scale up the tool.

The LIFE-FROSTDEFEND consortium warmly thanks all participants, especially Dr. Spyros Rizos for coordinating communication between the project and the stakeholders.



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Contact

NCSR Demokritos

Institute of Nuclear and Radiological Science & Technology, Energy & Safety

E-mail: frostdefend@ipta.demokritos.gr

Phone: +30 210 650 3008

More information on the website <https://frostdefend.eu/en/>



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