



European Plant Science Organisation  
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## Winner Announcement

# EPSO Young Plant Scientist Award 2025

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Brussels, 13.3.2025

EPSO is happy to announce the two winners of the 6<sup>th</sup> EPSO Young Plant Scientist Award: **Himanshu Chhillar** was selected for his fundamental plant research and **Javier Belinchon-Moreno** for his applied plant research. EPSO initiated these awards to encourage the development of ideas and imaginative thinking in the plant sciences. Himanshu and Javier will have the opportunity to present their research during the Science Day of the EPSO General Assembly to be held in Ljubljana, Slovenia on the 18.06.2025. In addition, each awardee will receive 200 € and EPSO will cover their travel to the meeting (see call text).

The winner of the award for **fundamental research** is **Himanshu Chhillar** of the Institute of Biology, Leiden University, The Netherlands, for his project “**Revolutionizing Plant Defence: Unveiling Key Signalling Mechanisms for Improved Resistance.**” Plant resistance to pathogen attack involves a multilayered response both at the environmental interface and within the cell. Immune responses at the plant surface are initiated by receptors leading to pattern-triggered immunity (PTI), whereas on the intracellular level, nucleotide-binding domain leucine-rich repeat-containing receptors (NLRs) lead to effector-triggered immunity (ETI). The two levels, PTI and ETI, eventually converge into shared downstream responses, complicating their individual analysis and amelioration. Himanshu Chhillar and his lab have addressed this conflation by developing and applying a system, SETI, whereby ETI can be induced and controlled by estradiol treatment. Using advanced multi-omics approaches and focusing on the role of calcium signalling, in particular calmodulin-binding protein 60 family (CBP60s), in immunity, Himanshu and his team resolved disease resistance from the hypersensitive response (HR), opening a new outlook on immunity in plants. The work will have important implications for plant breeding and for food security in general.



The winner of the award for **applied research** is **Javier Belinchon-Moreno** at INRAE-GAFL, Montfavet, France, for his project “**Comprehensive analysis of NLRome diversity in melon: Applications in association studies and resistance breeding.**” Climate change is driving the migration of pathogens while new virulent strains emerge, breaking the resistance genes in current cultivars. This spurs the search for novel sources of resistance. To this end, Javier and his team is the first to apply a novel and effective technology, Nanopore Adaptive Sampling (NAS), to target sequencing of NLR genes. They created a pangenome “NLRome” graph of NLR gene clusters, a challenging task, based on 150 genotypes. They also developed a novel GWAS approach based on kmers extracted from the NAS reads, which is significantly more precise than conventional SNP-based methods. The practical value of his work is manifested by the funding his project has attracted from five industrial partners.

The selection criteria as published in the [Call text](#) were: The novelty of the idea or approach being taken; the potential of the research to improve understanding or outcomes in the selected field of plant science; and the clarity with which the problem or research topic is conveyed to a non-specialist plant scientist.

We would like to thank the distinguished jury members Alan Schulman (chair), Marie-Theres Hauser, Angelo Santino, Timothy George and Odd Arne Rognli. The two winners were selected from among 22 PhD students who submitted from 15 different entities and 12 countries across Europe and New Zealand to the EPSO YPSA call.

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<b>Timelines:</b>	For the 2025 call:
Announcement of EPSO Young Plant Scientist Award Call:	24.10.2024
Deadline to receive nominations:	31.01.2025
Check Eligibility (need to belong to a member institute):	****
Consider and evaluate applications based on abstract and mini-cv:	****
Announcement of winners:	13.03.2025

#### **Useful links**

EPSO Young Plant Scientist Award 2024:  
EPSO news <https://bit.ly/3PhOXBH>; EPSO X Twitter <https://bit.ly/3Ta0LHh>; EPSO LinkedIn: <https://bit.ly/3lukqgn>  
EPSO breaking news: <https://epsoweb.org>  
EPSO publications: <https://epsoweb.org/news/>  
EPSO member institutes and universities: <https://epsoweb.org/about-epsos/epsos-members/>  
EPSO representatives: <https://epsoweb.org/about-epsos/representatives/>

#### **About EPSO**

EPSO, the European Plant Science Organisation, is an independent academic organisation that represents around 200 research institutes, departments and universities from 30 countries, mainly from Europe, and 2.600 individuals Personal Members, representing over 24 000 people working in plant science. EPSO's mission is to improve the impact and visibility of plant science in Europe, to provide authoritative source of independent information on plant science including science advice to policy, and to promote training of plant scientists to meet the 21st century challenges in breeding, agriculture, horticulture, forestry, plant ecology and sectors related to plant science. <https://epsoweb.org> | EU Transparency Register Number 38511867304-09