

Technical Working Party on Testing Methods and Techniques**TWM/4/9****Fourth Session
Cambridge, United Kingdom, June 2 to 5, 2026****Original:** English
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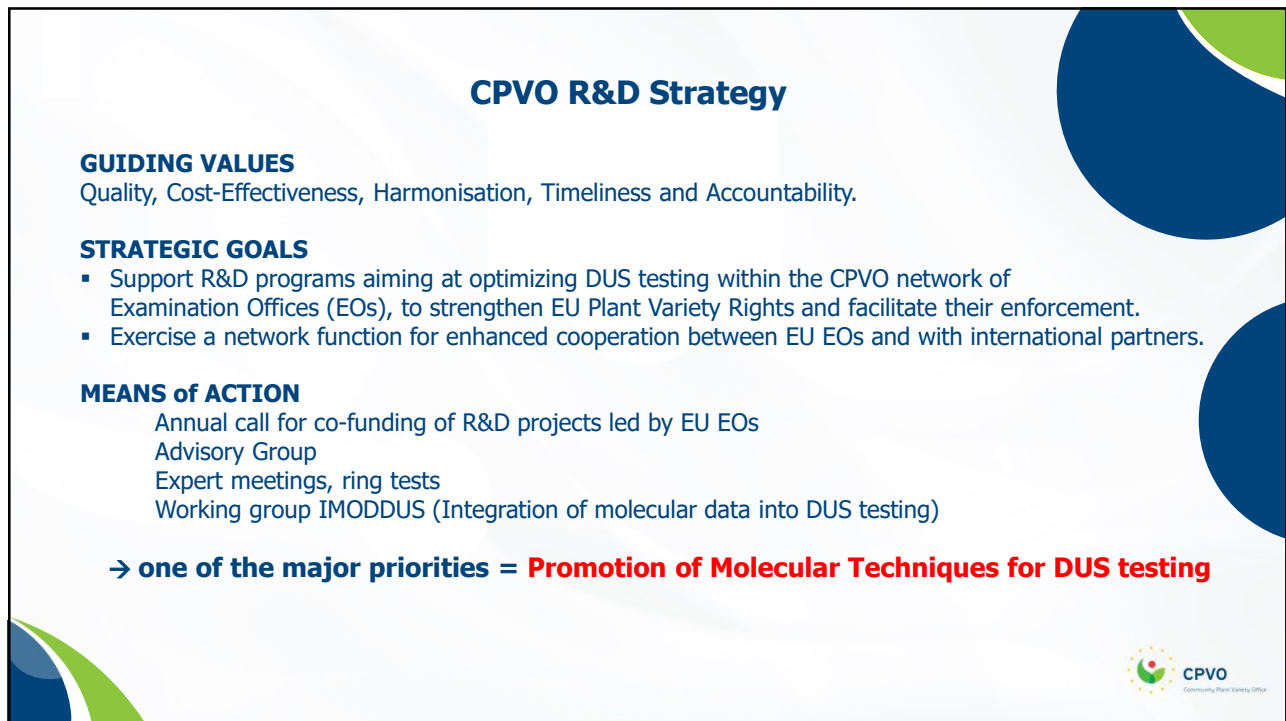
CPVO R&D ACTIVITIES*Document prepared by an expert from the European Union**Disclaimer: this document does not represent UPOV policies or guidance*

The annex to this document contains a presentation “CPVO R&D activities”, to be made by an expert from the European Union, at the fourth session of the TWM.

[Annex follows]




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IMODDUS working group activities

- ❖ "Integration of **MO**lecular **D**ata into **DUS** testing"
- ❖ CPVO BMT working group for the promotion of the use of molecular techniques in DUS testing and variety identification.
- ❖ Set up by CPVO Administrative Council within its R&D Strategy in 2016.
- ❖ IMODDUS works as a **think-tank** for the development of strategies supporting the integration of BMT into DUS testing.
- ❖ IMODDUS has a **practical approach** which aims at assisting the CPVO in identifying and assessing **R&D projects proposals** for species where BMT could improve the **quality** and potentially the **cost efficiency of DUS testing**.



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IMODDUS Nov 2025 8th meeting online

- Update on regulatory proposal for NGT (New Genomic Techniques) plants in the EU
- Update on Detective EU project (Detection of NGT products)
- Monitoring of ongoing projects co-financed by CPVO
- Update on AI-based approaches for molecular data at NIAB (UK)
- Shared molecular DUS databases in the EU: update on progress of CPVO-WG in charge of drafting the guideline.
- New molecular approaches to assess D and U and for variety collection management presented by BioSS (Genomic prediction) and CREA (molecular D)
- Review of potential trait-specific markers from INVITE to still validate



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CPVO
Community Plant Variety Office

CPVO co-funded R&D projects

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ToBrAg



CPVO co-funded projects

"Updating DUS resistance tests (biotests and markers) according to pests' evolution:

- *Setting up resistance tests to ToBRFV for tomato and pepper*
- *Improvement of resistance test melon/Aphis gossypii"*




- Coordinator : **GEVES** (FR)
- Project partners: EOs = NAKT (NL), INIA (ES), CREA (IT)
 - + breeding companies = BASF, Bayer, Enza Zaden, Gautier Semences, HM Clause, Rijk Zwaan, Sakata, Takii, Vilmorin
 - + research institute (INRAe, FR)
- Granted co-financing in Oct 2021, duration : 36 + 18 months (Feb 2022 - July 2026)

Biotests and markers improved/validated for all 3 pathosystems.



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SNPsNAP




CPVO co-funded projects

"SNP markers for guiding DUS testing in winter oilseed rape: Validating the new model"

- Follow up of two earlier projects :


Project 1) Validation of a set of SNP markers for KasPAR assays on bulk samples as a tool for the management of the variety collection (concluded in 2018).

Project 2) Development of a new method based on molecular networks used in combination with the two different testing systems GAIA and COY.



- Coordinator : **GEVES** (FR)
- Project partners: BSA (DE), INIA (ES), UKSUP (SZ)
 - + observers: COBORU (PL), Tystofte (DK), UKZUZ (CZ), NIAB (UK), Euroseeds
- Granted co-financing in Oct 2023, duration : 24 months (May 2024 – April 2026)

Final report being drafted. Validation of the model. Very significative reduction of trial size.



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Lettuce



**CPVO
co-funded
projects**

"International harmonization and validation of a SNP set for the management of lettuce variety collection"


- Coordinator: **NAKT**
- EU project partners : GEVES, Bundessortenamt, INIA-CSIC and Euroseeds
- Granted co-financing in Sept 2024
Duration : 36 months (Jan 2025 - Dec 2027)

First period (Jan 2025-Jan 2026) : all partners received DNA for the test set and used the SNP selection data to design primers according to their methods (NAKT: Gt-Seq, GEVES: KASP, INIA: Agri-Seq®)



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Tomato DB



"Development and implementation of an internationally accepted SNP database to assist the tomato DUS testing"

- follow-up of previous project where a set of 300 SNP markers was validated by EU entrusted EOs and Asian offices (CAAS, China; Seed & Variety Service, Rep. of Korea; NARO/NCSS, Japan).
- Aim = construction of an online depository platform containing molecular data of the varieties from the EU variety collection useable to search for similar varieties (either by tools to be developed within the database itself or by models selected by the EOs).
- Coordinator: **NAKT**
- Project partners : GEVES, COBORU, NÉBIH, INIA-CSIC, CREA and Euroseeds
- Duration : 24 months (March 2026 – March 2028)

KoM in March 2026
Choice of variety sets
DB structure: first version



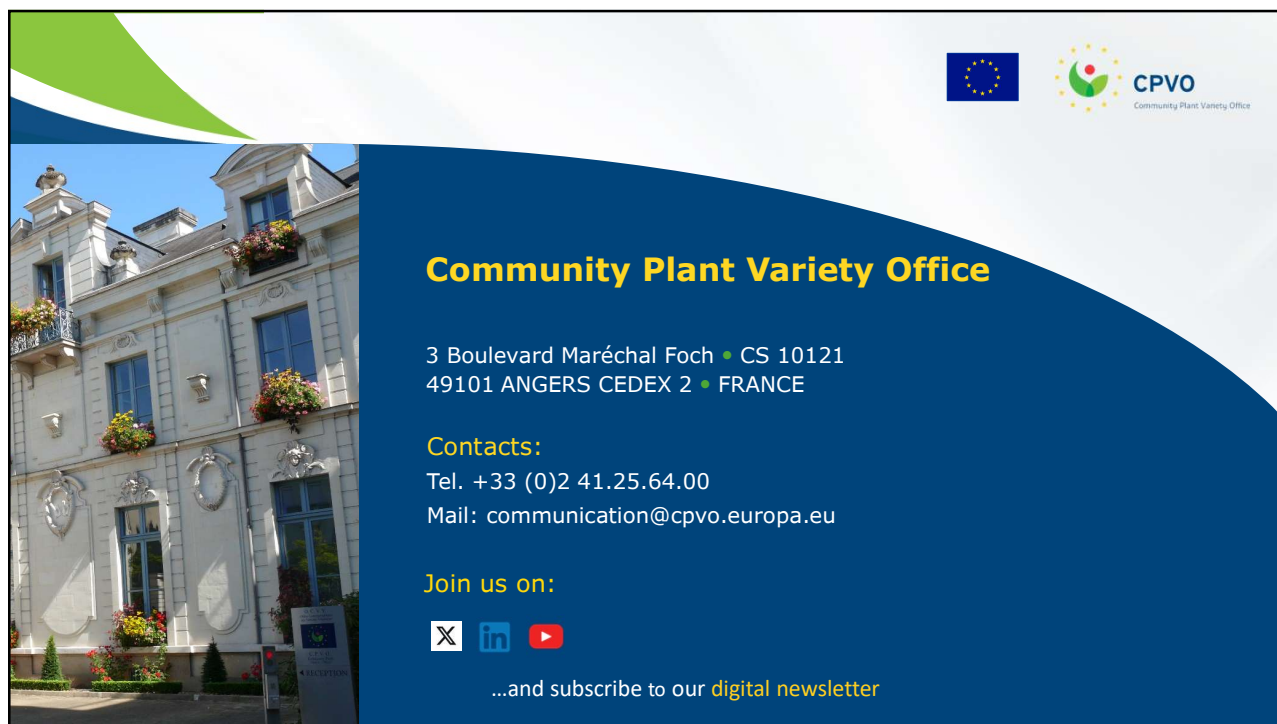
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The slide features the CPVO logo in the top left. The title 'Phenotyping tools for DUS testing in the EU' is centered in a bold blue font. On the left, there are three bullet points: '→ Discussions ongoing with EU EOs to identify common interests and support the elaboration of potential proposals by interested partners for future CPVO R&D calls --> **ToR, representatives.**', '→ **Visits to breeders 2026** to gain understanding on what can be done.', and '→ **Meeting to come (Nov 2026)**'. On the right, there is a collage of images: a person using a measuring tool in a field, a drone, a grid overlay on a plant canopy, a person holding a plant, a color-coded plant canopy, a person holding a plant, a grid overlay on a plant canopy, a person holding a plant, a color-coded plant canopy, and a black and white image of a plant canopy. The bottom left corner has a decorative green and blue wave graphic.

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A banner for the Community Plant Variety Office (CPVO). On the left is a photograph of a grand, light-colored building with ornate architectural details and flower boxes. The right side of the banner has a dark blue background with white and yellow text. At the top right, there are logos for the European Union and the CPVO. The main title 'Community Plant Variety Office' is in yellow. Below it, the address is listed in white. Contact information, including a telephone number and email address, is provided. Social media icons for X, LinkedIn, and YouTube are shown, followed by a call to action to subscribe to a digital newsletter.




 

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