

**Working Group on Biochemical and Molecular Techniques  
and DNA-Profiling in Particular****BMT/17/23****Seventeenth Session  
Montevideo, Uruguay, September 10 to 13, 2018****Original:** English  
**Date:** September 11, 2018

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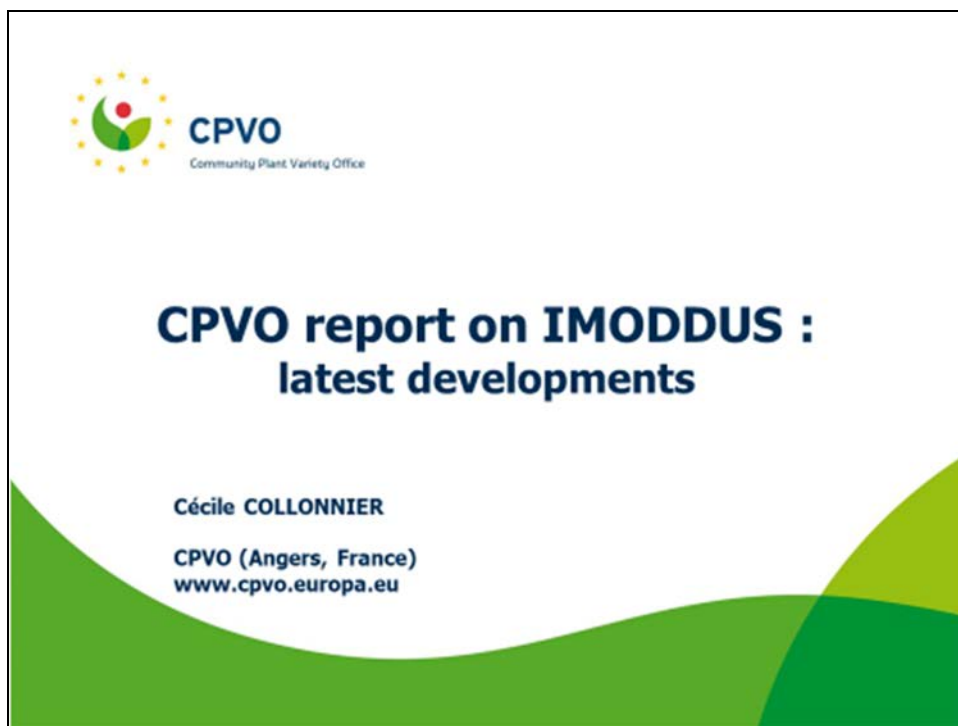
**NEW DEVELOPMENTS IN BIOCHEMICAL AND MOLECULAR TECHNIQUES  
CPVO REPORT ON IMODDUS: LATEST DEVELOPMENTS***Document prepared by an expert from the European Union**Disclaimer: this document does not represent UPOV policies or guidance*

The presentation prepared by an expert from the Community Plant Variety Office (CPVO) entitled “CPVO report on IMODDUS: Latest developments” is reproduced in the Annex to this document.

[Annex follows]

CPVO REPORT ON IMODDUS: LATEST DEVELOPMENTS

Presentation prepared by an expert from the European Union



## Background

- The CPVO Administrative Council adopted a R&D Strategy for the period 2015-2020
- The strategy includes the set up of a CPVO BMT working group for the promotion of the use of bio-molecular techniques in DUS testing and variety identification.
- Its name is CPVO **IMODDUS** which stands for **I**ntegration of **MO**lecular **D**ata into **DUS** testing.

## Background

- IMODDUS works as a think-tank on developing a strategy on how to integrate BMT into DUS testing
- IMODDUS has a **practical approach** which aims to assist the CPVO identifying and assessing R&D project proposals for species where BMT could improve the cost efficiency of DUS testing



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## IMODDUS Meetings

- First meeting: April 2016
- Second meeting: January 2017
- **Third meeting: April 2018**



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## Third meeting April 2018

### Main points of the agenda

1. Revision R&D procedure
2. Revision CPVO Strategy paper chapter 3.3.3
3. Prediction models based on molecular marker
4. Databasing
5. Conclusions and follow up



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## Revision procedure to apply for R&D projects

Applications for funding a project for calendar year "Y"  
must be received by the CPVO on 01 May Y-1

Timeline		
1	Recommended date for reception of project proposal	R = 15 March
2	Confirmation of reception	R + 1 week
3	Request to applicant to answer questions and/or complete information or decision on refusal	R + 3 weeks
4	<b>Final proposal</b>	<b>F = 1 May</b>
5	Advice of IMODDUS and/or expert group	F + 4 weeks
6	Conclusion Advisory group	F + 7 weeks
7	Decision President	F + 8 weeks
8	Financial commitments and Contract drafted	F + 11 weeks
9	Signed Contract	F + 13 weeks



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## Revision procedure to apply for R&D projects

### Transitional period

Applications for funding a project for calendar year 2019 must be received by the CPVO as final proposal on 30.09.2018

Timeline		
1	Recommended date for reception of project proposal	R = end August 2018
2	Confirmation of reception	R + 1 week
3	Request to applicant to answer questions and/or complete information or decision on refusal	R + 3 weeks
4	<b>Final proposal</b>	<b>F = 30 Sept 2018</b>
5	Advice of IMODDUS and/or expert group	F + 4 weeks
6	Conclusion Advisory group	F + 7 weeks
7	Decision President	F + 8 weeks
8	Financial commitments and Contract drafted	F + 11 weeks
9	Signed Contract	F + 13 weeks



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## Revision CPVO Strategy chapter 3.3.3

### Chapter 3.3.3 = "New model: Use of DNA only"

Discussed the presented draft

Received presentations from ESA, Plantum and CIOPORA

- Experts and Breeders associations agreed that
  - It is too early to switch to "DNA only" model
  - Do not develop model further
  - Revise chapter 3.3.3 taking up remarks
- CIOPORA sees future to develop "identity card" for ornamentals based on molecular markers



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## Prediction models based on molecular markers

Presentations received from Scientists:

- Genomic prediction of DUS traits (WUR, NL)
- Prediction of characters in Potato (WUR, NL)
- Use of Genotyping by sequencing in rye grass (Teagasc, IE)



Prediction accuracy depends:

- on species and feature of propagation
- on nature of characteristic (QL/QN)

☞ Will get more knowledge for use in UPOV model 2



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## Databasing

- CPVO informed on joint EU variety DB
  - Naktuinbouw informed about future set up of DBs for a number of important species
- ☞ Agreement that DBs have a high potential to increase efficiency in variety testing



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## Conclusions and follow up

Group assessed strategy paper on

- Work in progress
- Work abandoned
- Work for the future



- Revision of CPVO Strategy paper
  - in collaboration with IMODDUS experts
  - to be presented to AC in Spring 2019

Next meeting : April 2019 in Brussels...



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A word cloud centered around the phrase "THANK YOU". The words are in various sizes and orientations, representing different languages. Visible words include: DANKSCHEEN, TASHAKKUR ATU, SUKSAMA, EKSHMET, BIYAN, SHUKRIA, GRACIAS, ARIGATO, SHUKURIA, GOZAIMASHITA, EFCHARISTO, JUSPAXAR, KOMPAPUNDA, GRAZIE, MEHRBANI, PALDES, BOLZIN, and MERCI.



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[End of Annex and of document]