

Technical Working Party for Vegetables**TWV/55/6****Fifty-Fifth Session
Antalya, Turkey, May 3 to 7, 2021****Original:** English
Date: April 9, 2021

USE OF DISEASE RESISTANCE CHARACTERISTICS*Document prepared by experts from France and the European Union**Disclaimer: this document does not represent UPOV policies or guidance*

The annex to this document contains a copy of a presentation “Harmorescoll - Towards a European, harmonized collection of reference material for DUS resistance tests”, to be made by an expert from France, at the fifty fifth session of the Technical Working Party for Vegetables (TWV).

[Annex follows]

Harmorescoll

Towards a European, harmonized collection of reference material for DUS resistance tests

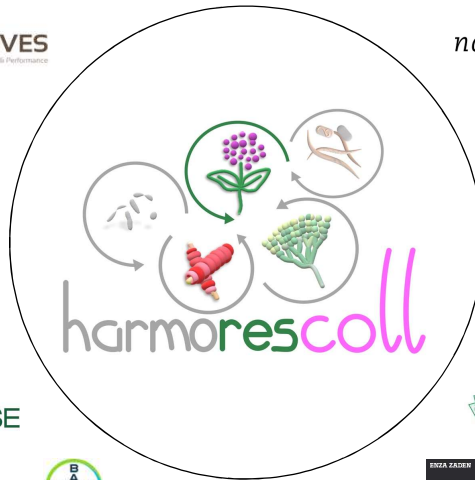
Nicolas Denancé

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With & for examination offices, initiatives, seed companies

Initiatives:
IBEB-EU
IWGP
MATREF
Plantum



From a project to a collaborative platform



Which reference material?
How to access it?



harmonized portal to provide **accurate information** on **reference material**

- to inform about **diversity** and **providers** of reference materials
- to facilitate **access** to reference material
- to perform **harmonized** resistance tests
- to improve **reliability** and **efficiency** of resistance tests
- to **reduce discrepancies** between claims & official results and between official results

Harmorescoll project: content & organization



WP1 **characterization of the future Harmorescoll network and associated list of material**



WP2 **Inventory & availability of material**



WP3 **validation of reference material**



WP4 **set up of a list of Harmorescoll reference material**



WP5 **coordination, management, communication**

Goals:

defining global strategy

defining the material to play with

organizing series of validation tests

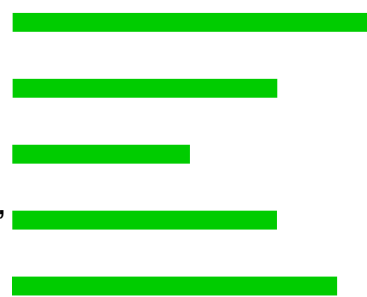
releasing the Harmorescoll list

WP1: defining global strategy

Leader: Bert Scholte

Progress
(started > completed)

- **functioning** of existing initiatives
- **governance** of the Harmorescoll network
- **delivery** of reference material
- **validation criteria** to guarantee “reference”
- **release** of the list



[Q2, 2020 – Q3, 2021]

WP1.1: Characterization of existing initiatives

COMPLETED

Seeds

Name	Backup system?	Entries	Pathogen species	Crops	Handling fee, per entry	Approximate demand	Note
MATREF/GEVES	y	202	48	10	€ 41-81	1500/year	Max. 200 seeds per year for non-men
IBEB/Naktuinbouw/GEVES	y	16*	1	1	free	5-10 sets/year	
IWGP/Naktuinbouw	n	12	1	1	free	5-10 sets/year	
Naktuinbouw	n	4	1	1	free	1 set/2 years	
SASA	y	?	1	1	to be decided		
CPPSI	n	?	6	5	\$ 50,- or 60,-		50% discount for academia

*IBEB differentials also counted in MATREF and CPPSI

Pathogens

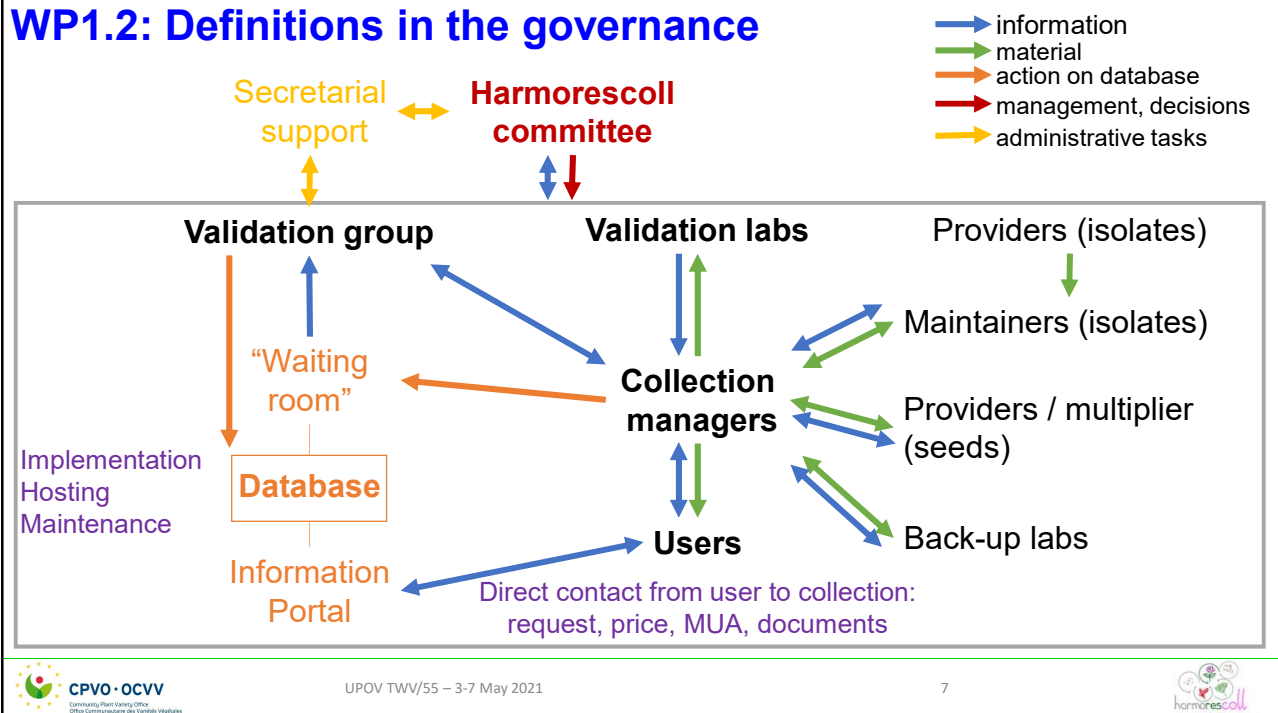
Name	Backup system?	Isolates	Pathogen Species	Crops	Handling fee, per isolate	Approximate demand	Note
MATREF/GEVES	y	82	48	10	€ 105,-	150-500 /year	FVBN
GEVES		132	18	12			FVBNI
Plantum/Naktuinbouw	y	82	32	11	€ 330,-	40-80 /year	Max. 4 isolates/user/year; FVBNI
IBEB		18*	1	1			F
IWGP		16**	1	1			F
SASA		1	1	1	to be decided		
CREA	n	39	9	4	free		
INIA	n	?	?	?	€ 110-175,-	4 /year	F 110, V 136, B 120, N 175**
CPPSI	n	?	6	5	\$ 50 or 250,-		50% discount for academia

*IBEB isolates also counted in PIC and MATREF

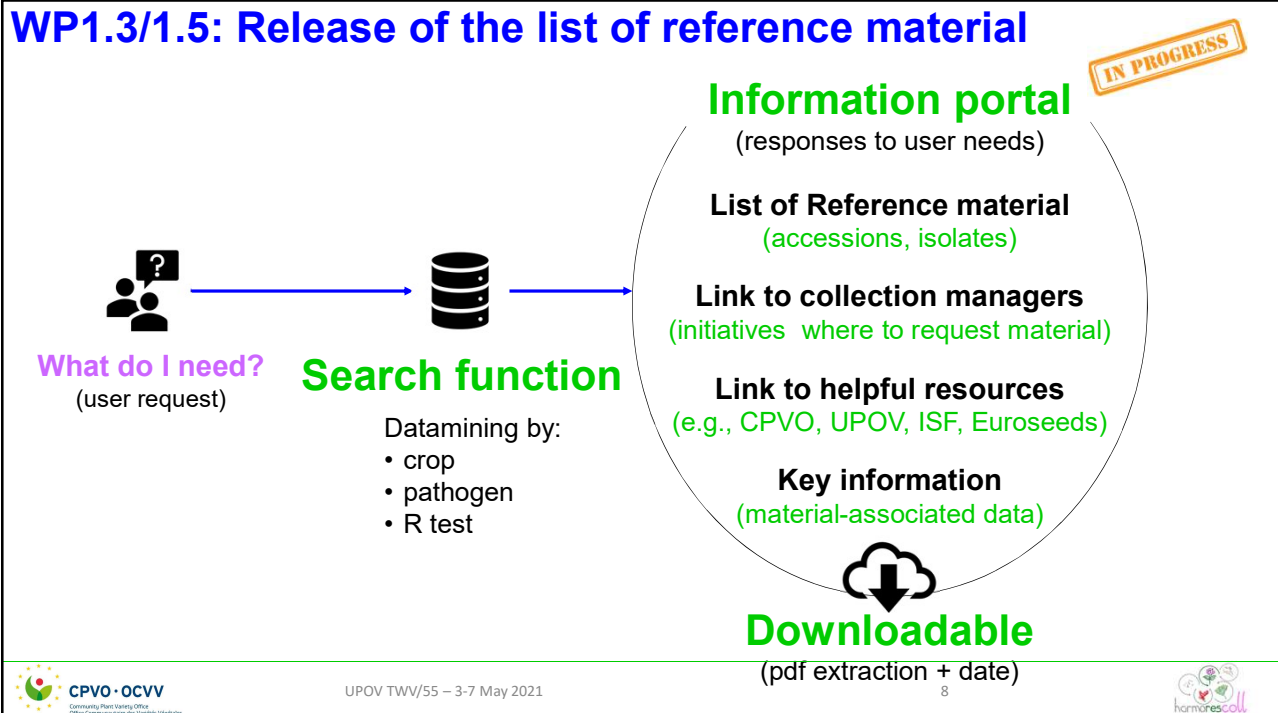
**F=fungi, V=viruses, B=Bacteria, N=Nematodes

Tips to define governance & strategy

WP1.2: Definitions in the governance

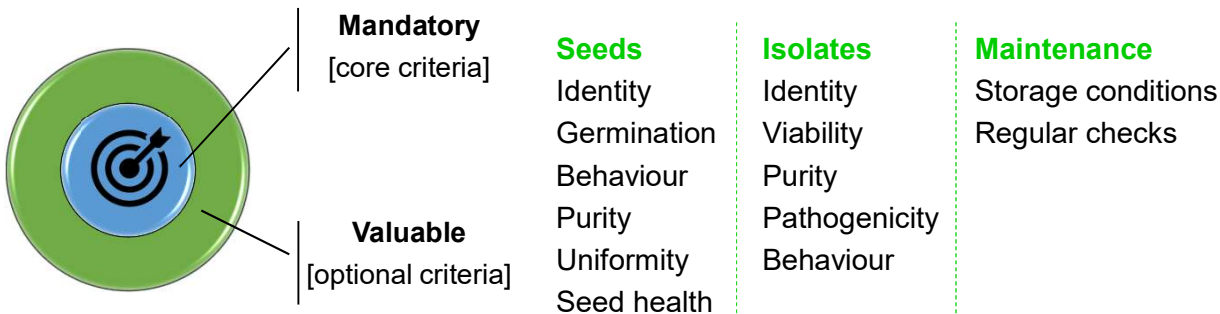


WP1.3/1.5: Release of the list of reference material



WP1.6: Reference or not: validation criteria

IN PROGRESS



WP2: defining the material to play with

[Q2, 2020 – Q3, 2021]

Leader: Nicolas Denancé

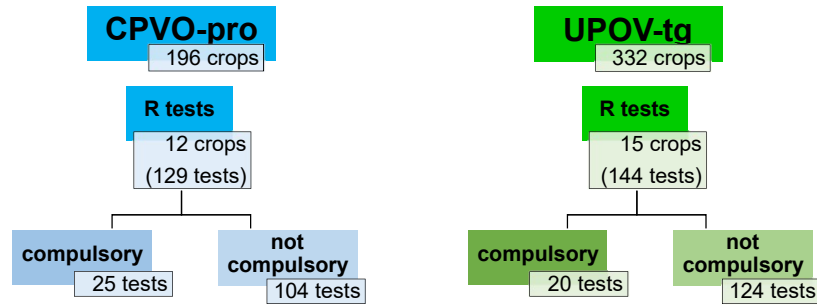
Progress
(started > completed)

- **inventory** of requested reference material
- **availabilities & gaps** in reference material
- **organization** of the collections
- & **supply for missing** materials or alternatives



WP2: Inventory of reference material needed

COMPLETED



• **15 crops - 455 seed materials**

- | | | |
|-------------|---------|-------------------|
| Cabbage | Melon | Tomato rootstocks |
| Corn salad | Pea | Watermelon |
| Cucumber | Pepper | Common millet |
| French bean | Spinach | Japanese pear |
| Lettuce | Tomato | Lucerne |

• **58 pest species - 145 isolates**

- Pathogens:** fungi (25), viruses (15), oomycetes (7), bacteria (5)
- Pests:** arthropods (4), nematodes (2)

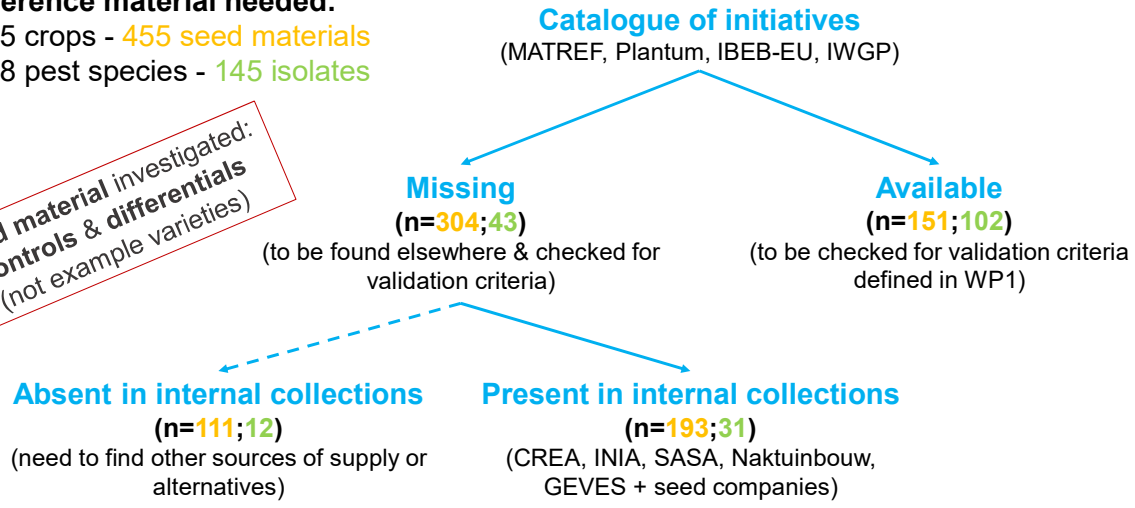
WP2: Availabilities & gaps in reference material

COMPLETED

Reference material needed:

- 15 crops - 455 seed materials
- 58 pest species - 145 isolates

**Seed material investigated:
controls & differentials
(not example varieties)**






WP3: organizing series of validation tests

[Q4, 2020 – Q1, 2023]

Leader: Sophie Perrot

Progress
(started > completed)



- **prioritization of material** to be validated 
- **performing** validation tests (isolates) 
- **performing** validation tests (seeds) 

WP4: releasing the Harmorescoll list

[Q1, 2021 – Q1, 2023]

Leader: Nicolas Denancé

Progress
(started > completed)

- **fill in the list** of reference material 
- **review the list** of reference material 

Take home message

Harmorescoll wish to become a user-friendly platform

- Providing reliable information on Reference Materials
- To improve efficiency & trust in DUS resistance tests
- For the benefit of the European EOs and the seed industry

