

Technical Working Party for Vegetables**TWV/55/7****Fifty-Fifth Session****Original:** English**Antalya, Turkey, May 3 to 7, 2021****Date:** March 31, 2021

MANAGEMENT OF THE REFERENCE COLLECTION – EUROPEAN UNION MELON DATABASE*Document prepared by an expert from France**Disclaimer: this document does not represent UPOV policies or guidance*

The annex to this document contains a copy of a presentation “Management of the reference collection – European Union Melon database”, to be made by an expert from the France, at the fifty fifth session of the Technical Working Party for Vegetables (TWV).

[Annex follows]

CPVO R&D project

01/01/2018 – 31-03-2021

Management of the reference collection

EU Melon database

Descriptions and pictures



5 Project partners –

CPVO Melon entrusted examination offices (EOs)

GEVES (FR)

INIA (ES)

UKSUP (SK)

DGAV (PT)

Naktuinbouw (NL) – Coordinator

UPOV – TWV 55
May, 2021

BACKGROUND

- High number of candidate varieties annually
- Responsibility of the EOs to **maintain the reference collection**
 - including **all varieties** of common knowledge, suitable to grow in the relevant climate
 - belonging to the varietal group of the applications

Time consuming

and

Skilled and well trained experts

- ***The same goal***

- Increase the quality of the DUS decisions and strengthening the NLI and PBR systems
- Decrease the risk to miss similar varieties

DEVELOPMENT OF THE GEMMA MELON DATABASE

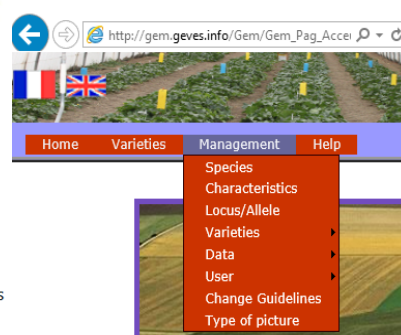
- An IT tool developed by GEVES (FR) , with a **User guide** (40 pages)
- A **central database**, used in *previous initiatives* (peach tree, potato)
- **Share of a common framework**, with addition of **new aspects**
- Import national data from **standardized Excel files**

GEMMA USER GUIDE



GEVES

- 0-Gem_Integration_User_FR.xls
- 1-Import_Species_FR.xls
- 2-Import_Characteristic_FR.xls
- 4-Import_Varieties_FR TOTAL_old.xls
- 5.1-Import_QualitativeData_FR_UPOV_TG104-4.xls
- 5.2-Import_QualitativeData_FR_CPVO_TP104-1.xls
- 5.3-Import_QualitativeData_FR TOTAL_CPVO_TP104-2.xls
- 5.4-Import_QualitativeData_FR_CPVO_TP104-2 Rev_old.xls
- 8-Import_Picture_FR.xls



MELON DESCRIPTIONS DATA BASE FOR A PANEL OF USE...

Applicant's descriptions, **Official descriptions** and/ or **Working descriptions**

FROM and **FOR**

Entrusted examination offices by CPVO (ES, FR, NL, PT, SK, and IT soon...)

- Annually fed, updated and potentially upgraded
- Allowing consultations, sorts and exports.

At a national or EU level

For DUS tests,
in a NLI or PBR framework

- Original descriptions remain the **ownership** the initial provider.
- **Uses restricted** to the Partners of the project, no access to 3rd party.

ADMINISTRATIVE DATA ASSOCIATED WITH A VARIETY

- **National Unique ID / Denomination /Breeder reference / Synonym**
- Year of application/ ... registration/ ...protection/ ... end of listing
- Breeder name / **Maintainer name**
- **Present application status:** Application/ Registered/ Surrendered/ Withdrawn...
- **Comments on variety / Phenotypical remarks**
- Level access: Administrators (*/ Users/ Public**)
- **Dissemination framework:** EU Var. list/ EU conservation.../Not EU var. .../ ...
- **Method of reproduction and maintenance:** Seed propagation, F1/ Seed..., OP/ Seed ..., self pollinated/.../ Vegetative propagation

* Option not chosen in GEMMA melon data base

NEW in the GEMMA framework

MORPHOLOGICAL DATA_ QUALITATIVE DATA (NOTES)

- Official protocols
 - **UPOV TG 104-4 / CPVO TP 104-1/ CPVO TP 104-2/ CPVO TP 104-2 Rev.**
 - With all the respective characteristics and levels of expression
 - Possibility to generate all the previous descriptions into **the latest official format**, for the **char. / levels of expression which are compatible.**

1 - Before use this screen be sure the 2 guidelines are declared into the database

GI Ref.	Melon GI	Species code	Species	Date (beginning)	Date ending	Date modif.
CPVO TP 99/2	CPVO Melon prototype TP 99/2	CUQUR_TEST	Melon	21/03/2007		
CPVO TP 99/2	CPVO Melon prototype TP 99/2	CUQUR_TEST	Melon	23/11/2020		

2 - For each characteristic : build the matrix of conversion

The image shows four screenshots of the GEMMA database interface. The top two are 'List of guidelines' for 'CPVO TP 99/2' and 'CPVO TP 99/2'. The bottom two are 'List of levels of expression' for 'CPVO TP 99/2'. The 'List of levels of expression' screen is circled in red, showing a table with columns for 'Characteristic', 'Level of expression', and 'Value'. The table contains several rows of data, including 'Color of the fruit', 'Shape of the fruit', 'Weight of the fruit', 'Number of seeds', 'Color of the seeds', 'Shape of the seeds', 'Weight of the seeds', 'Number of seeds per fruit', 'Color of the seeds per fruit', 'Shape of the seeds per fruit', and 'Weight of the seeds per fruit'.

To allow sorts whatever the initial test protocol

PICTURES DATA

Guidance for inclusion

- max 500 Ko, .pdf, .jpg
- Mandatory Name **nomenclature**



- Merged fruit pictures (**0001**)
- Immature Fruit (**0002**)
- Fruit at Maturity (**0003**)
- Extracted seeds (**0004**)
- Official description (**000A**)

FR-7014255-2019-0002.JPG
FR-7014255-2019-0003.JPG
FR-7014255-2019-0004.jpg
FR-7014255-2020-000A.pdf



VARIETY DESCRIPTION

1.	Reference number of reporting authority	: CPVS 4066163	
2.	Reference number of requesting authority	: 4066163	
3.	Breeder's reference	: O	
4.	Applicant (name and address)	: Taki Europe B.V. Houding 19 1424 PC DE KWANZEL, Papy-Bas Taki France S.A.	
5.	Botanical name of taxon	: Cucumis melo L.	
6.	Common name of taxon	: Melon	
7.	Variety denomination	: Kalbe	
7bis.	Variety type	: declared as hybrid	
8.	Date and document number of CPVO test guidelines	: 21/03/2007; CPVO-TP1042	
9.	Date and/or document number of national test guidelines	: ...	
10.	Testing authority	: GEVES, France	
11.	Testing station(s) and place(s)	: GEVES Cevalon	
12.	Period of testing	: 01/05/2019 - 30/07/2019	
13.	Date and place of document	: 30/06/2020; Vigmeux	
15.	Characteristics observed		
OCVV or National N°	Characteristic	Level of expression	Note
1	Seedling		
	length of hypocotyl	short	3
2	size of cotyledon	small	3
3	intensity of green colour of cotyledon	medium	5
4	Leaf blade		
	size	medium	5
5	intensity of green colour	medium	5
6	development of lobes	medium to strong	6
7	length of terminal lobe	medium	5
8	distinction of margin	strong	7
9	sinuering	medium	5
10	Petiole		
	attitude	erect	1
11	length	medium	3
12	Inflorescence		
	axe expression (at full flowering)	inconspicuous	1
13	Young fruit		
	hue of green colour of skin	green	3
14	intensity of green colour of skin	light to medium	4
15	density of ribs	medium	5
16	size of ribs	medium	5
17	contrast of rib colour/ground colour	medium	5
18	conspicuousness of ground colouring	absent or very weak	1

(A...) Characteristics identified by a user are additional characteristics used in France
La présente fiche descriptive ne peut être utilisée sans être utilisée pour l'inscription à un catalogue national ou pour le
diffusion d'un certificat d'inscription végétale sans l'accord préalable du GEVES
This description cannot be used for registration on any national list or register either for the purpose of marketing or plant
breeder's rights without GEVES consent

EXPERIENCES WITH THE DATA BASE

During the project

Necessity of practical experiences of the GEMMA functionalities.

- A detailed and illustrated **user guide**
- Two **training sessions** (Teams meetings: Nov. 23, 2020, Feb. 16, 2021)
- Exchanges between partners and individual supports provided by GEVES IT

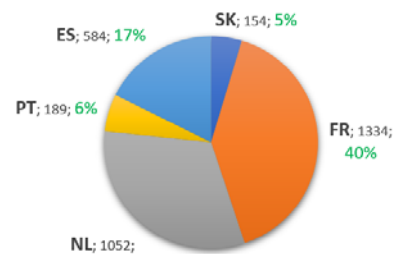
Respective involvement of the parnters

- Number of included varieties** whatever their status
(Application, Registered, Surrendered, Expired, Rejected, Withdrawn)

Difficulties and IT improvement *not yet achived*

- End of Adobe Flash Player software(Jan 2021).
 - IT developments to perform to allow the import of pictures
- To enlarge the size of the working screen

Number of varieties in database according to the partner - March 25, 2021



PARTNERSHIP AGREEMENT On the cooperation of a central EU Melon database

- **Signed** by all the partners (March 31, 2021)
 - With its 3 annexes
 - Annex 1: **Contribution of data**
 - Annex 2: **Licence Agreement on GEMMA website and database**
(valid after March 2021), Annual fees: 312€ /year / species
 - Annex 3: **Confidentiality of data**
- Validation of the **General Assembly**
 - once a year, *if possible* in February
 - With the named **Representatives**, and/or **Deputies per partner**
 - **A coordinator** chosen for a 3 years term: NL (2018 – 2020), FR (2021 – 2023)

FOLLOW UP – *DRAFT AGENDA OF THE NEXT GENERAL ASSEMBLY*

- **Annual updating**
 - Administrative data
 - Technical data (descriptions, pictures)
- Identification and validation of **Unique GEMMA IDs**
 - The « same » variety, with several Official/ working descriptions
- Definition and attribution of **varietal culti-groups** based on fruit types
 - Characteristics/ levels of expression allowing the definition of a fruit group
 - Validation of the wording
- **Future prospects, discussion around potential...**
 - new characters (disease resistance, ...)
 - assesement and / or management methods



[End of Annex and of document]