

Technical Working Party for Vegetables

Sixtieth Session
Pacific Grove, United States of America, May 18 to 21, 2026

TWP/10/6

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Technical Working Party on Testing Methods and Techniques

Fourth Session
Cambridge, United Kingdom, June 2 to 5, 2026

Technical Working Party for Agricultural Crops

Fifty-Fifth Session
Seoul, Republic of Korea, June 15 to 18, 2026

Technical Working Party for Ornamental Plants and Forest Trees

Fifty-Eighth Session
Virtual meeting, July 6 to 9, 2026

Technical Working Party for Fruit Crops

Fifty-Seventh Session
Leipzig, Germany, September 7 to 10, 2026

REPORT ON DEVELOPMENTS IN UPOV

Document prepared by the Office of the Union

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EXECUTIVE SUMMARY

1. The purpose of this document is to report developments in UPOV concerning the new “UPOV e-PVP DUS Report Exchange Module” and UPOV members at the Technical Working Parties will be invited to use the tool to facilitate cooperation in variety examination.
2. Developments concerning the UPOV databases for genera and species (GENIE) and plant varieties (PLUTO) are reported and the Technical Working Parties will be invited to check the UPOV codes that have been recently created or amended, including UPOV codes for the *Citrus* complex.
3. Discussion at the Technical Committee in 2025 on “New Technologies in DUS Examination” and corrections to Test Guidelines are reported for information purposes.
4. The structure of this document is as follows:

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PVP Office	Number of requests																Total number of reports downloaded (as of February 2026)	
	AP	BR	CA	CL	QZ	JP	MA	MX	NL	NZ	MD	TR	GB	US	UY	VN		
New Zealand	NZ	0	0	0	0	10	0	0	0	5	0	0	0	0	0	0	7	
Republic of Moldova	MD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Türkiye	TR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
United Kingdom	GB	0	0	0	0	90	0	0	0	293	0	0	0	62	0	0	49	
United States of America	US	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Uruguay	UY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Viet Nam	VN	0	0	0	0	16	0	0	0	7	0	0	0	0	0	0	7	
Total requests received:	16	0	0	0	1	255	8	0	0	314	2	0	0	72	29	0	0	116/681

10. The following functionalities have been released in the DUS Report Exchange Module:
- Support for the exchange of DUS reports between PVP Offices;
 - Support for exchanging VCU (Value for Cultivation and Use) reports, if needed;
 - Introduction of a dedicated role for DUS test centers, allowing them to:
 - Accept requests from the PVP Office of the same country or region; and
 - Share DUS test results with the PVP Office when the office has commissioned or delegated the test to the DUS test center;
 - Improvements to the search functionality.

11. More information on the tool, including the demonstration video can be found at: <https://www.upov.int/en/file-and-manage/upov-epvp-exchange>

Requirements to join the Exchange Module

12. The Exchange Module is available for all UPOV members at no cost.
13. To participate in the Exchange module, the following steps are required:
1. Sign the acknowledgment letter confirming acceptance of the terms of use.
 2. Designate a focal point to obtain access to the tool, which is granted via a WIPO account.
14. To enhance the efficiency of the tool, it is essential to expand its use. The DUS Exchange module is designed as a central repository for available reports, which can also be commissioned, searched and provided upon request. Increased participation of UPOV members will contribute to improved functionality and effectiveness the tool.

15. UPOV members at the TWPs are invited to use the new “UPOV e-PVP DUS Report Exchange Module” to facilitate cooperation in variety examination.

UPOV GENERA AND SPECIES DATABASE (GENIE DATABASE)

Background

16. The GENIE database (<http://www.upov.int/genie/en/>) has been developed to provide online information on the status of protection, experience and cooperation in DUS testing and the existence of UPOV Test Guidelines for different GENera and speciEs (hence GENIE). The GENIE database is used to generate the relevant Council and TC documents concerning that information¹.

17. The GENIE database is the repository of the UPOV codes and provides information concerning the principal and alternative botanical names and common names of plant taxa.

¹ See documents C/[session]/INF/6 “List of the taxa protected by the members of the Union; TC/[session]/INF/4 “List of genera and species for which authorities have practical experience in the examination of distinctness, uniformity and stability”; and TC/[session]/2 “Test Guidelines”.

UPOV code developments

18. In 2025, 135 new UPOV codes were created. The total number of UPOV codes in the GENIE database as of December 31, 2025 was 10,111.

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
New UPOV codes	188	173	440	242	243	177	131	183	78	505	135
Total UPOV Codes	7,992	8,149	8,589	8,844	9,077	9,213	9,342	9,525	9,605	10,109	10,111

TWP checking of new and amended UPOV codes

19. Section 3.3 of the “Guide to the UPOV Code System” provides the following:

“Amendments to UPOV codes will be handled by the same procedure as the introduction of new UPOV codes [...]. However, in addition, all members of the Union and contributors of data to the Plant Variety Database will be informed of any amendments”.

20. In accordance with the procedure set out in Section 3.3 of the Guide to the UPOV Code System, the Office of the Union prepared tables of UPOV code additions and amendments for the Technical Working Party (TWP) sessions in 2026.

21. The Excel files in the Annex to this document provide information on new UPOV codes added to the GENIE database and UPOV code amendments as follows:

“Part A ‘New UPOV codes’:

contains the new UPOV codes. In this spreadsheet, column headers highlighted in yellow indicate the relevant Technical Working Party (TWP) which are requested to check the correctness of the information.”

“Part B ‘UPOV codes amendments’:

contains UPOV codes to be amended. In this spreadsheet, the column highlighted in yellow indicates the information was amended. UPOV codes in red are no longer in use.

22. The Annex to this document contains parts A ‘New UPOV codes’ and B. ‘UPOV codes amendments’. The Excel format files are available on the websites for the 2026 sessions of the TWPs.

23. Experts of the Technical Working Party for Vegetables (TWV), Technical Working Party for Agricultural Crops (TWA), Technical Working Party for Ornamental Plants and Forest Trees (TWO) and Technical Working Party for Fruit Crops (TWF) are invited to check Part A and B and submit comments to the Office of the Union by December 31, 2026.

24. UPOV members at the TWPs are invited to check the information on the new UPOV codes added to the GENIE database and the amendments to existing UPOV codes, as set out in the Annex to this document.

GENIE database: finding cooperation in DUS examination

25. At its session in 2025, the Council² agreed to discontinue the section on “Cooperation in DUS Examination” in the GENIE database and Council document with the same title, with the understanding that such a decision would not affect the section “Practical experience in DUS examination” of the GENIE database, nor the publication of the TC document “List of genera and species for which authorities have practical experience in the examination of DUS”.

² Council, fifty-ninth session, held in Geneva on October 24, 2025. See document C/59/19 “Report”, paragraph 56

26. At its session in 2025, the TC³ noted that information in the PLUTO database and the UPOV e-PVP DUS Report Exchange Module provided alternatives to identifying cooperation in DUS examination. The TC noted that a report on the crops and number of reports exchanged using the UPOV e-PVP DUS Report Exchange Module would be provided by the UPOV Office on a periodic basis as a performance indicator. The TC agreed to encourage further UPOV members to utilize the UPOV e-PVP DUS Report Exchange Module.

Amendments to UPOV codes for Citrus

27. The TWF, at its fifty sixth session⁴, considered the proposals for amending the UPOV codes for *Citrus* and related genera and species.

28. The TWF agreed to invite experts to provide comments on the proposed amendments, to be submitted to the Office of the Union by July 24, 2025.

29. The TC, at its sixty-first session⁵, noted developments at the TWF on the revision of the UPOV codes for the *Citrus* complex. The TC considered the proposal from the TWF and agreed to amend the UPOV codes for the genera *Citroncirus*, *Fortunella* and *Poncirus*. On February 5, 2026, the Office of the Union issued Circular E-26/010 to all UPOV bodies to announce that the amendments to the UPOV codes, which took effect on March 16, 2026.

30. Discussions on the UPOV codes for *Citrus* continue and further proposals will be provided to the TWF, at its session in 2026.

Revision of scope of the five Test Guidelines for Citrus groups

31. At its session in 2025, the TC considered the revision of the UPOV codes for *Citrus* and the proposed revision of scope of the five Test Guidelines for *Citrus* groups.

32. The TC recalled that Test Guidelines should not be revised for the sole purpose of updating botanical names and agreed that the proposed revision of the five Test Guidelines for *Citrus* groups should be conducted to redefine the scope of documents TG/83, TG/201, TG/202, TG/203 and TG/204 (*Citrus* groups).

PLUTO DATABASE

33. The number and different types of subscriptions to the PLUTO premium service from 2021 to 2025 are indicated in the table below.

Subscription	2021	2022	2023	2024	2025
Paying Premium Users	9	21	52	8	24
Non-paying premium Users (Eligible Officials)	97	136	149	151	165
PVP Contributors	28	43	59	61	68
Other Users (Standard Service)	1,131	2,704	4,370	4,855	6,868

34. The frequency of data contributions to the PLUTO database differs from one authority to another.

Last contribution year	No data submission	2021	2022	2023	2024	2025
Number of authorities	11	4	0	3	6	44

35. The Office of the Union is arranging online sessions with new contributors to outline the contribution process and familiarize them with the PLUTO database interface for contributors.

³ Technical Committee, sixty-first session, held in Geneva on October 20 and 21, 2025. See document TC/61/8 "Report", paragraph 47

⁴ TWF, fifty-sixth session. Held in Bursa, Türkiye, from June 23 to 26, 2025. See document TWF/56/7 "Report", paragraphs 25 to 31.

⁵ Technical Committee, sixty-first session, held in Geneva on October 20 and 21, 2025. See document TC/61/8 "Report", paragraphs 48 to 51

36. A database of high quality is to the benefit for all UPOV members. The quality of a database depends on high quality contributions. Data contributors to the PLUTO database are invited to consider the following aspects of data quality:

- Timeliness: PLUTO contributors should aim to submit data as frequently as possible, ideally right after its publication in the gazette.
- Uniqueness: To prevent duplicates, a control on the variety identifier is implemented in PLUTO (application number or grant number).
- Validity: Denominations that are empty or dates that are invalid must be identified and corrected.
- Consistency: Application/grant numbers should be consistent within the data provided by an authority.
- Accuracy: It is crucial to identify species correctly and link them to the appropriate UPOV code to test denominations accurately. The PLUTO database has a rigorous process to propose UPOV codes and validate them with data contributors.
- Completeness: The quality of the PLUTO database would benefit from receiving complete sets of data contributions from all UPOV members.

37. At its session in 2025, the TC noted the current use of the PLUTO database and the challenges faced by data contributors and other users. The TC noted that two surveys were planned to understand factors affecting the completeness and timeliness of data contributions; and to gain insights into the efficiency and user-friendliness of the search functionality.

TWP WORKSHOPS AND WEBINARS

38. At its session in 2025, the TC agreed to organize technical webinars at suitable dates prior to the TWP sessions in 2026 on the following topics:

- Environmental effect in expression of characteristics;
- Completeness and relevance of variety collections;
- Phytosanitary issues that prevent or delay submission of plant material

39. The webinars took place from April 21 to 23, 2026 and the video recordings made available on the UPOV website at: <https://www.upov.int/en/find-and-explore/information-and-guidance/examination-guidance/>

DISCUSSION ON “NEW TECHNOLOGIES IN DUS EXAMINATION”

40. The TC received the following presentations on new technologies in DUS examination, which were available on the [TC/61 webpage](#) of the UPOV website:

United Kingdom research and development to support DUS examination	United Kingdom
The use of new technologies in the DUS examination in France - the experience of GEVES	France
Molecular markers to machine learning – a United Kingdom policy perspective	United Kingdom

41. The TC noted the efforts to increase the release of new varieties to achieve broader policies. The TC noted the policy considerations on a range of technologies and approaches to increase efficiency in DUS examination, such as:

- machine learning
- genomic prediction
- shared molecular databases
- phenotyping
- image analysis

42. The TC noted that the technologies used aimed at reducing the size of trials and replacing manual work on labor-intensive characteristics. Some were in use for routine work, such as the use of two-dimensional images; while others were being developed such as the use of markers linked to characteristic expression and genomic prediction. The TC noted the increasing efforts towards genotyping variety collections.

43. The TC noted the increasing use of molecular markers for efficiency gains in routine procedures, such as for variety identification and enforcement. The TC discussed the cost implications of using these technologies in routine work and invited UPOV members to contact the members of the Union presenting for cooperation on further developing tools and scaling up initiatives.

44. The TC discussed the implications of smaller differences identified between varieties using automated procedures compared to traditional methods and noted the usefulness of increased precision levels for statistical analysis, such used in forage crops.

45. The TC noted that discussions on these topics would continue at the fourth session of the TWM, to be held in Cambridge, United Kingdom, in 2026.

CORRECTIONS TO TEST GUIDELINES

46. The TC noted the corrections made to the adopted Test Guidelines for Barley (TG/19/11), Waxflower (TG/225/1 Corr.), Sour Cherry, Duke Cherry (document TG/230/2) and Oncidium (document TG/283/1 Rev. 2), as follows:

(a) Barley (document TG/19/11)

The correction concerns the following item:

- Correction of spelling of states 7 and 9 to read “semi-prostrate” and “prostrate” in characteristic 2 “Plant: growth habit”

(b) Waxflower (document TG/225/1 Corr.)

The correction concerns the following item:

- Correction of the German translation of Characteristic 12 “Flower: length of sepal in relation to length of petal” to read “*Blüte: Länge des Kelchblatts im Verhältnis zur Länge des Blütenblatts*”

(c) Sour Cherry, Duke Cherry (document TG/230/2)

The correction concerns the following item:

- Correction of the number of plants from 3 to 5 plants in Chapter 4.2.3 to read:

“For the assessment of uniformity in a sample of 3 plants, a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 3 plants, no off-types are allowed.”

(d) Oncidium (document TG/283/1 Rev. 2)

The correction concerns the following item:

- Correction of the population standard and acceptance probability in Chapter 4.2.1 to read:

“For the assessment of uniformity, a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 9 plants, 1 off-type is allowed.”

47. *UPOV members at the TWPs are invited to note developments reported in this document.*

[Annex follows]

TWP/10/6

ANNEX

UPOV CODES TO BE CHECKED BY AUTHORITIES

SEE EXCEL FILES

[End of document]