

Technical Working Party for Vegetables**TWV/60/2****Sixtieth Session****Pacific Grove, United States of America, May 18 to 21, 2026****Original:** English**Date:** July 3, 2026

REPORTS ON DEVELOPMENTS IN PLANT VARIETY PROTECTION FROM MEMBERS AND OBSERVERS*Document prepared by the Office of the Union**Disclaimer: this document does not represent UPOV policies or guidance*

1. The Technical Committee (TC), at its forty-seventh session, held in Geneva from April 4 to 6, 2011, agreed to request the Office of the Union to invite experts to submit written reports to the Office of the Union in advance of the Technical Working Party (TWP) sessions in order that a document containing those reports could be prepared by the Office of the Union. The TC noted that TWP experts would be invited to make a brief oral summary of their written report at the session and would also be encouraged to make reports under the agenda item "Experiences with new types and species", as appropriate. The TC also noted that TWP experts would have an opportunity to raise questions concerning matters of interest (see document TC/47/26 "Report on the Conclusions", paragraphs 9 and 10).

2. Written reports were invited by the Office of the Union in Circular E-26/027 of March 17, 2026. The following reports were received (in alphabetical order):

- ✓ Members of the Union: Annexes I to V: Brazil, European Union, France, Japan and the United Kingdom

[Annexes follow]

ANNEX I

BRAZIL

1. The National Plant Variety Protection Service (SNPC) on the Ministry of Agriculture and Livestock (MAPA) is the national authority for the examination of applications and for granting Plant Breeders' Rights in Brazil.
2. In 2025, SNPC received 342 applications: agricultural crops (172), ornamentals (64), fruit crops (49), forest trees (30), vegetables (25), and forage crops (2).
3. Those 25 applications of vegetables were for the following: *Cucumis melo* L. (8), *Lactuca sativa* L. (5), *Cucurbita* L. (3), *Brassica oleracea* L. var. *italica* Plenck (2), *Citrullus lanatus* (Thunb.) Matsum. & Nakai (2), *Solanum lycopersicum* L. (2), *Allium sativum* L. (1), *Ipomoea batatas* (L.) Lam. (1) and *Pisum sativum* L. (1).
4. Applications for vegetable varieties were filed by applicants from the Netherlands (Kingdom of) (15), Brazil (7), Japan (2), and Switzerland (1).
5. In 2025, SNPC granted 204 titles: agricultural crops (141), ornamentals (23), fruit crops (19), forage crops (8), forest trees (7), and vegetables (6).
6. Those 6 titles of vegetables were for the following: *Phaseolus vulgaris* L. (1), *Cucumis melo* L. (1); *Cichorium endivia* L. (1), *Solanum lycopersicum* L. (1), *Citrullus lanatus* (Thunb.) Matsum. & Nakai (1) and *Abelmoschus esculentus* (L.) Moench (1)
7. Those titles of vegetables were granted to applicants from the Netherlands (Kingdom of) (3), Brazil (2), and the United States of America (1).

[Annex II follows]

EUROPEAN UNION

CPVO statistics and activities

Statistics

The Community Plant Variety Office of the European Union (CPVO) applications decreased in 2025, with 2897 applications in total (previous year: 3268, -12%).

The distribution between crop sectors was as follows:

- Ornamental and Forestry, 1000 applications (34.5% of the total number of applications), previous year (1131 applications, 34.6%),
- Agricultural, 953 applications (32.9%), previous year (1133 applications, 34.6%),
- Vegetable, 723 applications (25%), previous year (747 applications, 22.9%),
- Fruit, 221 applications (7.6%), previous year (258 applications, 7.9%).

The decrease in the number of applications in 2025 compared to 2024 was of -11.5% in the ornamental and forestry sector, -16% in the agricultural sector, -14% in the fruit sector and -3% in the vegetable sector.

In 2025, the Office granted 2 762 titles for Community protection, and 31 798 titles were in force by the end of the year. National authorities from all over the world regularly base their decisions on applications for CPVRs on technical examinations carried out on behalf of the CPVO (international cooperation, takeover of reports). In 2025, the CPVO provided 574 technical reports to 38 countries (1266 in 2023 and 588 in 2024), among which 315 in the fruit sector, 219 in the ornamental sector, 21 in the vegetable sector and 19 in the agricultural sector. The five countries from which most requests emanated were the United Kingdom (138), Chile (86), Egypt (78), Brazil (76), and Colombia (74). More statistics are available on the CPVO website: [Statistics | CPVO \(europa.eu\)](https://cpvo.europa.eu/Statistics)

Administrative Council (AC)

The CPVO is supervised by an Administrative Council (AC) comprising representatives of the Member States and the European Commission and their alternates. In 2025, the members of the AC took note of the following:

- Preliminary Horizon scanning report: This work aims to provide the AC with balanced and contrasted information to support informed decision-making on substantive policies. The analysis will also enable the CPVO to better anticipate and respond to market dynamics, as well as evolving application flows.
- Strategic Discussion on the Future of Variety Testing of the EU PVR System: three working groups
 - ❖ Working Group I, cost effectiveness of DUS testing in the EU. Entrusted Examination Offices (EOs) are reflecting on optimizing DUS testing capacities within the EU and reducing duration of DUS testing. A survey has been launched to support bilateral discussions between EU Member states in view of increasing centralisation of DUS testing.
 - ❖ Working Group II, potential involvement of breeders in DUS testing: the potential involvement of breeders should be subject to the establishment of a clear framework and stringent oversight, transparency, and quality safeguards. Discussions ongoing.
 - ❖ Working Group III, strategic revision of the functions of the Quality Audit Service (QAS): the QAS Procedure Manual and the Entrustment Requirements were revised involving all entrusted EOs.
- European Commission launched the evaluation of the CPVO Basic Regulation (COUNCIL REGULATION (EC) No 2100/94), the study to be ready by the end of 2026/beginning 2027.

In 2025, 29 technical protocols were adopted by the AC, with most of the revisions based on the UPOV TGs.

Coleus	<i>Coleus scutellarioides</i> (L.) Benth. (syn. <i>Plectranthus scutellarioides</i> (L.) R. Br. ; <i>Coleus blumei</i> Benth.; <i>Solenostemon scutellarioides</i> (L.) Codd)	CPVO/TP-327/1-Corr
sour cherry, duke cherry	<i>Prunus cerasus</i> L., <i>Prunus</i> × <i>gondouinii</i> (Poit. & Turpin) Rehder	CPVO/TP-230/2
apple rootstocks	<i>Malus</i> Mill.	CPVO/TP-163/2-Rev
Amaryllis	<i>Hippeastrum</i> Herb.	CPVO/TP-181/2
apple (fruit varieties)	<i>Malus domestica</i> (Suckow) Bork.	CPVO/TP-014/3
Rice	<i>Oryza sativa</i> L.	CPVO/TP-016/4
Carnation	<i>Dianthus</i> L.	CPVO/TP-025/2-Corr
Spinach	<i>Spinacia oleracea</i> L.	CPVO/TP-055/5-Rev.5-Corr
Tomato	<i>Solanum lycopersicum</i> L.	CPVO/TP-044/5
swede, rutabaga	<i>Brassica napus</i> L. var. <i>napobrassica</i> (L.) Rchb.	CPVO/TP-089/1-Rev
Kale	<i>Brassica oleracea</i> L. var. <i>costata</i> DC.; <i>Brassica oleracea</i> L. var. <i>medullosa</i> Thell.; <i>Brassica oleracea</i> L. var. <i>sabellica</i> L.; <i>Brassica oleracea</i> L. var. <i>viridis</i> L.; <i>Brassica oleracea</i> L. var. <i>palmifolia</i> DC.	CPVO/TP-090/2
Chinese cabbage	<i>Brassica rapa</i> L. subsp. <i>pekinensis</i> (Lour.) Hanelt; hybrids between <i>Brassica rapa</i> L. subsp. <i>pekinensis</i> (Lour.) Hanelt and <i>Brassica rapa</i> L. subsp. <i>chinensis</i> (L.) Hanelt; hybrids between <i>Brassica rapa</i> L. subsp. <i>pekinensis</i> (Lour.) Hanelt and <i>Brassica rapa</i> L. var. <i>rapa</i> , <i>Brassica</i> × <i>turicensis</i> O. E. Schulz & Thell.	CPVO/TP-105/2
sweet pepper, hot pepper, paprika, chili	<i>Capsicum annuum</i> L.	CPVO/TP-076/3
vegetable marrow, squash	<i>Cucurbita pepo</i> L.	CPVO/TP-119/1-Rev.2
Melon	<i>Cucumis melo</i> L.	CPVO/TP-104/2-Rev.3
Statice	<i>Limonium</i> Mill., <i>Goniolimon</i> Boiss., <i>Psylliostachys</i> (Jaub. & Spach) Nevski	CPVO/TP-168/1
Oncidium	<i>Oncidium</i> Sw.; x <i>Oncidesa</i> Hort.; x <i>Ionocidium</i> Hort.; x <i>Zelenkocidium</i> J.M.H. Shaw.	CPVO/TP-283/1-Corr
ling, Scots heather	<i>Calluna vulgaris</i> (L.) Hull	CPVO/TP-094/2
turnip rape	<i>Brassica rapa</i> L. subsp. <i>campestris</i> (L.) A. R. Clapham.	CPVO/TP-185/1
oilseed rape	<i>Brassica napus</i> L. ssp. <i>Napus</i>	CPVO/TP-036/4
raspberry, black raspberry	<i>Rubus idaeus</i> L.; <i>Rubus</i> × <i>neglectus</i> Peck; <i>Rubus occidentalis</i> L.; <i>Rubus idaeus</i> L. × <i>Rubus parviflorus</i> L.	CPVO/TP-043/3
Strawberry	<i>Fragaria</i> L.	CPVO/TP-022/4
sweet cherry	<i>Prunus avium</i> (L.) L.	CPVO/TP-035/3
red clover	<i>Trifolium pratense</i> L.	CPVO/TP-005/1-Rev
Weigela	<i>Weigela</i> Thunb.	CPVO/TP-148/2
industrial chicory	<i>Cichorium intybus</i> L. <i>partim</i>	CPVO/TP-172/2-Rev
Asparagus	<i>Asparagus officinalis</i> L.	CPVO/TP-130/2-Rev
Lettuce	<i>Lactuca sativa</i> L.	CPVO/TP-013/6-Rev.5-Corr
cucumber, gherkin	<i>Cucumis sativus</i> L.	CPVO/TP-061/2-Rev.3

Pending new species

The CPVO is looking for cooperation for the testing of varieties from the following list of species. If interested, please contact the CPVO representatives participating to the relevant TWPs:

Sector	Species name
Vegetables	<i>Agaricus bisporus</i> (Quél.) Sacc. 1887
Vegetables	<i>Fusarium flavolapis</i>
Vegetables	<i>Inonotus obliquus</i> (Fr.) Pilát
Vegetables	<i>Rhizophagus</i> sp.
Vegetables	<i>Sideritis scardica</i> Griseb.

Vegetables	<i>Sideritis perfoliata</i> subsp. <i>athoa</i> (Papan. & Kokkini) Baden
Vegetables	<i>Sideritis raeseri</i> Boiss. & Heldr.
Vegetables	<i>Zingiber officinale</i> Roscoe
Ornamentals	<i>Dietes bicolor</i> (Steud.) Sweet ex Klatt
Ornamentals	<i>Eucalyptus</i> x <i>irbyi</i> R. T. Baker & H. G. Sm. (syn. <i>Eucalyptus dalrympleana</i> Maiden x <i>E. gunnii</i> Hook. f.)
Ornamentals	<i>Liquidambar styraciflua</i> L.
Ornamentals	<i>Bergera koenigii</i> L. (syn. <i>Murraya koenigii</i> (L.) Spreng.)
Ornamentals	<i>Quercus</i> x <i>auzandrii</i> Gren. & Godr. x <i>Quercus</i> x <i>morisii</i> Borzí (syn. <i>Q. x mixta</i> Vill. ex Colm.)
Ornamentals	<i>Rumex crispus</i> L.
Ornamentals	<i>Turnera ulmifolia</i> L.
Ornamentals	<i>Ugni molinae</i> Turcz.
Ornamentals	<i>Ziziphora clinopodioides</i> Lam.
Fruits	<i>Carica papaya</i> L.
Agriculturals	<i>Paspalum vaginatum</i> Swartz (vegetatively propagated)
Agriculturals	<i>Cenchrus clandestinus</i> (Hochst. ex Chiov.) Morrone (syn. <i>Pennisetum clandestinum</i> Hochst. ex Chiov.) (vegetatively propagated)
Agriculturals	<i>Scorpiurus vermiculatus</i> L.

CPVO Vegetable sector

The table hereunder shows the 10 most important vegetable species subject of CPVO applications over the last 5 years.

Species	2021	2022	2023	2024	2025	Total last 5 years	Total 1995-March 2026
<i>Lactuca sativa</i> L.	166	160	163	157	185	831	3755
<i>Solanum lycopersicum</i> L.	109	149	155	183	182	778	2414
<i>Capsicum annuum</i> L.	44	71	55	71	58	299	993
<i>Cucumis sativus</i> L.	38	32	21	47	47	185	653
<i>Cucumis melo</i> L.	43	40	25	25	45	178	757
<i>Pisum sativum</i> L.	22	35	28	35	33	153	670
<i>Phaseolus vulgaris</i> L.	20	22	12	22	17	93	640
<i>Cucurbita pepo</i> L.	6	20	13	11	23	73	176
<i>Spinacia oleracea</i> L.	9	14	18	14	15	70	282
<i>Allium porrum</i> L.	7	10	23	9	8	57	235

The outcomes of the EU Vegetable Expert Meeting (VEM25)

The CPVO held its annual meeting with EU vegetable experts on 5–6 November 2025 via electronic means. Experts from EU examination offices attended the meeting, alongside representatives of breeders' organisations. In addition to revising several CPVO technical protocols, the group discussed the following item:

- The working group on resistances: it was agreed in 2024, that characteristics concerning disease resistance, often originating from the EU, would be addressed and revised within the framework of the relevant EU expert group. The group was established, and a kick-off meeting was held in March 2025. It is composed of interested EU examination offices and the breeders' association Euroseeds. Five sub-groups have been set up and have met throughout the year to develop protocols, exchange material, and organise ring tests. The work of each sub-group was presented to the participants of the EU vegetable group. The CPVO will also inform the participants of the TWV of the outcomes of the EU working group at its TWV/60 session.

- The need to clarify, in CPVO documents, the germination requirements for seed material submitted to the testing station in the framework of DUS testing. The group agreed to provide more detailed information to applicants to ensure clarity and transparency regarding the expected germination rate thresholds prior to submission of the material, especially for parental lines not subject of marketing requirements.
- An in-depth review of the CPVO template used as the basis for drafting all CPVO technical protocols. This document refers to the CPVO Designation Agreement and Entrustment Requirements and also referred to relevant UPOV TGP. It was proposed and agreed to simplify this document and improve certain sections.
- The future revision of the onion/shallot technical protocol: several meetings were organised in 2025 with representatives of breeders' and producers' associations, DUS examiners, and the European Commission to engage in an open exchange with the Office in order to assess the need for a revision of CPVO-TP-046/2 (*Allium cepa*), in line with evolving practices and breeding trends, particularly given the increasing number of varieties being marketed as seed-propagated shallots. The discussions also aimed to enhance clarity, consistency, and harmonisation among the EU entrusted Examination Offices regarding the DUS evaluation of *Allium cepa* varieties and their classification as onions or shallots.
- The revision of 6 CPVO technical protocols for Pepper, Broccoli, Brussels sprouts, Cabbage, Cauliflower and Kohlrabi.
- Presentations or updates on the CPVO R&D projects involving vegetable crops:
 - o "Harmorescoll": Setting up an EU system for harmonized collections of reference isolates, controls and differentials to facilitate disease resistance testing (follow-up discussion on the project, 2020-2024)
 - o "ToBRAG": Updating DUS resistance tests according to pests' evolution: Setting up resistance tests to ToBRFV for tomato and pepper, Improvement of resistance test melon/Aphis gossypii. (2022-2026)
 - o "International harmonization and validation of a SNP set for the management of lettuce reference collection" (2025-2027)
 - o "Development and implementation of an internationally accepted SNP database to assist the tomato DUS testing" (2026-2028)

The Office finances a number of R&D projects; all reports of finalized R&D projects are published on the CPVO web site: <https://cpvo.europa.eu/en/about-us/what-we-do/research-and-development>.

- The CPVO presented the ongoing initiatives regarding:
 - o the development of Guidelines for the setting of molecular databases
 - o the creation of new EU working group on digital phenotyping

[Annex III follows]

FRANCE

Number of applications:

In France, the DUS activity, either in the framework of national listing, or PBR, or in the framework of international cooperation for DUS testing, has slightly decreased in 2025 compared to previous years.

In 2025, 2191 applications were received for National listing, and for National or European Plant Breeders' Rights, or for international cooperation for DUS testing:

- 1380 are new applications
- 811 are requests for take-over reports for application already tested or in test.

See figures on the table below:

	National Listing	National PBR	EU PBR	International cooperation	total
Number of applications in 2025 for new testing	980	106	186	108	1380

Main activity remains on agricultural species.

In total in 2025, GEVES carried out more than 3100 DUS cycles, mainly on its premises.

Crop sector	Main species tested
Agricultural	Maize, oilseed rape, wheat, barley, sunflower, soybean
Vegetable	Lettuce, tomato, melon, cauliflower, pepper, squash
Fruit	Peach, vine, apple, sweet cherry, apricot, Japanese plum, pear
Ornamental	<i>Hydrangea</i> , <i>Chrysanthemum</i> , <i>Buddleja</i> , <i>Nerium</i> , <i>Lavandula</i> , <i>Salvia</i> , <i>Echinacea</i>

Detailed figures can be found on the annual report available on our website.

Information on GEVES:

GEVES is the Examination Office of France, in charge of DUS and VSCU evaluation of new plant varieties and is designated as National Reference Laboratory in seed quality, GMO detection, plant health (matrix seeds).

GEVES website can be consulted here www.geves.fr

Description files can be found on the website for the varieties listed on the French catalogue. <https://www.geves.fr/catalogue-france/>

You can subscribe to our NEWSLETTER available both in French and in English to receive the latest information on GEVES's expert activities in plants and seeds, at national and international levels. Please subscribe here : <https://www.geves.fr/newsletter-en/>

The International System of Cooperation for DUS is active and efficient. For more information, the international cooperation service of GEVES can be contacted here: clarisse.leclair@geves.fr and camille.zitter@geves.fr

In 2025, the international cooperation service of GEVES received more than 800 takeover requests, mainly from the EU but also from all over the world.

Carole Dirwimmer continues in her role as the Chair of the UPOV Technical Working Party for Fruits (TWF).

Information on INOV:

The French National Office for PBR (**INOV**) has received 106 applications in 2025, out of which 98% were tested for DUS by GEVES.

INOV is involved in UPOV **PRISMA** for all genera and species.

INOV has announced the publication of its new fee schedule, which includes updated administrative fees. The fees relating to the DUS examination are those applied by the French or foreign Examination Office, in accordance with Article 2 of this decree. Regarding the procedure: the revision of INOV fees was jointly approved by the Ministry of Agriculture and the Ministry of Economy and Finance and is published in the form of a decree in the Official Journal. More information here [GEVES Newsletter n°68](#). Contact INOV: inov@geves.fr

Molecular markers in DUS testing:

Regarding the use of **molecular markers**, GEVES has provided data to the UPOV survey.

France is using in routine molecular markers for the management of reference collection according to UPOV guidance model "Combining Phenotypic and Molecular Distances in the Management of Variety Collections", for maize, sorghum, spring barley, durum wheat. Projects are ongoing on Oilseed rape and common wheat and being finalized for Hydrangea.

GEVES is using in routine several markers for several traits in the framework of UPOV model "Characteristic-Specific Molecular Markers", in accordance with the technical guidelines in force.

For more information on BMT, please contact: GEVES BIOGEVES rene.mathis@geves.fr.

Disease resistance tests in DUS testing:

Regarding the use of **disease resistance characteristics**, GEVES uses in routine disease resistance characteristics, processed in bioassays, for DUS results. GEVES also provides services, facilities, protocols, identified standards and strains for such activities to Examination Offices and seed companies, all over the world. For more information, please contact: GEVES SNES sophie.perrot@geves.fr

For laboratory tests, GEVES continues to manage MatRef (<https://www.geves.fr/tools/reference-material-matref/>), a reference collection of inoculum and seeds (resistant/susceptible controls and differentials) covering approximately 60 vegetable pathosystems. GEVES has also made a major contribution to the establishment of the HarmoresColl project. HarmoresColl will be a web portal whose objective is to compile data and contacts for the acquisition of isolates and reference varieties for many pathosystems included in the CPVO vegetable technical protocols."

Digital phenotyping in DUS testing:

Regarding digital phenotyping for DUS testing, GEVES uses 2D image analysis on a routine basis, using detached plant organs that are scanned or photographed and then analyzed by AIM. GEVES is interested in developing the use of drones and pedestrian sticks to phenotype certain DUS characteristics, such as plant natural height for lucerne. For more information, please contact: GEVES clarisse.leclair@geves.fr

R&D projects:

GEVES is involved in several collaborative R&D projects dealing with DUS and co-founded by the CPVO:

- ToBrAg, project to update DUS resistance tests (biotests and markers) according to pests' evolution with the practical cases of resistance tests to ToBRFV for tomato and pepper, and the resistance test to Aphis gossypii on melon, together with the Netherlands (Kingdom of), Spain, Italy and breeders.
- SNPsNAP: "SNP markers for guiding DUS testing in winter oilseed rape: Validating the new model". It is the second follow up of an earlier project which validated a set of SNP markers for KasPAR assays on bulk samples as a tool for the management of the variety collection, together with Germany, Spain, Slovakia.
- Lettuce project: International harmonization and validation of a SNP set for the management of lettuce variety collection, together with the Netherlands (Kingdom of), Germany, Spain.

- CPVO Tomato database: Development and implementation of an internationally accepted SNP database to assist the tomato DUS testing, together with the Netherlands (Kingdom of), Poland, Hungary, Spain, Italy.

GEVES is involved in the Belis project, funded by the European Union: Breeding European Legumes for Increased Sustainability. GEVES is contributing to the project through its work on optimizing DUS, with the use of molecular markers for the management of the *Pisum sativum* variety collection.

GEVES was involved in the INVITE project, funded by the European Union. One follow-up of INVITE, conducted by GEVES, is to explore the potential use of UPOV model Combining Phenotypic and Molecular Distances in the Management of Variety Collections for common wheat in France, and a presentation will be given during TWM et TWA meetings in 2026.

In 2024, the INVITE project validated the reproducibility of molecular markers associated with resistance/susceptibility to Tomato mosaic virus (ToMV), Tomato spotted wilt virus (TSWV), and *Fusarium oxysporum* f. sp. *lycopersici* race 1 (EU)/2 (US). The validation work was continued in 2025 to verify the specificity on tomato varieties registered in France. It was successfully completed. These characteristic-specific molecular markers can now be used as an alternative to biotests in France.

GEVES is involved in Allegrodactyle: a French project to develop targeted molecular markers in cocksfoot. If successful, the final aim would be to describe cocksfoot variety collection and use these molecular data to guide the choice of varieties for relevant comparisons in the field.

[Annex IV follows]

ANNEX IV

JAPAN

1. Number of applications in 2025

Year	Total number	(2025/2024)	Vegetables and Mushrooms	(2025/2024)
1978 to 2025	38336	-	Vegetables 2594 Mushrooms 711	-
2024	599		Vegetables 62 Mushrooms 7	
2025	531	(89%)	Vegetables 57 Mushrooms 16	(106%)

Top 5 applications for Vegetables and Mushrooms in 2025

Strawberry 24, Lettuce 11, Shiitake 6, Maitake 4, Daikon 3, Total: 73

2. Number of granted in 2025

Year	Total number	(2025/2024)	Vegetables and Mushrooms	(2025/2024)
1978 to 2024	31307	-	Vegetables 2132 Mushrooms 624	-
2024	703		Vegetables 90 Mushrooms 16	
2025	769	(109%)	Vegetables 126 Mushrooms 17	(135%)

Top 5 applications for Vegetables and Mushrooms in 2025

Tomato 33, Lettuce 30, Strawberry 16, Shiitake 12, Eggplant 6, Total: 143

3. National test guidelines harmonized with UPOV TGs in 2025

Common name of plants (12)
Kangaroo paw, Brown mustard, Citrus L.-Group1, Citrus L. – Group 3, Citrus L. - Group 5, Pumpkin, Butternut Squash, Vegetable Marrow, Apple Rootstock, Oxypetalum, Poplar

4. National test guidelines developed for new type of species in 2025

Genera or Species (5)
<i>Cephalanthus occidentalis</i> L., <i>Isatis tinctoria</i> L., <i>Origanum</i> L., <i>Paulownia</i> L., <i>Valeriana fauriei</i> Briq.

Website: https://www.maff.go.jp/j/shokusan/hinshu/info/sinsa_kijun_jp.html

5. Other

- ✓ As from 2016, MAFF have agreed with Australia, Brazil, New Zealand, Switzerland, Viet Nam, the European Union, the Russian Federation, Kenya, Mexico, Israel, the Netherlands (Kingdom of), Türkiye, Canada, Peru, Singapore, the United States of America, Colombia and the United Kingdom to provide the results of DUS examination in Japan free of charge for the examination of the varieties that have been applied to the examination authority of the relevant countries. Japan continuously provides other UPOV members with examination reports under the Memorandum of Cooperation (MOC). Japan had provided 28 DUS examination reports in total to other countries in 2025.
- ✓ Since 2016, based on the Memorandum of Understanding (MOU), Center for Seeds and Seedlings, NARO (NCSS) and Naktuinbouw have established Calibration Manuals for DUS technical harmonization. "Calibration manual for Mandevilla" will be completed in 2026, and it will be published through both websites. With addition of this, a total of 13 Calibration Manuals will be available for third country.

- ✓ In addition, a three-year extension of the MOU between Naktuinbouw and NCSS, which expired in March 2024, was concluded up to March 2027 in order to contribute international harmonization in cooperation with Naktuinbouw. In extending the MOU, it was newly agreed to provide technical cooperation on DNA analysis for disease resistance in DUS test, DNA variety identification techniques for plant variety protection.

[Annex V follows]

UNITED KINGDOM

1. The Plant Variety Rights Office (PVRO) for the United Kingdom (UK) comprises the United Kingdom Controller of Plant Variety Rights, and the Plant Varieties and Seeds team within the Animal and Plant Health Agency (APHA). APHA is an executive agency of the Department for Environment, Food and Rural Affairs (Defra). It has responsibility for the delivery of United Kingdom PBRs, and the coordination and delivery of variety listing within the United Kingdom. Contact details are available on the Gov.UK website: [UK Variety Listing and PBR](#). The National Lists and Seeds Committee (NLSC) advises the PVRO and makes recommendations to them. The Controller who sits in Defra is responsible for the decision making required for the granting of United Kingdom PBRs.
2. In 2025, the United Kingdom received 779 applications for United Kingdom PBRs for agricultural (308), fruit (66), ornamental (104) and vegetable (301) species. Of these, 487 tests were not conducted in the United Kingdom, but carried out by UPOV members where the United Kingdom DUS Test Centres did not have testing capability.
3. DUS testing in the United Kingdom is conducted at Niab (www.Niab.com), AFBI (www.afbini.gov.uk), and SASA (www.sasa.gov.uk). Niab carry out the testing of Wheat (winter and spring), Barley (winter and spring), Oats (winter and spring), Oilseed Rape (winter), Sugar Beet, Field Beans (winter and spring), Fodder Kale, and ornamental plants which include Chrysanthemum, Rose and a range of species of shrubs and herbaceous perennials. AFBI perform DUS testing of perennial ryegrass, Italian ryegrass, hybrid ryegrass and white clover. SASA conduct the DUS testing for potatoes, field pea, swede, turnip rape and vegetable peas. The DUS Test Centres, the PVRO and Defra are working together to support innovation and to ensure that DUS examinations can meet the opportunities of gene edited plant varieties.
4. The United Kingdom has implemented a customised version of the UPOV e-PVP administration module and the UPOV DUS exchange module. This will further complement the use of UPOV PRISMA as the compulsory application pathway for PBR and variety listing in the United Kingdom.
5. The United Kingdom authorities are working together to develop a United Kingdom Plant Variety and Seeds (PVS) Strategic Roadmap spanning PBR, variety listing, and setting standards for marketing and certification of seed and other plant propagating material within the context of the UK-EU SPS Agreement. It is expected to be published in 2027. This will be the first United Kingdom PVS strategy, and its development is an opportunity to set out a shared vision, priorities and actions, and work in partnership with industry and stakeholders to deliver these over the next 5 years.
6. The United Kingdom and Japan signed a Memorandum of Cooperation on the examination of plant varieties for the purpose of PBR in 2025. Following on from this, the United Kingdom hosted a DUS examiner from Japan for a two-week training visit at Niab, Cambridge in May 2026. The visit encompassed a broad schedule covering DUS testing arrangements within the United Kingdom, practical DUS testing at Niab for agricultural and ornamental species, current research and development activities and a breeder visit.
7. The United Kingdom continues to support the UPOV distance learning courses by providing tutors. Technical and administrative staff at our test centres take advantage of the distance learning opportunities through DL205 and DL305.
8. Colleagues across the United Kingdom have also benefitted from attending three recent UPOV technical webinars. Peter Scotting (APHA) presented in the third webinar on 'Phytosanitary matters that impact access to plant material for DUS examination'.
9. Hilary Papworth continues in her role as the Chair of the UPOV Technical Working Party for Ornamental Plants and Forest Trees (TWO). As does Margaret Wallace (Niab) in her role coordinating a sub-group of the Technical Committee focusing on issues relating to Test Guidelines and the web-based TG-Template. Furthermore, the fourth Technical Working Party on Testing Methods and Techniques (TWM) is being held from 2 – 5 June 2026 at Jesus College, Cambridge, United Kingdom.

10. The United Kingdom is actively driving development and implementation of new techniques to DUS testing through several collaborative or internal projects:

- A revised version of DUST is nearly ready for release. This version includes an improved installation process and the new COYU with splines module. The software has been tested by the United Kingdom, the Netherlands (Kingdom of) and Finland. This was mainly successful but revealed that the Excel conversion function does not work outside of the United Kingdom. We are working to resolve this.
- The United Kingdom is implementing the new COYU with splines method. As part of this, guidance is being developed for dealing with extrapolation.
- Initiatives exploring the use of molecular approaches in DUS work continues using barley (*Hordeum vulgare*) as a case study. This first project, completed in 2025, was a proof of concept for the use of molecular markers to predict DUS phenotypes and to inform the selection of similar varieties for the growing trials. The next phase will be to genotype the remaining varieties in the variety collection, optimise and validate the genomic prediction models in parallel to current DUS testing procedures and explore technical barriers to implementation. Niab are progressing with implementing a smaller marker set to be used to validate seed stock authentications and varietal identification in barley.
- Niab continues their investigation into the use of UAV (Unmanned Aerial Vehicles) within a DUS testing situation, exploring the potential to replace or supplement current methods for assessment of phenotypic characteristics.

[End of Annex V and of document]