UPOV
International Union for the Protection of New Varieties of Plants

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Technical Working Party for Vegetables
Fifty-Seventh Session
Antalya, Türkiye, May 1 to 5, 2023

Technical Working Party for Agricultural Crops
Fifty-Second Session
Virtual meeting, May 22 to 26, 2023

Technical Working Party for Ornamental Plants and Forest Trees
Fifty-Fifth Session
Virtual meeting, June 12 to 16, 2023

Technical Working Party for Fruit Crops
Fifty-Fourth Session
Nîmes, France, July 3 to 7, 2023

TWP/7/7

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UPOV INFORMATION DATABASES

Document prepared by the Office of the Union

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EXECUTIVE SUMMARY

1. The purpose of this document is to report on developments concerning the GENIE database and to present proposals to amend UPOV codes.

2. This document is presented in two sections. The first section, "Proposals for amending the UPOV code system and UPOV codes", presents matters which may require a decision to be taken by the Technical Working Parties (TWPs). The second section, "Matters for information", is provided for the information of the TWPs but does not require decisions at this stage.

3. The TWA and TWV are invited to consider:

(a) the proposal to create variety groups to the UPOV codes for Beta vulgaris L. ssp. vulgaris, as set out in paragraph 8 of this document;

(b) whether to delete the UPOV code BETAA_VUL_GV to avoid the situation where a variety cannot be allocated with certainty to any variety group; and

(c) whether to create variety groups for the UPOV code ZEAAA_MAY_MAY replacing infra-specific botanical names, as set out in paragraph 10 of this document.

4. The TWV is invited to consider the proposal to create variety groups for the UPOV code Brassica oleracea var. capitata L., as set out in paragraph 12 of this document.

5. The TWO is invited to consider the proposals to delete and amend UPOV codes, as set out in paragraphs 14 to 37 of this document.

6. The structure of this document is as follows:

7. The following abbreviations are used in this document:

CAJ: Administrative and Legal Committee
GRIN: Germplasm Resources Information Network
TC: Technical Committee
TWA: Technical Working Party for Agricultural Crops
TWF: Technical Working Party for Fruit Crops
TWM: Technical Working Party for Testing Methods and Techniques
TWO: Technical Working Party for Ornamental Plants and Forest Trees
TWP(s): Technical Working Party(ies)
TWV: Technical Working Party for Vegetables

REPLACING COMPLEX BOTANICAL NOMENCLATURE BY VARIETY GROUPS

UPOV codes for Beta vulgaris

8. The TC, at its fifty-eight session[1], agreed to invite the TWA and TWV to consider whether to create variety groups to the UPOV codes for *Beta vulgaris* L. ssp*. Vulgaris;* and whether to delete the UPOV code BETAA_VUL_GV to avoid the situation where a variety cannot be allocated with certainty to any variety group (see document TC/58/31 "Report", paragraph 72).

Proposal:

Denomination class	Botanical names	Current UPOV code	UPOV Codes with appended information	Proposed UPOV code with group information
Class 2.1	*Beta vulgaris* L. subsp. *vulgaris* (Fodder beet Group) (synonym to *Beta vulgaris* L. subsp. *vulgaris* var. *alba* DC.)	BETAA_VUL_GVA	BETAA_VUL_VUL _21**FB**	BETAA_VUL_G**VA**
	Beta vulgaris L. subsp. *vulgaris* (Sugar beet Group) (synonym to *Beta vulgaris* L. subsp. *vulgaris* var. *saccharifera* Alef.)	BETAA_VUL_GVS	BETAA_VUL_VUL_21**SB**	BETAA_VUL_G**VS**

[1] Held in Geneva on October 24 and 25, 2022

Class 2.2	*Beta vulgaris* L. subsp. *vulgaris* (Beetroot Group) (synonym to *Beta vulgaris* L. subsp. *vulgaris* var. *conditiva* Alef.)	BETAA_VUL_GVC	BETAA_VUL_VUL_22**BR**	BETAA_VUL_G**VC**
	Beta vulgaris L. subsp. *vulgaris* (Leaf beet Group) (synonym to *Beta vulgaris* L. subsp. *vulgaris* var. *flavescens* DC. f. crispa)	BETAA_VUL_GVF	BETAA_VUL_VUL_22**LB**	BETAA_VUL_G**VF**
Class 2.3	Beta other than classes 2.1 and 2.2.	BETAA; BETAA_VUL; BETAA_VUL_GV		BETAA; BETAA_VUL;

9. The TWA and TWV are invited to consider:

(a) the proposal to create variety groups to the UPOV codes for Beta vulgaris *L. ssp.* vulgaris*, as set out in paragraph 8 of this document; and*

(b) whether to delete the UPOV code BETAA_VUL_GV to avoid the situation where a variety cannot be allocated with certainty to any variety group.

UPOV codes for Brassica oleracea

10. The TC, at its fifty-eight session, agreed to invite the TWV to consider the following proposal to create variety groups for the UPOV code *Brassica oleracea* var. *capitata* L. (see document TC/58/31 "Report", paragraph 73):

Botanical names	Current UPOV code	UPOV Codes with appended information	Proposed UPOV code with group information
Brassica oleracea L. var. *capitata* L. (White Cabbage Group) (synonym to *Brassica oleracea* L. f. *alba* DC.)	BRASS_OLE_GCA	BRASS_OLE_GC_1W	BRASS_OLE_GC**A**
Brassica oleracea L. var. *capitata* L. (Red Cabbage Group) (synonym to *Brassica oleracea* L. var. *rubra* L.)	BRASS_OLE_GCR	BRASS_OLE_GC_2R	BRASS_OLE_GC**R**

11. The TWV is invited to consider the proposal to create variety groups for the UPOV code Brassica oleracea *var.* capitata *L., as set out in paragraph 10 of this document.*

UPOV codes for Zea mays

12. The TC, at its fifty-eight session[2], agreed to invite the TWA and TWV to consider whether to create variety groups for the UPOV code ZEAAA_MAY_MAY replacing infra-specific botanical names, as follows:

Principal botanical name	Other botanical name(s)	Variety groups	Proposed UPOV code with group information
Zea mays L. subsp. *mays*	*Zea mays* var *ceratina* L.; *Zea mays* var. *indentata* (Sturtev.) L. H. Bailey; *Zea mays* var. *indurata* (Sturtev.) L. H. Bailey; *Zea mays* var. *saccharata* (Sturtev.) L. H. Bailey; *Zea mays* L. *saccharata* Koern.; *Zea mays* L. var. *everta* (Praecox) Sturt.; *Zea mays* L. convar. *microsperma* Koern.	Corn; Maize: "1MA"	ZEAAA_MAY_**GMA**
		Sweet Corn: "2SW"	ZEAAA_MAY_**GSW**
		Popcorn: "3PO"	ZEAAA_MAY_**GPO**

[2] Held in Geneva on October 24 and 25, 2022

13. The TWA and TWV are invited to consider whether to create variety groups for the UPOV code ZEAAA_MAY_MAY replacing infra-specific botanical names, as set out in paragraph 12 of this document.

RECLASSIFICATION OF SPECIES UNDER DIFFERENT GENERA

UPOV code for Berberis species

14. The Office of the Union was informed of the reclassification of certain *Berberis* species to *Mahonia* species.

15. The current entries in the GENIE database for certain *Berberis* species, the taxa in GRIN and the numbers of entries in the PLUTO database, are as follows:

UPOV code	Principal botanical name in GENIE	Botanical name(s) in GRIN	Common name(s) in GENIE	Number of entries in PLUTO
BERBE_AQU	*Berberis aquifolium* Pursh	*Mahonia aquifolium* (Pursh) Nutt.	blue barberry, holly barberry, holly mahonia, mountain-grape, Oregon-grape	6
BERBE_EUR	*Berberis eurybracteata* (Fedde) Laferr.	*Mahonia eurybracteata* Fedde	n.a.	3
BERBE_NIT	*Berberis nitens* (C. K. Schneid.) Laferr.	*Berberis nitens* (C. K. Schneid.) Laferr.	n.a	1
BERBE_PUM	*Berberis pumila* Greene	*Mahonia pumila* (Greene) Fedde	n.a	0
BERBE_REP	*Berberis repens* Lindl.	*Mahonia repens* (Lindl.) G. Don	creeping barberry, creeping mahonia, Oregon barberry, Oregon grape-holly, Oregon-grape	5

Proposal

16. The TWO might wish to consider replacing the UPOV codes BERBE_AQU, BERBE_EUR, BERBE_NIT, BERBE_PUM and BERBE_REP by the UPOV Codes MAHON_AQU, MAHON_EUR, MAHON_NIT, MAHON_PUM and MAHON_REP, respectively, as follows:

Current			Proposal		
UPOV code	Principal botanical name	Other botanical name(s)	UPOV code	Principal botanical name	Other botanical name(s)
BERBE_AQU	*Berberis aquifolium* Pursh	*Berberis diversifolia* (Sweet) Steud.; *Mahonia aquifolium* (Pursh) Nutt.; *Mahonia aquifolium* subsp. *aquifolium* (Pursh) Nutt.; *Mahonia diversifolia* Sweet	MAHON_ AQU	*Mahonia aquifolium* (Pursh) Nutt.	Mahonia diversifolia Sweet; Mahonia aquifolium (Pursh) Nutt.; Mahonia aquifolium (Pursh) Nutt. subsp. aquifolium; *Mahonia aquifolium* subsp. *aquifolium* (Pursh) Nutt.
BERBE_EUR	*Berberis eurybracteata* (Fedde) Laferr.	*Mahonia eurybracteata* Fedde	MAHON_EUR	*Mahonia eurybracteata* Fedde	*Berberis eurybracteata* (Fedde) Laferr.
BERBE_NIT	*Berberis nitens* (C. K. Schneid.) Laferr.	*Mahonia nitens* C. K. Schneid.	MAHON_NIT	*Mahonia nitens* C. K. Schneid.	*Berberis nitens* (C. K. Schneid.) Laferr.
BERBE_PUM	*Berberis pumila* Greene	*Mahonia pumila* (Greene) Fedde	MAHON_PUM	*Mahonia pumila* (Greene) Fedde	*Berberis pumila* Greene

BERBE_REP	*Berberis repens* Lindl.	*Berberis sonnei* (Abrams) McMinn*; Mahonia repens* (Lindl.) G. Don*; Mahonia repens var. repens* (Lindl.) G. Don*; Mahonia repens var.* rotundifolia (May) Fedde*; Mahonia sonnei* Abrams	MAHON_REP	*Mahonia repens* (Lindl.) G. Don	*Berberis repens* Lindl.; *Berberis sonnei* (Abrams) McMinn*; Mahonia repens* (Lindl.) G. Don*; Mahonia repens var. repens* (Lindl.) G. Don*; Mahonia repens var.* rotundifolia (May) Fedde*; Mahonia sonnei* Abrams

UPOV code for Calathea species

17. The Office of the Union was informed of the reclassification of certain *Calathea* species to *Goeppertia* species.

18. The current entries in the GENIE database for certain *Calathea* species, the taxa in GRIN and the numbers of entries in the PLUTO database, are as follows:

UPOV code	Principal botanical name in GENIE	Botanical name(s) in GRIN	Common name(s) in GENIE	Number of entries in PLUTO
CALAT_CRO	*Calathea crocata* E. Morren & Joriss.	*Goeppertia crocata* (É. Morren & Joriss.) Borchs. & S. Suárez	n.a.	8
CALAT_LOE	*Calathea loeseneri* J. F. Macbr.	*Goeppertia loeseneri* (J. F. Macbr.) Borchs. & S. Suárez	n.a.	0
CALAT_ROS	*Calathea roseopicta* (Linden) Regel	*Goeppertia roseopicta* (Linden) Borchs. & S. Suárez	n.a.	25
CALAT_WAR	*Calathea warscewiczii* (Klotzsch) Körn.	*Goeppertia warscewiczii* (L. Mathieu ex Planch.) Borchs. & S. Suárez	n.a.	3
CALAT_LRO	*Calathea loeseneri* J. F. Macbr. × *Calathea roseopicta* (Linden) Regel	n.a.	n.a.	5

Proposal

19. The TWO might wish to consider replacing the UPOV Codes CALAT_CRO, CALAT_LOE, CALAT_ROS, CALAT_WAR and CALAT_LRO by the UPOV Codes GOEPP_CRO GOEPP_LOE, GOEPP_ROS, GOEPP_WAR and GOEPP_LRO, as follows:

Current			Proposal		
UPOV code	Principal botanical name	Other botanical name(s)	UPOV code	Principal botanical name	Other botanical name(s)
CALAT_CRO	*Calathea crocata* E. Morren & Joriss.	*Goeppertia crocata* (É. Morren & Joriss.) Borchs. & S. Suárez	GOEPP_CRO	*Goeppertia crocata* (É. Morren & Joriss.) Borchs. & S. Suárez	*Calathea crocata* É. Morren & Joriss.
CALAT_LOE	*Calathea loeseneri* J. F. Macbr.	n.a.	GOEPP_LOE	*Goeppertia loeseneri* (J. F. Macbr.) Borchs. & S. Suárez	*Calathea loeseneri* J. F. Macbr.
CALAT_ROS	*Calathea roseopicta* (Linden) Regel	*Goeppertia roseopicta* (Linden) Borchs. & S. Su rez	GOEPP_ROS	*Goeppertia roseopicta* (Linden) Borchs. & S. Suárez	*Calathea roseopicta* (Linden) Regel
CALAT_WAR	*Calathea warscewiczii* (Klotzsch) Körn.	*Calathea warscewiczii* (Mathieu ex Planch.) Körn.	GOEPP_WAR	*Goeppertia warscewiczii* (L. Mathieu ex Planch.) Borchs. & S. Suárez	*Calathea warscewiczii* (L. Mathieu ex Planch.) Planch. & Linden
CALAT_LRO	*Calathea loeseneri* J. F. Macbr. × *Calathea roseopicta* (Linden) Regel	n.a.	GOEPP_LRO	*Goeppertia loeseneri* (J. F. Macbr.) Borchs. & S. Suárez × *G. roseopicta* (Linden) Borchs. & S. Suárez	*Calathea loeseneri* J. F. Macbr. × *C. roseopicta* (Linden) Regel

UPOV code for Castalis species

20. The Office of the Union was informed of the reclassification of certain *Castalis* species to *Dimorphotheca* species.

21. The current entries in the GENIE database for certain *Castalis* species, the taxa in GRIN and the numbers of entries in the PLUTO database, are as follows:

UPOV code	Principal botanical name in GENIE	Botanical name(s) in GRIN	Common name(s) in GENIE	Number of entries in PLUTO
CASTL_TRA	*Castalis tragus* (Aiton) Norl.	*Dimorphotheca tragus* (Aiton) DC..	n.a.	3

Proposal

22. The TWO might wish to consider replacing the UPOV code CASTL_TRA by the UPOV Code DIMOR_TRA, as follows:

Current			Proposal		
UPOV code	Principal botanical name	Other botanical name(s)	UPOV code	Principal botanical name	Other botanical name(s)
CASTL_TRA	*Castalis tragus* (Aiton) Norl.	*Dimorphoteca aurantiaca; Dimorphoteca aurantiaca* DC.*; Dimorphotheca aurantiaca* DC.*; Dimorphotheca tragus* (Aiton) B. Nord.	DIMOR_TRA	*Dimorphotheca tragus* (Aiton) DC.	Castalis tragus (Aiton) Norl.; *aurantiaca; Dimorphoteca aurantiaca* DC.*; Dimorphotheca aurantiaca* DC.

UPOV code for Cleome species

23. The Office of the Union was informed of the reclassification of certain *Cleome* species to *Tarenaya* species.

24. The current entries in the GENIE database for certain *Tarenaya* species, the taxa in GRIN and the numbers of entries in the PLUTO database, are as follows:

UPOV code	Principal botanical name in GENIE	Botanical name(s) in GRIN	Common name(s) in GENIE	Number of entries in PLUTO
CLEOM_HAS	*Cleome hassleriana* Chodat	*Tarenaya hassleriana* (Chodat) H. H. Iltis (synonym: *Cleome hassleriana* Chodat, *Cleome pungens* auct., *Cleome spinosa* auct.*)*	pink-queen; spider-flower; spiderplant	8
CLEOM_SPI	*Cleome spinosa* Jacq.	*Tarenaya spinosa* (Jacq.) Raf. (synonym: *Cleome spinosa* Jacq.*)*	spiny spider-flower	12

Proposal

25. The TWO might wish to consider replacing the UPOV Codes CLEOM_HAS and CLEOM_SPI by the UPOV Codes TARNY_SPI and TARNY_HAS, respectively, as follows:

Current			Proposal		
UPOV code	Principal botanical name	Other botanical name(s)	UPOV code	Principal botanical name	Other botanical name(s)
CLEOM_HAS	*Cleome hassleriana* Chodat	*Cleome pungens* auct.; *Cleome spinosa* auct.; *Tarenaya hassleriana* (Chodat) H. H. Iltis	TARNY_SPI	*Tarenaya hassleriana* (Chodat) H. H. Iltis	*Cleome hassleriana* Chodat, *Cleome pungens* auct., *Cleome spinosa* auct.
CLEOM_SPI	*Cleome spinosa* Jacq.	*Tarenaya spinosa* (Jacq.) Raf.	TARNY_HAS	*Tarenaya spinosa* (Jacq.) Raf.	*Cleome spinosa* Jacq.

UPOV code for Deschampsia species

26. The Office of the Union was informed of the reclassification of certain *Deschampsia* species to *Avenella* species.

27. The current entries in the GENIE database for certain *Deschampsia* species, the taxa in GRIN and the numbers of entries in the PLUTO database, are as follows:

UPOV code	Principal botanical name in GENIE	Botanical name(s) in GRIN	Common name(s) in GENIE	Number of entries in PLUTO
DESCH_FLE	*Deschampsia flexuosa* (L.) Trin.	*Avenella flexuosa* (L.) Parl.	n.a	2

Proposal

28. The TWO might wish to consider replacing the UPOV code DESCH_FLE by the UPOV Code AVENE_FLE, as follows:

Current			Proposal		
UPOV code	Principal botanical name	Other botanical name(s)	UPOV code	Principal botanical name	Other botanical name(s)
DESCH_FLE	*Deschampsia flexuosa* (L.) Trin.	*Avenella flexuosa* (L.) Parl.	AVENE_FLE	*Avenella flexuosa* (L.) Parl.	*Deschampsia flexuosa* (L.) Trin.

UPOV code for Epiphyllum species

29. The Office of the Union was informed of the reclassification of certain *Epiphyllum* species to *Tarenaya* species.

30. The current entries in the GENIE database for certain *Tarenaya* species, the taxa in GRIN and the numbers of entries in the PLUTO database, are as follows:

UPOV code	Principal botanical name in GENIE	Botanical name(s) in GRIN	Common name(s) in GENIE	Number of entries in PLUTO
EPIPH_ANG	*Epiphyllum anguligerum* (Lem.) G.Don	*Disocactus anguliger* (Lem.) M. Á. Cruz & S. Arias	n.a.	2

Proposal

31. The TWO might wish to consider replacing the UPOV Code EPIPH_ANG by the UPOV Codes DISOC_NGL, as follows:

Current			Proposal		
UPOV code	Principal botanical name	Other botanical name(s)	UPOV code	Principal botanical name	Other botanical name(s)
EPIPH_ANG	*Epiphyllum anguligerum* (Lem.) G.Don	*Disocactus anguliger* (Lem.) M. Á. Cruz & S. Arias	DISOC_NGL	*Disocactus anguliger* (Lem.) M. Á. Cruz & S. Arias	*Epiphyllum anguligerum* (Lem.) G.Don

UPOV code for Osteospermum species

32. The Office of the Union was informed of the reclassification of certain *Osteospermum* species to *Dimorphotheca* species.

33. The current entries in the GENIE database for certain *Osteospermum* species, the taxa in GRIN and the numbers of entries in the PLUTO database, are as follows:

UPOV code	Principal botanical name in GENIE	Botanical name(s) in GRIN	Common name(s) in GENIE	Number of entries in PLUTO
OSTEO_ECK	*Osteospermum ecklonis* (DC.) Norl.	*Dimorphotheca ecklonis* DC.	n.a.	1,159
OSTEO_FRU	*Osteospermum fruticosum* (L.) Norl.	*Dimorphotheca fruticosa* (L.) DC.	n.a.	34

Proposal

34. The TWO might wish to consider replacing the UPOV Codes OSTEO_ECK, OSTEO_FRU and OSTEO_ECC by the UPOV Codes DIMOR_ECK, DIMOR _FRU and DIMOR_ECC, respectively, as follows:

Current			Proposal		
UPOV code	Principal botanical name	Other botanical name(s)	UPOV code	Principal botanical name	Other botanical name(s)
OSTEO_ECK	*Osteospermum ecklonis* (DC.) Norl.	*Dimorphotheca ecklonis* DC.	DIMOR_ECK	*Dimorphotheca ecklonis* DC.	*Osteospermum ecklonis* (DC.) Norl.
OSTEO_FRU	*Osteospermum fruticosum* (L.) Norl.	n.a.	DIMOR _FRU	*Dimorphotheca fruticosa* (L.) DC.	*Osteospermum fruticosum* (L.) Norl.

UPOV code for Uncinia species

35. The Office of the Union was informed of the reclassification of *Uncinia* to *Carex* species.

36. The current entries in the GENIE database for certain *Uncinia* species, the taxa in GRIN and the numbers of entries in the PLUTO database, are as follows:

UPOV code	Principal botanical name in GENIE	Botanical name(s) in GRIN	Common name(s) in GENIE	Number of entries in PLUTO
UNCIN	*Uncinia* Pers.	*Carex* L.	n.a	0
UNCIN_DIV	*Uncinia divaricata* Boott	*Carex edura* K. A. Ford	n.a.	0
UNCIN_EGM	*Uncinia egmontiana* Hamlin	*Carex egmontiana* (Hamlin) K. A. Ford	*Egmont hook sedge; Mount Egmont tussock*	0
UNCIN_RUB	*Uncinia rubra* Colenso ex Boott	*Carex punicea* K. A. Ford	n.a	4
UNCIN_UNC	*Uncinia uncinata* (L. f.) Kük.	*Carex uncinata* L. f.	n.a	2

Proposal

37. The TWO might wish to consider the deletion of the UPOV codes UNCIN, UNCIN_DIV, UNCIN_EGM, UNCIN_RUB and UNCIN_UNC. Uncinia species would be covered as a synonym of *Carex* species under UPOV codes CAREX, CAREX _DIV, CAREX _EGM, CAREX _RUB and CAREX _UNC, as follows:

Current			Proposal		
UPOV code	Principal botanical name	Other botanical name(s)	UPOV code	Principal botanical name	Other botanical name(s)
UNCIN	*Uncinia* Pers.	n.a	CAREX	*Carex* L.	*Uncinia* Pers.
UNCIN_DIV	*Uncinia divaricata* Boott	n.a	CAREX _DIV	*Carex edura* K. A. Ford	*Uncinia divaricata* Boott
UNCIN_EGM	*Uncinia egmontiana* Hamlin	n.a	CAREX _EGM	*Carex egmontiana* (Hamlin) K. A. Ford	*Uncinia egmontiana* Hamlin
UNCIN_RUB	*Uncinia rubra* Colenso ex Boott	n.a	CAREX _RUB	*Carex punicea* K. A. Ford	*Uncinia rubra* Colenso ex Boott
UNCIN_UNC	*Uncinia uncinata* (L. f.) Kük.	n.a	CAREX _UNC	*Carex uncinata* L. f.	*Uncinia uncinata* (L. f.) Kük.

38. The TWO is invited to consider the proposal to delete and amend the UPOV Codes CLEOM_HAS, CLEOM_SPI, EPIPH_ANG, CALAT_CRO, CALAT_LOE, CALAT_ROS, CALAT_WAR, CALAT_LRO, OSTEO_ECK, OSTEO_FRU, OSTEO_ECC, CASTL_TRA BERBE_AQU, BERBE_EUR, BERBE_NIT, BERBE_PUM, BERBE_REP, DESCH_FLE, UNCIN, UNCIN_DIV, UNCIN_EGM, UNCIN_RUB and UNCIN_UNC*, as set out in paragraphs 14 to 37 of this document.*

MATTERS FOR INFORMATION

GENIE database

Background

39. The GENIE database (http://www.upov.int/genie/en/) has been developed to provide online information on the status of protection, cooperation in examination, experience in DUS testing and 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 information[3].

40. 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.

UPOV code developments

41. In 2022, 183 new UPOV codes were created. The total number of UPOV codes in the GENIE database as of December 31, 2022 was 9,525.

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
New UPOV codes	212	209	577	188	173	440	242	243	177	131	183
Amendments	5	47*	37	11	16	1	5	3	44	35	35
Total UPOV Codes	7,061	7,251	7,808	7,992	8,149	8,589	8,844	9,077	9,213	9,342	9,525

* including changes to UPOV codes resulting from the amendment of the "Guide to the UPOV Code System" concerning hybrids (see document TC/49/6).

TWP checking

42. 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".

43. 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 checking by the relevant authorities, for each of the Technical Working Party (TWP) sessions in 2023.

44. The Excel files in the Annex to this document provide information on new UPOV codes added to the GENIE database and UPOV code amendments that have not yet been checked by the relevant authorities, as follows:

> "Part A, 'UPOV codes amendments to be checked':
>
> for each change, the old entry is highlighted in the row in red and the changes to the entry are found in the line immediately below that highlighted row (they have the same number in the first column). All Technical Working Parties and Authority(ies) are requested to check the amendments whether the amendments follow UPOV code system, reflects authentic botanical names and/or common names (see "Guide to the UPOV Code System" http://www.upov.int/export/sites/upov/genie/en/pdf/upov_code_system.pdf).
>
> "Part B 'New UPOV codes or new information':
>
> contains the new UPOV codes or new information added for existing UPOV codes. Highlighting in grey indicates that the UPOV code or name has not been changed. In this spreadsheet, the column headers highlighted in yellow indicate the relevant Technical Working Party (TWP) and Authority(ies) of interest which are requested to check the correctness of the information."

[3] See documents C/[session]/INF/6 "List of the taxa protected by the members of the Union; C/[session]/INF/5 "Cooperation in Examination"; 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".

"Part C 'Crop type(s) of existing UPOV codes used in the PLUTO database for the first time':

contains the new crop type allocation or amended allocation for existing UPOV codes used in the PLUTO database for the first time. In this spreadsheet, the column headers highlighted in yellow indicate the relevant crop type(s) which are requested to check the correctness of the information."

45. The Annex to this document contain parts A "UPOV codes amendments to be checked", B "New UPOV codes or new information", and C "Crop type(s) of UPOV codes used in the PLUTO database for the first time". The Excel format files are available on the websites for the 2023 sessions of the TWPs.

46. Experts of the Technical Working Party for Vegetables (TWV), Technical Working Party for Ornamental Plants and Forest Trees (TWO), Technical Working Party for Agricultural Crops (TWA) and Technical Working Party for Fruit Crops (TWF) are invited to check the amendments, new UPOV codes or information, and UPOV codes used in the PLUTO database for the first time, as reproduced in the Annex to this document and submit comments to the Office of the Union by December 31, 2023.

Proposals for amending the UPOV code system and UPOV codes

47. The guide to the UPOV code system (document UPOV/INF/23 "UPOV Code System") was adopted by the Council on September 21, 2021, and is available on the UPOV website at https://www.upov.int/genie/resources/pdfs/upov_code_system_en.pdf (see document C/55/12 "Outcome of consideration of documents by correspondence", paragraph 32).

Proposals for the revision of document UPOV/INF/23 "Guide to the UPOV code system"

48. The TC, at its fifty-eight session[4], agreed to revise document UPOV/INF/23 "Guide to the UPOV Code System", as follows (deletions indicated with highlighting and ~~strikethrough~~; additions indicated with highlighting and underline) (see document TC/58/31 "Report", paragraph 22):

"5 UPOV CODE: APPENDED INFORMATION

"5.1 Appended element construction

"5.1.1.Where required, an element may be appended to a UPOV code to provide information on the variety group, variety type and/or denomination class.

"The appended element to UPOV codes is identifiable though the following naming convention:

- "A digit (number from 1 to 9) prefix identifies the new appended element.
- "Different digits or letters could, if appropriate, indicate different categories of information.
- "The appended element should contain a maximum of six digits or letters in total (e.g. '1AC2TG')

"This element may be appended to any UPOV code, regardless of plant taxa (genera, species or subspecies levels). Examples:

"UPOV code for genus *Abies*: ..... ABIES
"UPOV code with appended element: ..... ABIES_~~1234~~ 1AC2TG

"UPOV code for species *Abies sibirica*: ..... ABIES_SIB
"UPOV code with appended element: ..... ABIES_SIB_~~1234~~ 1AC2TG

"UPOV code for sub-species *Abies sibirica* subsp. *semenovii*: ..... ABIES_SIB_SEM
"UPOV code with appended element: ..... ABIES_SIB_SEM_~~1234~~ 1AC2TG"

[4] Held in Geneva on October 24 and 25, 2022

Correction of cross-references to document UPOV/EXN/DEN

49. Cross-references to document UPOV/INF/12 “Explanatory Notes to Variety Denominations under the UPOV Convention” should be corrected and replaced by UPOV/EXN/DEN in paragraphs 4.2 and 4.3 of document UPOV/INF/23, as follows:

“4.2 Inter-generic and inter-specific hybrids

4.2.6 In the case of UPOV codes for hybrid genera and species, the UPOV code will not distinguish between two hybrids produced using the same parents. A UPOV code is created for the first hybrid notified to UPOV in accordance with the procedure set out in paragraphs ~~2.2.3 to 2.2.5~~ 4.2.3 to 4.2.5. However, if a subsequent request is received for a hybrid involving the same genera/species in a different combination, the Principal Botanical Name will be amended to indicate that the UPOV code covers all combinations involving the same genera/species.”

“4.3 Introduction of New UPOV Codes / Amendments to UPOV Codes

“(d) In general, amendments to UPOV codes will not be made as a result of taxonomic developments unless these result in a change to the genus classification of a species. The “Explanatory notes on variety denominations under the UPOV Convention” (document ~~UPOV/INF/12~~ UPOV/EXN/DEN) contain UPOV variety denomination classes; for genera and species not covered by the List of Classes in Annex I to document ~~UPOV/INF/12~~ UPOV/EXN/DEN, the general rule (“one genus / one class”) is that a genus is considered to be a class (see document ~~UPOV/INF/12~~ UPOV/EXN/DEN, Section ~~2.5.2~~ 4.5.2 and its Annex I). […]”

Proposals for amending UPOV codes

Replacing complex botanical nomenclature by variety groups

50. Section 4.3 (d) 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”.

51. On the basis of the conclusions at the TC on the matters presented in the following sections, members of the Union and contributors of data to the PLUTO database will be informed of the changes and the date of the changes by means of a Circular in advance. Contributors of data to the PLUTO database will be requested to use the amended UPOV codes when submitting their plant variety data to the Office of the Union.

UPOV codes for Brassica oleracea

52. On the basis of the conclusions at the TC, the UPOV codes BRASS_OLE_GA and BRASS_OLE_GB will be deleted on June 30, 2023.

UPOV codes for Citrus

53. On the basis of the conclusions at the TC, the UPOV code CITRU_AUM will be amended to append information to create groups “1MA” for mandarins and “2OR” for oranges, as following, on June 30, 2023.

Old					New		
Entries in PLUTO	TG	UPOV Code	Principal botanical name	Other botanical name(s)	UPOV Code	Principal botanical name	Other botanical name(s)
10	TG/202	CITRU_AUM	Citrus aurantium L.	n.a.	CITRU_AUM_**1MA** CITRU_AUM_**2OR**	Citrus ×aurantium L.	Citrus amara Link; Citrus bigarradia Loisel.; Citrus intermedia hort. ex Tanaka; Citrus taitensis Risso; Citrus vulgaris Risso; Citrus ×aurantium subsp. aurantium L.; Citrus ×aurantium subsp. jambiri Engl.; Citrus ×aurantium subsp. keonla Engl.; Citrus ×aurantium subsp.
115	TG/201	CITRU_CLE	Citrus clementina hort. ex Tanaka	n.a.			
1	/	CITRU_MRE	Citrus maxima X Citrus reticulata	n.a.			

0	TG/201	CITRU_CRE	Citrus crenatifolia Lush.	n.a.			suntara Engl.; Citrus ×aurantium var. aurantium L.; Citrus ×aurantium var. citrina Lush.; Citrus ×bigarradia var. volkameriana Risso; Citrus ×clementina hort. ex Tanaka; Citrus ×crenatifolia Lush.; Citrus reticulata × C. maxima
0	TG/204	CITRU_INT	Citrus intermedia hort. ex Tanaka	n.a.			

54. The UPOV codes CITRU_CLE, CITRU_MRE, CITRU_CRE, CITRU_INT, CITRU_AUR, CITRU_DAV, CITRU_EXC, CITRU_KER, CITRU_BAL and CITRU_KAR and CITRU_BEN will be deleted on the said date.

UPOV codes for Zea mays

55. On the basis of the conclusions at the TC, the UPOV code ZEAAA_MAY_SAC, ZEAAA_MAY_EVE and ZEAAA_MAY_MIC will be deleted, on June 30, 2023.

[Annex follows]

ANNEX

[See Excel files]

[End of Annex and of document]