|  |  |
| --- | --- |
|  | E |
| International Union for the Protection of New Varieties of Plants |  |

|  |  |
| --- | --- |
| Technical Committee  Fifty-Seventh Session Geneva, October 25 and 26, 2021 | TC/57/11.  Original: English  Date: September 24, 2021 |

UPOV information databases

Document prepared by the Office of the Union

Disclaimer: this document does not represent UPOV policies or guidance

Executive summary

The purpose of this document is to report on developments concerning the UPOV code system and to present a proposal to amend the UPOV code system to provide information on variety types, groups and denomination class.

The TC is invited to:

(a) note that the TWPs, at their sessions in 2021, agreed with the proposal for amending the UPOV code system, as set out in document UPOV/INF/23/1 Draft 2;

(b) note that matters concerning the draft revised “Guide to the UPOV code system” (document  UPOV/INF/23) are presented in document TC/57/4 “Guidance and information materials – Matters for adoption by the Council in 2021”;

(c) note that the proposals for amending UPOV codes presented in this document are made on the basis that they would be made in conjunction with the adoption of document  UPOV/INF/23/1;

(d) note that members of the Union and contributors of data to the PLUTO database will be informed of the changes to UPOV codes and the date of the changes by means of a circular in advance.

(e) consider the proposal to amend the UPOV codes for *Beta vulgaris* L. subsp. *vulgaris*, as reproduced in Annex I to this document;

(f) consider appending information to the UPOV code for *Beta vulgaris* L. subsp. *vulgaris* to establish the following groups:

(i) Fodder beet group: Class 2.1 (“21FB”),

(ii) Sugar beet group: Class 2.1 (“21SB”),

(iii) Beetroot group: Class 2.2 (“22BR”),

(iv) Leaf beet group: Class 2.2 (“22LB”).

(g) consider amending the botanical names for *Brassica oleracea* in accordance with GRIN, with the consequent changes to the UPOV codes in relation to groups, as provided in the Appendix to Annex II of this document;

(h) consider appending information to the UPOV code for *Brassica oleracea* L. var. *capitata* L. (BRASS\_OLE\_GC) to create variety groups or types for White and Red Cabbage, as follows:

(i) White Cabbage: 1W (e.g. BRASS\_OLE\_GC\_1W)

(ii) Red Cabbage: 2R (e.g. BRASS\_OLE\_GC\_2R)

(i) consider appending information to UPOV code CITRU\_AUM to create groups “1MA” for mandarins; and “2OR” for oranges;

(j) consider amending the UPOV code CITRU\_AUM, following the reclassification of *Citrus clementina* hort. ex Tanaka (UPOV code: CITRU\_CLE) as a synonym of *Citrus aurantium* L. (UPOV code: CITRU\_AUM), as set out in Annex III to this document;

(k) note that the proposal from the TWF for partial revision of the Test Guidelines for *Citrus* to move obsolete species from the “principle botanical names” box to the “alternative botanical names” box will be considered in document TC/57/2 “Test Guidelines”;

(l) consider the proposal to delete the UPOV Codes ZEAAA\_MAY\_SAC, ZEAAA\_MAY\_EVE and ZEAAA\_MAY\_MIC, that would be covered by the UPOV code ZEAAA\_MAY\_MAY;

(m) consider appending information on variety types or groups to the UPOV code ZEAAA\_MAY\_MAY to establish the following variety types or groups:

(i) Corn; Maize: “1MA”,

(ii) Sweet Corn: “2SW”,

(iii) Popcorn: “3PO”.

(n) consider the proposal to delete the UPOV Code ALOEE\_ARI, as set out in paragraph 37 of this document; and

(o) consider the proposal to delete the UPOV Code DICEN\_SPE, as set out in paragraph 41 of this document.

The structure of this document is as follows:

Executive summary 1

Amending the UPOV Code system to provide information on variety groups or types 3

Background 3

Consideration by the Technical Working Parties 3

proposals for Amending UPOV codes 3

UPOV codes for *Beta vulgaris* 4

UPOV codes for *Brassica oleracea* 5

UPOV codes for *Citrus* 5

UPOV codes “ZEAAA\_MAY\_SAC”, “ZEAAA\_MAY\_EVE” and “ZEAAA\_MAY\_MIC” 6

additional proposals for amending upov codes considered by the TWPs in 2021 7

UPOV code for *Aloe* *aristata* 7

UPOV code for *Dicentra* species 7

ANNEX I Proposals to amend the UPOV code for *Beta vulgaris* subsp. *vulgaris*

ANNEX II UPOV codes for *Brassica oleracea:* Current situation

Appendix to Annex II Proposal on changes to the UPOV codes for *Brassica oleracea*

ANNEX III Proposals to amend UPOV codes for *Citrus*

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

TWC: Technical Working Party on Automation and Computer Programs

TWF: Technical Working Party for Fruit Crops

TWO: Technical Working Party for Ornamental Plants and Forest Trees

TWP(s): Technical Working Party(ies)

TWV: Technical Working Party for Vegetables

Amending the UPOV Code system to provide information on variety groups or types

## Background

The TC, at its fifty-sixth session[[1]](#footnote-2), agreed to request the Office of the Union to prepare a draft revised “Guide to the UPOV code system” on the basis of the proposal set out in document TC/56/8, paragraphs 15 to 26, for consideration by the TC and CAJ, at their sessions in 2021 and, subject to agreement by CAJ, present the draft revised “Guide to the UPOV code system” (document UPOV/INF/23) for adoption by the Council in 2021 (see document TC/56/22 “Outcome of consideration of documents by correspondence”, paragraphs 50 to 53).

The TC agreed to request the Office of the Union to invite comments by the TWPs at their sessions in 2021 on the draft revised “Guide to the UPOV code system” (document UPOV/INF/23) on the basis of the proposal presented in document TC/56/10, to assist the TC in its consideration of the draft.

## Consideration by the Technical Working Parties

At their sessions in 2021, the TWV[[2]](#footnote-3), TWO[[3]](#footnote-4), TWA[[4]](#footnote-5) and TWF[[5]](#footnote-6) agreed with the proposal for amending the UPOV code system to provide information on variety types, groups and denomination class, as set out in document UPOV/INF/23/1 Draft 2 (see documents TWV/55/16 “Report”, paragraph 73; TWO/53/10 “Report”, paragraph 36; TWA/50/9 “Report”, paragraph 48; and TWF/52/10 “Report”, paragraph 47).

Matters concerning the draft revised “Guide to the UPOV code system” (document UPOV/INF/23) are presented in document TC/57/4 “Guidance and information materials – Matters for adoption by the Council in 2021”.

The TC is invited to note that:

(a) the TWPs, at their sessions in 2021, agreed with the proposal for amending the UPOV code system, as set out in document UPOV/INF/23/1 Draft 2; and

(b) matters concerning the draft revised “Guide to the UPOV code system” (document  UPOV/INF/23) are presented in document TC/57/4 “Guidance and information materials – Matters for adoption by the Council in 2021”.

proposals for Amending UPOV codes

The TC, at its fifty-sixth session, agreed to request the Office of the Union to present proposals to address the taxonomical reclassification of *Beta vulgaris* ssp. *vulgaris*, *Brassica oleracea*, *Citrus* and *Zea mays*, in conjunction with a proposal to revise the “Guide to the UPOV code system” (document UPOV/INF/23) for consideration by the TWPs and the TC at their sessions in 2021 (see document TC/56/22 “Outcome of consideration of documents by correspondence”, paragraph 53).

The following proposals are made on the basis that the changes to the UPOV codes would be made in conjunction with the adoption of document  UPOV/INF/23/1.

On the basis of the conclusions at the fifty-seventh session of 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.

The TC is invited to note:

(a) that the proposals for amending UPOV codes presented in this document are made on the basis that they would be made in conjunction with the adoption of document  UPOV/INF/23/1; and

(b) that members of the Union and contributors of data to the PLUTO database will be informed of the changes to UPOV codes and the date of the changes by means of a circular in advance.

## UPOV codes for *Beta vulgaris*

Annex I to this document provides the number of entries in the PLUTO database for *Beta vulgaris*L. subsp. *vulgaris* and its synonyms, as currently provided in the GENIE database. A proposal for updating UPOV codes in line with the taxa in GRIN is provided in Annex I to this document. All previously recognized taxonomical ranks lower than subspecies are added as synonyms to *Beta vulgaris*L. subsp. *vulgaris*.

The TWV, at its fifty-fifth session, and TWA, at its fiftieth session, agreed with the proposal to amend the UPOV codes for *Beta vulgaris*, as reproduced in Annex I to this document (see documents TWV/55/16 “Report”, paragraphs 76 and 77; and TWA/50/9 “Report”, paragraphs 52 and 53).

The TWV and TWA agreed to append information on denomination classes to the UPOV codes for *Beta vulgaris* subsp. *vulgaris* to establish the following groups:

(i) Fodder beet group: Class 2.1 (“21FB”),

(ii) Sugar beet group: Class 2.1 (“21SB”),

(iii) Beetroot group: Class 2.2 (“22BR”),

(iv) Leaf beet group: Class 2.2 (“22LB”).

The following table provides a summary of the denomination classes proposed by the TWV and TWA:

|  | Botanical names | UPOV codes |
| --- | --- | --- |
| Class 2.1 | *B. vulgaris* L. ssp. *vulgaris* (synonym to *B. vulgaris* L. var. *alba* DC.), *B. vulgaris* L. ssp. *vulgaris* (synonym to *B. vulgaris* L. var. *altissima)* | BETAA\_VUL\_VUL\_21FB;  BETAA\_VUL\_VUL\_21SB |
| Class 2.2 | *Beta vulgaris* ssp. *vulgaris* var. *conditiva* Alef. (synonym to *B. vulgaris* L. var. *rubra* L.), B. *vulgaris* L. var. *cicla* L., *B. vulgaris* L. ssp. *vulgaris* var. *vulgaris* | BETAA\_VUL\_VUL\_22BR;  BETAA\_VUL\_VUL\_22LB |
| Class 2.3 | *Beta* other than classes 2.1 and 2.2. | other than classes 2.1 and 2.2 |

The TC is invited to consider:

(a) the proposal to amend the UPOV codes for Beta vulgaris L. subsp. vulgaris, as reproduced in Annex I to this document; and

(b) appending information to UPOV codes for Beta vulgaris L. subsp. vulgaris to establish the following groups:

(i) Fodder beet group: Class 2.1 (“21FB”),

(ii) Sugar beet group: Class 2.1 (“21SB”),

(iii) Beetroot group: Class 2.2 (“22BR”),

(iv) Leaf beet group: Class 2.2 (“22LB”).

## UPOV codes for *Brassica oleracea*

Annex II to this document provides the current entries in the GENIE database for *Brassica oleracea* (except hybrids), the taxa in GRIN and the number of entries in the PLUTO database.

The TWV, at its fifty-fifth session, agreed to amend the botanical names for *Brassica oleracea* in accordance with GRIN, as provided in the Appendix to Annex II of this document (see document TWV/55/16 “Report”, paragraphs 78 to 80).

The TWV agreed to append information to the UPOV code for *Brassica oleracea* L. var. *capitata* L. (BRASS\_OLE\_GC) to create variety groups or types for White and Red Cabbage, as follows:

* White Cabbage: 1W (e.g. BRASS\_OLE\_GC\_1W)
* Red Cabbage: 2R (e.g. BRASS\_OLE\_GC\_2R)

The TWV considered the proposal from the Netherlands to replace mentions to the botanical nomenclature of *Brassica oleracea* by the respective group type. For example, reference would be made to *Brassica oleracea* Curly kale Group instead of *B. oleracea* L. var. *sabellica* (synonym of *B. oleracea* L. convar. *acephala* (DC.) Alef. var. *sabellica* L.). The TWV agreed to invite the Netherlands to make a presentation at its fifty-sixth session to consider the proposal further.

The TC is invited to consider:

(a) amending the botanical names for Brassica oleracea in accordance with GRIN, with the consequent changes to the UPOV codes in relation to groups, as provided in the Appendix to Annex II of this document; and

(b) appending information to the UPOV code for Brassica oleracea L. var. capitata L. (BRASS\_OLE\_GC) to create variety groups or types for White and Red Cabbage, as follows:

(i) White Cabbage: 1W (e.g. BRASS\_OLE\_GC\_1W)

(ii) Red Cabbage: 2R (e.g. BRASS\_OLE\_GC\_2R)

## UPOV codes for *Citrus*

Annex III to this document presents a proposal for updating UPOV codes in line with the taxa in GRIN.

The TWF, at its fifty-first session, considered amending the UPOV codes for *Citrus*, as reproduced in Annex III to this document. The TWF agreed that the reclassification of *Citrus clementina* hort. ex Tanaka (UPOV code: CITRU\_CLE) as a synonym of *Citrus* *aurantium* L. (UPOV code: CITRU\_AUM) should not be implemented before solutions to enable UPOV codes to provide information on variety groups were provided. The TWF noted that the remaining proposals had no practical impact due to the absence of varieties reported in the PLUTO database and agreed to the proposed changes (see document TWF/51/10 “Report”, paragraph 51).

The TWF, at its fifty-second session, agreed to append the following information to UPOV code CITRU\_AUM to create groups mandarins (1MA); and oranges (1OR), as follows (see document TWF/52/10 “Report”, paragraphs 50 to 52):

(a) Mandarins group: “1MA” (e.g. CITRU\_AUM\_1MA); and

(b) Oranges group: “1OR” (e.g. CITRU\_AUM\_1OR)

The TWF agreed to amend the UPOV code CITRU\_AUM, following the reclassification of *Citrus clementina* hort. ex Tanaka (UPOV code: CITRU\_CLE) as a synonym of *Citrus aurantium* L. (UPOV code: CITRU\_AUM), as set out in the Annex III to this document.

The TWF agreed to propose the partial revision of the Test Guidelines for *Citrus* to move relevant botanical names from the “principle botanical names” box to the “alternative botanical names” box. Matters concerning partial revisions of Test Guidelines are presented in document TC/57/2 “Test Guidelines”.

The TC is invited to:

(a) consider appending information to UPOV code CITRU\_AUM to create groups “1MA” for mandarins; and “2OR” for oranges;

(b) consider amending the UPOV code CITRU\_AUM, following the reclassification of Citrus clementina hort. ex Tanaka (UPOV code: CITRU\_CLE) as a synonym of Citrus aurantium L. (UPOV code: CITRU\_AUM), as set out in Annex III to this document; and

(c) note that the proposal from the TWF for partial revision of the Test Guidelines for Citrus to move obsolete species from the “principle botanical names” box to the “alternative botanical names” box will be considered in document TC/57/2 “Test Guidelines”.

## UPOV codes “ZEAAA\_MAY\_SAC”, “ZEAAA\_MAY\_EVE” and “ZEAAA\_MAY\_MIC”

The TWV, at its fifty-fifth session, and the TWA, at its fiftieth session, agreed with the proposal to delete the UPOV Codes ZEAAA\_MAY\_SAC, ZEAAA\_MAY\_EVE and ZEAAA\_MAY\_MIC, that would be covered by the UPOV code ZEAAA\_MAY\_MAY, as follows (see documents TWV/55/16 “Report”, paragraphs 81 to 83; and TWA/50/9 “Report”, paragraphs 54 to 56):

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Current** | | | **Proposal** | | |
| UPOV code | Principal botanical name | Other botanical name(s) | UPOV code | Principal botanical name | Other botanical name(s) |
| ZEAAA\_MAY\_SAC | *Zea mays* L. *saccharata* Koern. | n.a. | [to delete] | n.a. | n.a. |
| ZEAAA\_MAY\_EVE | *Zea mays* L. var. *everta* (Praecox) Sturt. | n.a. | [to delete] | n.a. | n.a. |
| ZEAAA\_MAY\_MIC | *Zea mays* L. convar. *microsperma* Koern. | n.a. | [to delete] | n.a. | n.a. |
| ZEAAA\_MAY\_MAY | *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 | ZEAAA\_MAY\_MAY | *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. |

The TWV and TWA agreed that the UPOV code for Durango teosinte should not be changed and should remain as ZEAAA\_MAY\_MEX.

The TWV and TWA agreed to append information on variety types or groups to the UPOV code ZEAAA\_MAY\_MAY to establish the following variety types or groups:

(a) Corn; Maize: “1MA” (e.g. ZEAAA\_MAY\_MAY\_1MA);

(b) Sweet Corn: “2SW” (e.g. ZEAAA\_MAY\_MAY\_2SW);

(c) Popcorn: “3PO” (e.g. ZEAAA\_MAY\_MAY\_3PO).

The TC is invited to consider:

(a) the proposal to delete the UPOV Codes ZEAAA\_MAY\_SAC, ZEAAA\_MAY\_EVE and ZEAAA\_MAY\_MIC, that would be covered by the UPOV code ZEAAA\_MAY\_MAY; and

(b) appending information on variety types or groups to the UPOV code ZEAAA\_MAY\_MAY to establish the following variety types or groups:

*(i) Corn; Maize: “1MA”,*

*(ii) Sweet Corn: “2SW”,*

*(iii) Popcorn: “3PO”.*

# additional proposals for amending upov codes considered by the TWPs in 2021

The following sections present proposals for amendments to UPOV codes considered by the TWPs at their session in 2021.

## UPOV code for *Aloe* *aristata*

The Office of the Union was informed of the reclassification of certain *Aloe* subspeciesas species under the genus *Aristaloe*.

The current entries in the GENIE database for the *Aloe* subspecies concerned, 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 |
| ALOEE\_ARI | *Aloe aristata* Haw. | *Aristaloe aristata* (Haw.) Boatwr. & J. C. Manning | Lace aloe; Torch plant | 14 |

The TWO, at its fifty-third session, agreed to delete the UPOV Code ALOEE\_ARI, as indicated below. The species *Aloe aristata* would be covered as a synonym of *Aristaloe aristata* under a new UPOV codeARSTL\_ARI, which the office of the union would create (see document TWO/53/10 “Report”, paragraph 44).

| Current | | | Proposal | | |
| --- | --- | --- | --- | --- | --- |
| UPOV code | Principal botanical name | Other botanical name(s) | UPOV code | Principal botanical name | Other botanical name(s) |
| ALOEE\_ARI | *Aloe aristata* Haw. | *Aristaloe aristata* (Haw.) Boatwr. & J. C. Manning | ARSTL\_ARI | *Aristaloe aristata* (Haw.) Boatwr. & J. C. Manning | *Aloe aristata* Haw. |

The TC is invited to consider the proposal to delete the UPOV Code ALOEE\_ARI, as set out in paragraph 37 of this document.

## UPOV code for *Dicentra* species

The Office of the Union was informed of the reclassification of certain *Dicentra* speciesto *Lamprocapnos*.

The current entries in the GENIE database for certain *Dicentra 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 |
| DICEN\_SPE | *Dicentra spectabilis* (L.) Lem. | *Lamprocapnos spectabilis* (L.) Fukuhara | Asian bleeding-heart; Bleeding-heart | 12 |

The TWO, at its fifty-third session, agreed to delete the UPOV Code DICEN\_SPE, as presented in the table below. *Dicentra spectabilis* would be covered as a synonym of *Lamprocapnos spectabilis* under a new UPOV codeLAMPO\_SPE, which the office of the union would create (see document TWO/53/10 “Report”, paragraph 43).

| Current | | | Proposal | | |
| --- | --- | --- | --- | --- | --- |
| UPOV code | Principal botanical name | Other botanical name(s) | UPOV code | Principal botanical name | Other botanical name(s) |
| DICEN\_SPE | *Dicentra spectabilis* (L.) Lem. | *Lamprocapnos spectabilis* (L.) Fukuhara | LAMPO\_SPE | *Lamprocapnos spectabilis* (L.) Fukuhara | *Dicentra spectabilis* (L.) Lem. |

The TC is invited to consider the proposal to delete the UPOV Code DICEN\_SPE, as set out in paragraph 41 of this document.

[Annexes follow]

proposals to amend the upov code for *beta vulgaris* subsp. *vulgaris*

Current situation and proposed UPOV code amendments

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Currrent | | | | | Proposal | | |
| Entries in PLUTO | TG | UPOV Code | Principal botanical name | Other botanical name(s) | UPOV Code | Principal botanical name | Other botanical name(s) |
| 5 | / | **BETAA\_VUL\_GV** | **Beta vulgaris L. subsp. vulgaris** | n.a. | **BETAA\_VUL\_VUL** | **Beta vulgaris L. subsp. vulgaris** | Beta altissima Steud.; Beta brasiliensis hort. ex Voss, nom. inval.; Beta chilensis hort.; Beta cicla (L.) L.; vulgaris f. rhodopleura (Alef.) Helm; vulgaris f. vulgaris L.; vulgaris subsp. cicla (L.) Schübl. & G. Martens; Beta vulgaris subvar. flavescens DC.; Beta vulgaris var. altissima Döll; Beta vulgaris var. cicla L.; Beta vulgaris var. conditiva Alef.; Beta vulgaris var. flavescens (DC.) Mansf.; Beta vulgaris var. rapacea W. D. J. Koch; Beta vulgaris var. rubra DC.; Beta vulgaris var. saccharifera Alef.; Beta vulgaris var. vulgaris L.; Beta vulgaris var.-gr. crassa Alef. |
| 1298 | TG/150 | BETAA\_VUL\_**G**VA | Beta vulgaris L. ssp. vulgaris var. alba DC. | Beta vulgaris L. ssp. vulgaris var. crassa Alef.; Beta vulgaris L. ssp. vulgaris var. crassa Mansf.; Beta vulgaris L. ssp. vulgaris var. rapacea K. Koch |
| 811 | TG/60 | BETAA\_VUL\_**G**VC | Beta vulgaris L. ssp. vulgaris var. conditiva Alef. | Beta vulgaris L. ssp. vulgaris var. esculenta L.; Beta vulgaris L. ssp. vulgaris var. hortensis |
| 195 | TG/106 | BETAA\_VUL\_**G**VF | Beta vulgaris L. ssp. vulgaris var. flavescens DC. | Beta vulgaris L. ssp. vulgaris var. cicla (L.) Ulrich; Beta vulgaris L. ssp. vulgaris var. vulgaris |
| 21799 | / | BETAA\_VUL\_**G**VS | Beta vulgaris L. ssp. vulgaris var. saccharifera Alef. | Beta vulgaris L. ssp. vulgaris var. altissima Doell |

[Annex II follows]

UPOV CODES FOR *BRASSICA OLERACEA:* CURRENT SITUATION

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| UPOV code | Principal botanical name in GENIE | Botanical name(s) in GRIN | Common name(s) in GENIE | Number of entries in PLUTO |
| BRASS\_OLE | *Brassica oleracea* L. | *Brassica oleracea* L. | n.a. | 3,794 |
| BRASS\_OLE\_GA | *Brassica oleracea* L. *convar. acephala* (DC.) Alef. | n.a. | Kale | 156 |
| BRASS\_OLE\_GAM | *Brassica oleracea* L. *convar. acephala* (DC.) Alef. *var. medullosa* Thell. | *Brassica oleracea* L. var. *medullosa* Thell. | Marrow-stem Kale | 28 |
| BRASS\_OLE\_GAR | *Brassica oleracea* L.var. *ramosa* DC. | *Brassica oleracea* L. var. *ramosa* DC. | branching bush kale; branching cabbage; perennial kale; perpetual kale; thousand-head kale | 0 |
| BRASS\_OLE\_GAS | *Brassica oleracea* L. *convar. acephala (DC.)* Alef. var. *sabellica* L. | *Brassica oleracea* L.var. *sabellica* L. | Borecole; Curly Kale; Dwarf Siberian kale; Kitchen kale; Scotch kale | 415 |
| BRASS\_OLE\_GAV | *Brassica oleracea* L. *convar. acephala* (DC.) Alef. var. *viridis* L. | *Brassica oleracea* L.var. *viridis* L. | Collards; Cow cabbage; Fodder Kale; Kale; Spring-heading cabbage; Tall kale; Tree kale | 160 |
| BRASS\_OLE\_GB | *Brassica oleracea* L. convar. *botrytis* (L.) Alef. | n.a. | n.a. | 298 |
| BRASS\_OLE\_GBB | *Brassica oleracea* L. *convar. botrytis* (L.) Alef. var. *botrytis* | *Brassica oleracea* L. var. *botrytis* L. | Cauliflower | 3,522 |
| BRASS\_OLE\_GBC | *Brassica oleracea* L. var. *italica* Plenck | *Brassica oleracea* L.var. *italic* Plenck | Calabrese; Cape broccoli; Sprouting Broccoli; Winter broccoli; asparagus broccoli; broccoli; heading broccoli; purple cauliflower | 1,043 |
| BRASS\_OLE\_GC | *Brassica oleracea* L. convar. *capitata* (L.) Alef. | *Brassica oleracea* L.var. *capitata* L. | Cabbage | 292 |
| BRASS\_OLE\_GCA | *Brassica oleracea L. convar. capitata* (L.) Alef. var. *alba* DC. | n.a. | White Cabbage | 3,747 |
| BRASS\_OLE\_GCR | *Brassica oleracea* L. *convar. capitata* (L.) Alef.var. *rubra* (L.) Thell. | n.a. | Red Cabbage | 619 |
| BRASS\_OLE\_GCS | *Brassica oleracea* L.convar. *capitata* (L.) Alef. var. *sabauda* L. | *Brassica oleracea* L.var. *sabauda* L. | Savoy Cabbage | 533 |
| BRASS\_OLE\_GGM | *Brassica oleracea* L.var. *gemmifera* Zenker | *Brassica oleracea* L.var. *gemmifera* DC. | Brussels Sprouts | 950 |
| BRASS\_OLE\_GGO | *Brassica oleracea* L. var. *gongylodes* L. | *Brassica oleracea* L.var. *gongylodes* L. | Kohlrabi; Stem turnip | 543 |
| BRASS\_OLE\_ALB | *Brassica oleracea* L.var. *alboglabra* (L. H. Bailey) Musil | *Brassica oleracea* L. var. *alboglabra* (L. H. Bailey)Musil | Chinese broccoli; Chinese kale | 0 |
| BRASS\_OLE\_COS | *Brassica oleracea* L.var. *costata* DC. | *Brassica oleracea* L. var. *costata* DC. | Bedford cabbage; Braganza; Portugese cole; Portuguese kale; Seakale cabbage; Tronchuda cabbage; Tronchuda kale | 16 |

[Appendix to Annex II follows]

PROPOSAL ON CHANGES TO THE UPOV CODES FOR *BRASSICA OLERACEA*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Current | | | Proposal | | |
| UPOV code | Principal botanical name | Other botanical name(s) | UPOV code | Principal botanical name | Other botanical name(s) |
| BRASS\_OLE | *Brassica oleracea* L. | n.a. | BRASS\_OLE | *Brassica oleracea* L. | *Brassica oleracea* L. *convar. acephala* (DC.) Alef.;  *Brassica oleracea* L. convar. *botrytis* (L.) Alef. |
| BRASS\_OLE\_GA | *Brassica oleracea* L. *convar. acephala* (DC.) Alef. | n.a. | [to delete] | n.a. | n.a. |
| BRASS\_OLE\_GAM | *Brassica oleracea* L. *convar. acephala* (DC.) Alef. *var. medullosa* Thell. | *Brassica oleracea* L. var. *medullosa* Thell. | BRASS\_OLE\_GAM | *Brassica oleracea* L. var. *medullosa* Thell. | *Brassica oleracea* L. *convar. acephala* (DC.) Alef. *var. medullosa* Thell. |
| BRASS\_OLE\_GAS | *Brassica oleracea* L. *convar. acephala (DC.)* Alef. var. *sabellica* L. | *Brassica oleracea* L. var. *sabellica* L. | BRASS\_OLE\_GAS | *Brassica oleracea* L.var. *sabellica* L. | *Brassica oleracea* L. *convar. acephala (DC.)* Alef. var. *sabellica* L. |
| BRASS\_OLE\_GAV | *Brassica oleracea* L. *convar. acephala* (DC.) Alef. var. *viridis* L. | *Brassica oleracea* L.var. *viridis* L. | BRASS\_OLE\_GAV | *Brassica oleracea* L.var. *viridis* L. | *Brassica oleracea* L. *convar. acephala* (DC.) Alef. var. *viridis* L. |
| BRASS\_OLE\_GB | *Brassica oleracea* L. convar. *botrytis* (L.) Alef. | n.a. | [to delete] | n.a. | n.a. |
| BRASS\_OLE\_GBB | *Brassica oleracea* L. *convar. botrytis* (L.) Alef. var. *botrytis* | *Brassica cauliflora* lizg | BRASS\_OLE\_GBB | *Brassica oleracea* L. var. *botrytis* L. | *Brassica oleracea* L. *convar. botrytis* (L.) Alef. var. *botrytis;*  *Brassica cauliflora lizg* |
| BRASS\_OLE\_GC | *Brassica oleracea* L. convar. *capitata* (L.) Alef. | *Brassica oleracea* L. var. *capitata* L. | BRASS\_OLE\_GC | *Brassica oleracea* L.var. *capitata* L. | *Brassica oleracea* L. convar. *capitata* (L.) Alef.;  *Brassica oleracea* L. convar. *capitata* (L.) Alef. var. *capitata* (L.) Alef.*;*  *Brassica oleracea L. convar. capitata* (L.) Alef. var. *alba* DC.;  *Brassica oleracea* L. convar. *capitata* (L.) Alef. var. *capitata* L. f. *alba* DC.  *Brassica oleracea* L. *convar. capitata* (L.) Alef.var. *rubra* (L.) Thell.;  Brassica oleracea L. convar. capitata (L.) Alef. var. capitata L. f. rubra (L.) Thell.;  *Brassica oleracea* L. convar. *capitata* (L.) Alef. var. *alba* DC. x *Brassica oleracea L. convar. capitata* (L.) Alef. var. *rubra* (L.) Thell |
| BRASS\_OLE\_GCA | *Brassica oleracea L. convar. capitata* (L.) Alef. var. *alba* DC. | *Brassica oleracea* L. convar. *capitata* (L.) Alef. var. *capitata* L. f. *alba* DC. | [to delete] | n.a. | n.a. |
| BRASS\_OLE\_GCR | *Brassica oleracea* L. *convar. capitata* (L.) Alef.var. *rubra* (L.) Thell | Brassica oleracea L. convar. capitata (L.) Alef. var. capitata L. f. rubra (L.) Thell. | [to delete] | n.a. | n.a. |
| BRASS\_OLE\_GCS | *Brassica oleracea* L.convar. *capitata* (L.) Alef. var. *sabauda* L. | *Brassica oleracea* L. convar. *capitata (L.)* Alef. var. *bullata* DC. | BRASS\_OLE\_GCS | *Brassica oleracea* L.var. *sabauda* L. | *Brassica oleracea* L.convar. *capitata* (L.) Alef. var. *sabauda* L. ;  *Brassica oleracea* L. convar. *capitata (L.)* Alef. var. *bullata* DC. |

[Annex III follows]

proposals to amend UPOV codes for *citrus*

Current situation and proposed UPOV code amendments

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Currrent | | | | | Proposal | | |
| 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 | 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. 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" |
| 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. |
| 0 | TG/204 | CITRU\_INT | Citrus intermedia hort. ex Tanaka | n.a. |
| 12 | TG/203 | CITRU\_AUR | Citrus aurantiifolia (Christm.) Swingle | Citrus ×javanica Blume | CITRU\_AUR | Citrus ×aurantiifolia (Christm.) Swingle | Citrus acida Roxb.; Citrus acida var. acida Roxb.; Citrus aurata Risso; Citrus excelsa var. davaoensis Wester; Citrus grandis Hassk.; Citrus grandis var. grandis Hassk.; Citrus grandis var. oblonga Hassk.; Citrus grandis var. sphaerocarpos Hassk.; Citrus hystrix subsp. acida (Roxb.) Engl.; Citrus lima Lunan; Citrus limetta var. aromatica Wester; Citrus limonellus Hassk.; Citrus limonellus var. limonellus Hassk.; Citrus limonellus var. oxycarpus Hassk.; Citrus medica var. acida (Roxb.) Hook. f.; Citrus ×aurantiifolia var. aurantiifolia (Christm.) Swingle; Citrus ×davaoensis (Wester) Tanaka; Citrus ×excelsa Wester; Citrus ×javanica Blume; Limonia aurantiifolia Christm., Citrus medica × C. micrantha" |
| 0 | TG/203 | CITRU\_AUA | Citrus aurata Risso | n.a. |
| 0 | TG/203 | CITRU\_DAV | Citrus davaoensis (Wester) Tanaka | n.a. |
| 0 | TG/203 | CITRU\_EXC | Citrus excelsa Wester | n.a. |
| 0 | / | CITRU\_HYS | Citrus hystrix DC. | n.a. | CITRU\_HYS | Citrus hystrix DC. | Citrus auraria Michel; Citrus balincolong (Tanaka) Tanaka; Citrus boholensis (Wester) Tanaka; Citrus celebica Koord.; Citrus celebica var. celebica Koord.; Citrus combara Raf.; Citrus echinata St.-Lag.; Citrus hyalopulpa Tanaka; Citrus hystrix subsp. hystrix DC.; Citrus hystrix var. balincolong Tanaka; Citrus hystrix var. boholensis Wester; Citrus hystrix var. hystrix DC.; Citrus kerrii (Swingle) Tanaka; Citrus latipes Hook. f. & Thomson; Citrus macroptera var. annamensis Tanaka; Citrus macroptera var. kerrii Swingle; Citrus papeda Miq.; Citrus papuana F. M. Bailey; Citrus torosa Blanco; Citrus vitiensis Tanaka; Fortunella sagittifolia K. M. Feng & P. I Mao; Papeda rumphii Hassk. |
| 0 | TG/203 | CITRU\_KER | Citrus kerrii (Swingle) Tanaka | Citrus hyalopulpa Tanaka |
| 149 | TG/203 | CITRU\_LIM | Citrus ×limon (L.) Osbeck | Citrus limon (L.) Burm. f.; Citrus medica var. limon L.; Citrus rissoi Risso; Citrus ×limonia Osbeck; Citrus ×mellarosa Risso; Citrus ×volkameriana (Risso) V. Ten. & Pasq. | CITRU\_LIM | Citrus ×limon (L.) Osbeck | Citrus balotina Poit. & Turpin; Citrus bergamota Raf.; Citrus karna Raf.; Citrus limonum Risso; Citrus medica var. limon L.; Citrus rissoi Risso; Citrus ×limon (L.) Burm. f.; Citrus ×limonia Osbeck; Citrus ×mellarosa Risso; Citrus ×volkameriana (Risso) V. Ten. & Pasq.; a hybrid of Citrus × aurantium (C. maxima × C. reticulata) × C. medica |
| 0 | TG/203 | CITRU\_BAL | Citrus balotina Poit. & Turpin | n.a. |
| 0 | TG/203 | CITRU\_KAR | Citrus karna Raf. | n.a. |
| 355 | TG/201 | CITRU\_RET | Citrus reticulata Blanco | n.a. | CITRU\_RET | Citrus reticulata Blanco | Citrus benikoji hort. ex Tanaka; Citrus daoxianensis S. W. He & G. F. Liu; Citrus depressa var. vangasay (Bojer) H. Perrier; Citrus nobilis Andrews; Citrus vangasay Bojer |
| 0 | TG/201 | CITRU\_BEN | Citrus benikoji hort. ex Tanaka | n.a. |

[End of Annex III and of document]

1. Held via electronic means on October 26 and 27, 2020. [↑](#footnote-ref-2)
2. at its fifty-fifth session, hosted by Turkey and held via electronic means, from May 3 to 7, 2021 [↑](#footnote-ref-3)
3. at its fifty-third session, hosted by the Netherlands and held via electronic means, from June 7 to 11, 2021 [↑](#footnote-ref-4)
4. at its fiftieth session, hosted by the United Republic of Tanzania and held via electronic means, from June 21 to 25, 2021 [↑](#footnote-ref-5)
5. at its fifty-second session, hosted by China and held via electronic means, from July 12 to 16, 2021 [↑](#footnote-ref-6)