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TECHNICAL COMMITTEE

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VARIETY DENOMINATIONS

Document prepared by the Office of the Union

1. Document UPOV/INF/12 Rev. sets out the “UPOV Recommendations on Variety Denominations”. However, the Administrative and Legal Committee (CAJ) has established the Working Group on Variety Denominations (WG-VD) to review those recommendations. The purpose of this document is to explain the considerations taking place with regard to Recommendation 9 of document UPOV/INF/12 Rev., which establishes classes for taxonomic units which are considered to be closely related, and the corresponding list of classes. The document also specifies aspects where the advice of the Technical Committee (TC) and its Technical Working Parties (TWPs) is requested.

Recommendation 9 (closely related taxonomic units)

2. Recommendation 9 of document UPOV/INF/12 Rev. states that:

“For the purposes of the fourth sentence of Article 13(2) of the Convention, all taxonomic units are considered closely related that belong to the same botanical genus or are contained in the same class in the list in Annex I to these Recommendations.”

(Annex I to document UPOV/INF/12 Rev. is reproduced as Annex I to this document.)

3. The WG-VD has noted that the current wording of Recommendation 9 relates to the 1978 Act of the UPOV Convention and needs to be revised to relate also to the 1991 Act of the Convention. As a part of the initiative to develop “explanatory notes” on certain Articles of the 1991 Act of the UPOV Convention, the WG-VD is considering the following explanatory note (see document WG-VD/5/3) concerning Article 20(2)¹ of the 1991 Act of the Convention to replace Recommendation 9 of document UPOV/INF/12 Rev.:

“1. For the purposes of Article 20(2) of the 1991 Act of the UPOV Convention, and subject to points (2) and (3), the general recommendation is that all plant species that belong to a different genus are considered not to be closely related and are not liable to mislead or to cause confusion concerning the identity of the variety.

“2. In addition to 1, plant species, which are in different classes in Part I of the List of Classes, notwithstanding the fact that they may belong to the same genus, are considered not to be closely related and are not liable to mislead or to cause confusion concerning the identity of the variety.

“3. As an exception to 1, above, plant species that belong to any of the genera in the same class in Part II of the List of Classes, are considered to be closely related and/or are liable to mislead or cause confusion concerning the identity of the variety.”

Variety Denomination Classes

4. At its sixth meeting, held in Geneva on April 1, 2004, the WG-VD reached a consensus that, unless there were clear reasons to the contrary, classes should be deleted in order to apply the general recommendation (see point 1. in paragraph 3). The WG-VD also considered that certain proposals which it had developed for revision of the List of Classes would require further consultation or coordination with relevant parties, including the relevant TWPs. The proposals developed by the WG-VD were circulated to the relevant TWPs at their sessions in 2004 and the comments made by those TWPs were discussed by the WG-VD at their seventh meeting, held in Geneva on October 18, 2004. Annex II to this document summarizes the changes to the list of classes (Annex I to document UPOV/INF/12 Rev.), proposed by the WG-VD at its seventh meeting, and specifies where further comments from the TC and the TWPs are sought. Those proposals, together with the further comments from the TC and the relevant TWPs will be presented to the CAJ at its fifty-second session, to be held in Geneva on October 24 and 25, 2005.

5. The WG-VD requested, in particular, that the TC and the TWPs note the WG-VD consensus that, unless there were clear reasons to the contrary, classes should be deleted in order to apply the general recommendation and requested that the TC and the TWPs consider the following aspects in relation to the specific proposals in Annex II:

¹ Article 20(2) states that “The denomination must enable the variety to be identified. It may not consist solely of figures except where this is an established practice for designating varieties. It must not be liable to mislead or to cause confusion concerning the characteristics, value or identity of the variety or the identity of the breeder. In particular, it must be different from every denomination which designates, in the territory of any Contracting Party, an existing variety of the same plant species or of a closely related species.”

Part I classes

(a) Classes within Hibiscus (Proposal I-A); Potentilla (I-B); Mangifera (I-C): to note the existence of a “special denomination class” established in the International Code of Nomenclature for Cultivated Plants (ICNCP) (the special denomination classes are attached as Annex III to this document) and to consider if there is a clear need to establish such a class within the UPOV recommendations;

(b) Classes within Prunus (Proposal I-D): consideration should be given to the possibilities of inter-specific hybrids within Prunus, and the consequences for variety denomination purposes, if recommending the development of separate classes within Prunus.

Part II classes

(a) Classes 203, 204: the WG-VD clarified that these classes have been established on the basis that the genera included within a class are those which can be included in the same mixture;

(b) Classes within Orchidaceae (Proposal II-A): the WG-VD agreed that there should not be a single class for Orchidaceae and that the special denomination classes established in the ICNCP (see Annex III) should be considered when developing classes outside the general recommendation (see point 1. in paragraph 3);

(c) Proposals II-B to II-G: to consider if there is a clear need to establish such classes. In that respect, the absence of UPOV codes indicates that no protected varieties within the genera / species concerned were found in the UPOV-ROM Plant Variety Database, when searched in 2003.

Deleted classes

(a) Helianthus (Old classes: 23, 24 and 35): the classes were deleted because of the existence of protected varieties which were hybrids between *Helianthus annuus* and *Helianthus tuberosus*.

TWF Chairman's proposals

6. As a first step in response to the request of the WG-VD, Mr. Erik Schulte (Germany), Chairman of the Technical Working Party for Fruit Crops (TWF), has developed proposals concerning the development of classes within Prunus. Those proposals are set out in Annex II, Proposal I-D. In addition, Mr. Schulte has proposed that the creation of individual classes within Ribes (Proposal I-E) and within Rubus (Proposal I-F) might also be appropriate. Those proposals are presented in Annex II to this document.

Classes used in Japan

7. At the seventh meeting of the WG-VD, the Delegation of Japan expressed the view that the list of classes needed some flexibility to permit differences according to tradition and culture in the usage of crops. For example, Japan had traditional pickles made with several leafy vegetables and for that reason had created a denomination class for that group of vegetables. The WG-VD noted that some flexibility was appropriate, whilst recalling the

importance of a single denomination in all members of the Union for the effective operation of the UPOV system. For that reason, the WG-VD wished to harmonize variety denomination classes for all members of the Union as far as possible. Therefore, it proposed that the Delegation of Japan be invited to provide its list of denomination classes for consideration by the TC and the relevant TWPs to see how far those denomination classes could be harmonized with the WG-VD proposals. The variety denomination classes relating to groups of crops and species used in Japan are presented in Annex IV to this document.

8. *The TC is invited:*

(a) to consider the proposals by the WG-VD and the Chairman of the TWF concerning variety denomination classes as set out in Annex II;

(b) to invite the TWPs indicated in Annex II to provide comments for the CAJ on those proposals; and

(c) to invite the TWPs to review the classes in Annex IV (Group classes used in Japan) and consider if the proposals in Annex II should be modified in light of those classes.

[Annexes follows]

ANNEX I

LIST OF CLASSES FOR VARIETY DENOMINATION PURPOSES

As amended by the Council at its twenty-fifth ordinary session, on October 25, 1991

[Recommendation 9]

For the purposes of the fourth sentence of Article 13(2) of the Convention, all taxonomic units are considered closely related that belong to the same botanical genus or are contained in the same class in the list in Annex I to these Recommendations.]

Note: Classes which contain subdivisions of a genus may lead to the existence of a complementary class containing the other subdivisions of the genus concerned (example: Class 9 (*Vicia faba*) leads to the existence of another class containing the other species of the genus *Vicia*).*

Class 1: *Avena*, *Hordeum*, *Secale*, *Triticale*, *Triticum*

Class 2: *Panicum*, *Setaria*

Class 3: *Sorghum*, *Zea*

Class 4: *Agrostis*, *Alopecurus*, *Arrhenatherum*, *Bromus*, *Cynosurus*, *Dactylis*, *Festuca*, *Lolium*, *Phalaris*, *Phleum*, *Poa*, *Trisetum*

Class 5: *Brassica oleracea*, *Brassica chinensis*, *Brassica pekinensis*

Class 6: *Brassica napus*, *B. campestris*, *B. rapa*, *B. juncea*, *B. nigra*, *Sinapis*

Class 7: *Lotus*, *Medicago*, *Ornithopus*, *Onobrychis*, *Trifolium*

Class 8: *Lupinus albus* L., *L. angustifolius* L., *L. luteus* L.

Class 9: *Vicia faba* L.

Class 10: *Beta vulgaris* L. var. *alba* DC., *Beta vulgaris* L. var. *altissima*

Class 11: *Beta vulgaris* ssp. *vulgaris* var. *conditiva* Alef. (syn.: *Beta vulgaris* L. var. *rubra* L.), *Beta vulgaris* L. var. *ciela* L., *Beta vulgaris* L. ssp. *vulgaris* var. *vulgaris*

Class 12: *Lactuca*, *Valerianella*, *Cichorium*

Class 13: *Cucumis sativus*

Class 14: *Citrullus*, *Cucumis melo*, *Cucurbita*

* The complementary classes have been added by the Office of the Union for the convenience of the reader and are given the numbers 28 to 35.

Class 15: Anthriscus, Petroselinum

Class 16: Daucus, Pastinaca

Class 17: Anethum, Carum, Foeniculum

Class 18: Bromeliaceae

Class 19: Picea, Abies, Pseudotsuga, Pinus, Larix

Class 20: Calluna, Erica

Class 21: Solanum tuberosum L.

Class 22: Nicotiana rustica L., N. tabacum L.

Class 23: Helianthus tuberosus

Class 24: Helianthus annuus

Class 25: Orchidaceae

Class 26: Epiphyllum, Rhipsalidopsis, Schlumbergera, Zygocactus

Class 27: Proteaceae

COMPLEMENTARY CLASSES

Class 28: Species of Brassica other than
(in Class 5 + 6) Brassica oleracea, Brassica chinensis, Brassica pekinensis + Brassica napus,
B. campestris, B. rapa, B. juncea, B. nigra, Sinapis

Class 29: Species of Lupinus other than
(in Class 8) Lupinus albus L., L. angustifolius L., L. luteus L.

Class 30: Species of Vicia other than
(in Class 9) Vicia faba L.

Class 31: Species of Beta + subdivisions of the species Beta vulgaris other than
(in Class 10 +11) Beta vulgaris L. var. alba DC., Beta vulgaris L. var. altissima + Beta
vulgaris ssp. vulgaris var. conditiva Alef. (syn.: Beta vulgaris L. var. rubra L.), Beta vulgaris
L. var. cicla L., Beta vulgaris L. ssp. vulgaris var. vulgaris

Class 32: Species of Cucumis other than
(in Class 13 + 14) Cucumis sativus + Citrullus, Cucumis melo, Cucurbita

Class 33: Species of Solanum other than
(in Class 21) Solanum tuberosum L.

Class 34: Species of Nicotiana other than
(in Class 22) *Nicotiana rustica* L., *N. tabacum* L.

Class 35: Species of Helianthus other than
(in Class 23 + 24) *Helianthus tuberosus* + *Helianthus annuus*

[Annex II follows]

ANNEX II

CONSOLIDATED WG-VD PROPOSAL CONCERNING
THE REVISION OF THE LIST OF CLASSES

Part I

Plant species, which are in different classes in Part I of the List of Classes, notwithstanding the fact that they may belong to the same genus, are considered not to be closely related and are not liable to mislead or to cause confusion concerning the identity of the variety.

* indicates old class has been modified

“Proposal” indicates that the introduction of a class has not been agreed at present.

	<u>Old class</u>	<u>Botanical names</u>	<u>UPOV codes</u>
Class 1.1	5*	Brassica oleracea	BRASS_OLE
Class 1.2	5*	Brassica rapa (B. campestris): Chinensis group and the Pekinensis group	BRASS_RAP_CHI; BRASS_RAP_PEK
Class 1.3	6*, 28*	Brassica other than classes 1.1 and 1.2	other than classes 1.1 and 1.2
Class 2.1	10	Beta vulgaris L. var. alba DC., Beta vulgaris L. var. altissima	BETAA_VUL_GVA; BETAA_VUL_GVS
Class 2.2	11	Beta vulgaris ssp. vulgaris var. conditiva Alef. (syn.: B. vulgaris L. var. rubra L.), B. vulgaris L. var. cicla L., B. vulgaris L. ssp. vulgaris var. vulgaris	BETAA_VUL_GVC; BETAA_VUL_GVF
Class 2.3	31	Beta other than classes 2.1 and 2.2.	other than classes 2.1 and 2.2
Class 3.1	13	Cucumis sativus	CUCUM_SAT
Class 3.2	14*	Cucumis melo	CUCUM_MEL
Class 3.3	32*	Cucumis other than classes 3.1 and 3.2	other than classes 3.1 and 3.2
Class 4.1	21	Solanum tuberosum L.	SOLAN_TUB
Class 4.2	33	Solanum other than class 4.1	other than class 4.1
Proposal I-A (WG-VD)	possible new	2 classes: for Hibiscus rosa-sinensis L. / other Hibiscus (see ICNCP classes in Annex III) <i>- to be considered further by TC / TWO</i>	HIBIS_ROS / other HIBIS
Proposal I-B (WG-VD)	possible new	2 classes: for Potentilla fruitcosa L. / other Potentilla (see ICNCP classes in Annex III) <i>- to be considered further by TC / TWO</i>	POTEN_FRU / other POTEN
Proposal I-C (WG-VD)	possible new	2 classes: for Mangifera indica L. / other Mangifera (see ICNCP classes in Annex III) <i>- to be considered further by TC / TWF</i>	MANGI_IND / other MANGI

	<u>Old class</u>	<u>Botanical names</u>	<u>UPOV codes</u>
Proposal I-D (WG-VD / TWF Chairman)	possible new	classes within Prunus <i>- to be considered further by TC / TWF</i>	
		Class D.1: Almond, Apricot, Peach, Nectarine (plus hybrids within the class)	PRUNU_DUL; PRUNU_ARM; PRUNU_PER; (PRUNU_AMY); (PRUNU_DUP)
		Class D.2: Sweet Cherry, Sour Cherry (plus hybrids within the class)	PRUNU_AVI; PRUNU_CSS; (PRUNU_GON)
		Class D.3: Japanese Apricot	PRUNU_MUM
		Class D.4: Japanese Plum	PRUNU_SAL
		Class D.5: Ornamental class	PRUNU_CIS; PRUNU_CON; PRUNU_DAW; PRUNU_FRU; PRUNU_GLA; PRUNU_LAU; PRUNU_LUS; PRUNU_MAR; PRUNU_PAD; PRUNU_PRO; PRUNU_SAR; PRUNU_SER; PRUNU_SPI; PRUNU_SRU; PRUNU_SUB; PRUNU_TEN; PRUNU_TRI; PRUNU_YED
		Class D.6: Plum	PRUNU_DOM
		Class D.7: Rootstocks (plus hybrids within the class)	PRUNU_CAN; PRUNU_CSF; PRUNU_MAH; PRUNU_MRN; PRUNU_PAV; PRUNU_PUM; PRUNU_TOM; (PRUNU_CTO); (PRUNU_PCF); (PRUNU_TCS);
		Class D.8: Other	to include: PRUNU_AME; PRUNU_BLI; PRUNU_CSD; PRUNU_DAV; PRUNU_INC; PRUNU_MIR; PRUNU_MUN; PRUNU_PSE;
	Hybrids not attributed	PRUNU_ACD; PRUNU_ADA; PRUNU_ADO; PRUNU_AFR; PRUNU_APS; PRUNU_ASA; PRUNU_CCA; PRUNU_CIN; PRUNU_CMU; PRUNU_CPE; PRUNU_DAR; PRUNU_DBL; PRUNU_DOP; PRUNU_DPE; PRUNU_DPM; PRUNU_FCS; PRUNU_MAV; PRUNU_PDA; PRUNU_PDO; PRUNU_PDP; PRUNU_SAM; PRUNU_SAS; PRUNU_SPE; PRUNU_SSP;	

	<u>Old class</u>	<u>Botanical names</u>	<u>UPOV codes</u>
Proposal I-E (TWF Chairman)	possible new	classes within Ribes <i>- to be considered further by TC / TWF</i>	
		Class E.1: Black currant	RIBES_NIG
		Class E.2: Gooseberry	RIBES_UVA
		Class E.3: Jostaberry	RIBES_CUL; RIBES_NID;
		Class E.4: Red Currant, White Currant	RIBES_RUB; RIBES_NIV
		Class E.5: Other	to include: RIBES_AUR; RIBES_PAU; RIBES_SAN
Proposal I-F (TWF Chairman)	possible new	classes within Rubus <i>- to be considered further by TC / TWF</i>	
		Class F.1: Blackberry	RUBUS_EUB; RUBUS_LAC
		Class F.2: Raspberry	RUBUS_IDA; RUBUS_ILL; RUBUS_OCC
		Class F.3: Other	to include: RUBUS_ALL; RUBUS_ARC; RUBUS_CAE; RUBUS_CHA; RUBUS_HAY; RUBUS_LOG; RUBUS_NEG; RUBUS_STR; RUBUS_TRI
		Hybrids not attributed	RUBUS_INE

Part II

Plant species that belong to any of the genera in the same class in Part II of the List of Classes, are considered to be closely related and/or are liable to mislead or cause confusion concerning the identity of the variety.

	<u>Old class</u>	<u>Botanical names</u>	<u>UPOV codes</u>
Class 201	1*	Secale, Triticale, Triticum	SECAL; TRITL; TRITI
Class 202	2	Panicum, Setaria	PANIC; SETAR
Class 203	4*	Agrostis, Dactylis, Festuca, Festulolium, Lolium, Phalaris, Phleum and Poa	AGROS; DCTLS; FESTU; FESTL; LOLIU; PHALR; PHLEU; POAAA
Class 204	7	Lotus, Medicago, Ornithopus, Onobrychis, Trifolium	LOTUS; MEDIC; ORNTP; ONOBR; TRFOL
Class 205	12*	Cichorium, Lactuca	CICHO; LACTU
Class 206	new	Petunia and Calibrachoa	PETUN; CALIB
Class 207	new	Chrysanthemum and Ajania	CHRYS; AJANI
Class 208	new	(Statice) Goniolimon, Limonium, Psylliostachys	GONIO; LIMON; PSYLL_
Class 209	new	(Waxflower) Chamelaucium, Verticordia	CHMLC; VERTI; VECHM
Proposal II-A (WG-VD)	(see old class 25)	Classes within Orchidaceae: – to be considered further by TC / TWO	
Proposal II-B (WG-VD)	possible new	Amaryllis and Hippeastrum – to be considered further by TC / TWO	AMARY; HIPPE
Proposal II-C (WG-VD)	possible new	Calathea and Maranta – to be considered further by TC / TWO	CALAT; MARAN
Proposal II-D (WG-VD)	possible new	Hylocereae (Britton & Rose) Buxb. (tribe within Cactaceae): Disocactus Lindl. + Epiphyllum Haw. + Hylocereus (A. Berger) Britton & Rose + Pseudorhipsalis Britton & Rose + Selenicereus (A. Berger) Britton & Rose, + Weberocereus Britton & Rose + their hybrids (see ICNCP classes in Annex III) – to be considered further by TC / TWO	[no code]; [no code]; HYLOC; [no code]; SELEN; [no code]
Proposal II-E (WG-VD)	possible new	Jovibarba Opiz + Rosularia (DC.) Stapf + Sempervivum L. (Crassulaceae) (see ICNCP classes in Annex III) – to be considered further by TC / TWO	[no codes]
Proposal II-F (WG-VD)	possible new	Chamaecyparis Spach + Cupressus L. + their hybrids (Cupressaceae) (see ICNCP classes in Annex III) – to be considered further by TC / TWO	CHMCP; CUPRE
Proposal II-G (WG-VD)	possible new	Gladiolus L. and Iris L. (Iridaceae) (see ICNCP classes in Annex III) – to be considered further by TC / TWO	GLADI; IRISS

Deleted classes

The following classes are proposed to be deleted and to follow the general recommendation i.e. “all plant species that belong to a different genus are considered not to be closely related and are not liable to mislead or to cause confusion concerning the identity of the variety”.

<u>Old class</u>	<u>Botanical names</u>
3	Sorghum, Zea
15	Anthriscus, Petroselinum
16	Daucus, Pastinaca
17	Anethum, Carum, Foeniculum
18	Bromeliaceae
19	Picea, Abies, Pseudotsuga, Pinus, Larix
20	Calluna, Erica
25	Orchidaceae
26	Epiphyllum, Rhipsalidopsis, Schlumbergera, Zygocactus
27	Proteaceae
8 & 29	Lupinus albus L., L. angustifolius L., L. luteus L. / other Lupinus
9 & 30	Vicia faba L. / other Vicia
22 & 34	Nicotiana rustica L., N. tabacum L. / other Nicotiana
23, 24 & 35	Helianthus tuberosus / Helianthus annuus / other Helianthus

[Annex III follows]

ANNEX III

INTERNATIONAL CODE OF NOMENCLATURE FOR CULTIVATED
PLANTS (ICNCP) (SEVENTH EDITION):
DENOMINATION CLASSES

The seventh edition of the ICNCP states that:

“ARTICLE 5: THE DENOMINATION CLASS

5.1. A denomination class is the unit within which the use of a cultivar or Group epithet may not be duplicated except when re-use of a cultivar epithet is permitted in accordance with Art. 27 (but see also Art. 19.9).

5.2. A denomination class under the provisions of this *Code* is a single genus or hybrid genus unless a special denomination class has been determined by the I.S.H.S. Commission for Nomenclature and Cultivar Registration. (See Appendix III for the list of current denomination classes that are not a single genus or hybrid genus.)

Ex. 1. *Hibiscus rosa-sinensis* has been designated as a denomination class. Although a cultivar epithet may not be repeated in that species, it may be used once in the remainder of the genus which forms a second denomination class.

Ex. 2. Because plants of the various genera in the tribe *Hylocereeae* within the family *Cactaceae* are known to hybridize freely and because the taxonomic status of those genera is uncertain, the I.S.H.S. Commission for Nomenclature and Cultivar Registration has designated *Hylocereeae* as the denomination class for this group of cacti.

Note 1. Notwithstanding Art. 5.2, statutory plant registration authorities sometimes define their own denomination classes for the purposes of particular national or international legislation. Such classes are usually used by those statutory authorities for the same purposes as denomination classes as defined in this *Code*.

5.3. When a denomination class is divided or when two or more denomination classes are united or the limits of a denomination class are changed in any way, the new denomination class is to be announced and published by the appropriate International Cultivar Registration Authority.

5.4. When a denomination class is a taxonomic unit whose nomenclature is governed by the I.C.B.N. is divided or when two or more such denomination classes are united, the Rules of botanical nomenclature apply (I.C.B.N., Art. 11.3) unless a different denomination class is established under the provisions of Art. 5.2.

Ex. 3. It has been proposed that the genera *Gaultheria* (validly published in 1753) and *Pernettya* (validly published in 1825) be united. If this proposal is accepted, the combined denomination class must be *Gaultheria* which has priority in publication.

Ex. 4. If the segregation of *Lycianthes* and *Lycopersicon* from the genus *Solanum* is accepted, two new denomination classes are automatically created unless it is decided that all three genera be considered part of the same special denomination class under the provisions of Art. 5.2.

5.5. Notwithstanding Art. 5.1, **in orchids only**, if a cultivar name has been established for more than one cultivar within a denomination class but within different taxonomic units, the cultivar epithet must be linked to the name of the species or grex to which it applies.

Ex. 5. The epithet ‘Saint Thomas’ has been applied to a cultivar of both *Lycaste aromatica* and *L. Wyld Spirit*: the names must be written *Lycaste aromatica* ‘Saint Thomas’ and *Lycaste Wyld Spirit* ‘Saint Thomas’ respectively and not simply as *Lycaste* ‘Saint Thomas’.”

Appendix III of the ICNCP states that:

“SPECIAL DENOMINATION CLASSES

The denomination class for the purposes of cultivar and Group registration is the genus (or hybrid genus) to which a cultivar or Group is assigned unless a special denomination class has been determined by the I.S.H.S. Commission for Nomenclature and Cultivar Registration (see Article 5: 5.2 of this *Code*). This list is periodically revised: for the most recent listing, see the ICRA webpages under

<http://www.ishs.org/icra/index.htm>

ANACARDIACEAE

Class: *Mangifera indica* L.

Class: *Mangifera* L., other than *M. indica* L.

CACTACEAE

Class: Tribe *Hylocereeae* (Britton & Rose) Buxb., i.e., *Disocactus* Lindl. + *Epiphyllum* Haw. + *Hylocereus* (A. Berger) Britton & Rose + *Pseudorhipsalis* Britton & Rose + *Selenicereus* (A. Berger) Britton & Rose, + *Weberocereus* Britton & Rose + their hybrids + their synonyms

CRASSULACEAE

Class: *Jovibarba* Opiz + *Rosularia* (DC.) Stapf + *Sempervivum* L. + their synonyms

CUPRESSACEAE

Class: *Chamaecyparis* Spach + *Cupressus* L. + their hybrid + their synonyms

IRIDACEAE

Class: *Gladiolus* L., large-flowering types

Class: *Gladiolus* L., species and early-flowering types

Class: *Iris* L., bulbous types

Class: *Iris* L., non-bulbous types

MALVACEAE

Class: *Hibiscus rosa-sinensis* L.

Class: *Hibiscus* L., other than *H. rosa-sinensis* L.

ORCHIDACEAE

Class: *Anguloa* Ruiz & Pav. + *Ida* A. Ryan & Oakeley + *Lycaste* Lindl. + their hybrids + their synonyms

Class: *Ascocentrum* Schltr. ex J.J. Sm. + *Vanda* Jones ex R. Br. + their hybrid + their synonyms

Class: *Brassavola* R. Br. + *Cattleya* Lindl. + *Laelia* Lindl. + *Schomburgkia* Lindl. + *Sophranitis* Lindl. + their hybrids + their synonyms

Class: *Bulbophyllum* Thouars + *Cirrhopetalum* Lindl. + *Mastigion* Garay *et al.* + *Rhytionanthos* Garay *et al.* + their hybrids + their synonyms

Class: *Catasetum* Rich. ex Kunth + *Clowesia* Lindl. + their hybrid + their synonyms

Class: *Cochlioda* Lindl. + *Cyrtochilum* Kunth + *Miltonia* Lindl. + *Odontoglossum* Kunth. + *Oncidium* Sw. + their hybrids + their synonyms

Class: *Doritis* Lindl. + *Kingiella* Rolfe + *Phalaenopsis* Blume + their hybrids + their synonyms

Class: *Dracula* Luer + *Masdevallia* Ruiz & Pav. + their hybrid + their synonyms

ROSACEAE

Class: *Potentilla fruticosa* L. sensu lato + its synonyms

Class: *Potentilla* L., other than *P. fruticosa* L. sensu lato + its synonyms”

[Annex IV follows]

ANNEX IV

GROUPS USED IN JAPAN

1. Fruit Vegetables

<i>Botanical Name</i>	<i>UPOV Code</i>
Cucumis sativus L. (Class 3.1 in Annex II of this document)	CUCUM_SAT
Cucumis melo L. (Class 3.2 in Annex II of this document)	CUCUM_MEL
Cucurbita L.	CUCUR
Abelmoschus esculentus Moench	ABELM_ESC
Benincasa hispida Cogn.; Lagenaria siceraria Standl.	BENIN_HIS
Capsicum annum L.	CAPSI_ANN
Citrullus lanatus Matsum. et Nakai	CTRLS_LAN
Fragaria L.	FRAGA
Luffa cylindrica Roem.	LUFFA_CYL
Lycopersicon esculentum P. Mill.	LYCOP_ESC
Momordica charantia L.	MOMOR_CHA
Solanum L. except S. tuberosum L. (see Class 4.1 in Annex II of this document)	SOLAN (except_TUB)

2. Leaf Vegetables

<i>Botanical Name</i>	<i>UPOV Code</i>
Asparagus L.	ASPAR
Apium graveolens L.	APIUM_GRA
Allium bakeri Regal; Allium cepa L.; Allium fistulosum L.; Allium sativum L.; Allium schoenoprasum L.; Allium tuberosum Rottler ex Spreng.	ALLIU_CHI; ALLIU_CEP; ALLIU_FIS; ALLIU_SAT; ALLIU_SCH; ALLIU_TUB
Beta vulgaris L. var. vulgaris (see Class 2 in Annex II of this document)	BETAA_VUL
Brassica juncea Czern. et Coss in Czern; Brassica oleracea L. convar. botrytis (L.) Alef. var. botrytis L.; Brassica oleracea L. convar. botrytis (L.) Alef. var. italica Plenck; Brassica oleracea L. convar. capitata (L.) Alef. var. capitata (L.) Alef.; Brassica oleracea L. convar. oleracea var. gemmifera DC. ; Brassica pekinensis (Lour.) Rupr. (see Class 1 in Annex II of this document)	BRASS_JUN; BRASS_OLE_GBB; BRASS_OLE_GBC; BRASS_OLE_GC; BRASS_OLE_GGM; BRASS_RAP_PEK
Chrysanthemum coronarium L.	CHRY_S_COR
Cryptotaenia japonica Hassk.	CRPTT_JAP
Lactuca sativa L.	LACTU_SAT
Perilla L.	PERIL
Petroselinum crispum (Mill) Nym. ex A.W.Hill	PETRO_CRI
Spinacia oleracea L.	SPINA_OLE

3. Root vegetables

<i>Botanical Name</i>	<i>UPOV Code</i>
Arctium lappa L.	ARCTI_LAP
Brassica rapa L. (see Class 1 in Annex II of this document)	BRASS_RAP
Colocasia Schott	COLOC
Daucus carota L.	DAUCU_CAR
Dioscorea L.	DIOSC
Raphanus sativus L.	RAPHA_SAT

4. Mushrooms

All mushrooms	
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