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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

TECHNICAL WORKING PARTY **FOR VEGETABLES**

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VARIETY DENOMINATION CLASSES

Document prepared by the Office of the Union

Document UPOV/INF/12 Rev. sets out the "UPOV Recommendations on Variety However, as explained at the thirty-eighth session of the TWV (see document TWV/38/5), 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 developments since the thirty-eighth session, 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 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:

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 <u>need</u> 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 <u>need</u> 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 considered the possible development of classes within Prunus (see Annex II, Proposal I-D). In addition, Mr. Schulte has proposed that the creation of individual classes within Ribes (see Annex II, Proposal I-E) and within Rubus (see Annex II, Proposal I-F) might also be appropriate. The Chairman of the TWF clarified that the information provided in proposals I-D, I-E and I-F was not intended as proposals for classes, but as a structuring of those genera to assist the TWF in developing proposals for possible classes within the genera concerned.

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.

Conclusions of the Technical Committee (TC)

8. The TC, at its forty-first session, held in Geneva from April 4 to 6, 2005, agreed that the following matters should be considered by the TWPs as indicated below and their comments reported to the CAJ for consideration at its fifty-second session:

TWP	to consider		
TWF	Annex II: Part I: Proposals I-C; I-D; I-E; I-F		
TWO	Annex II: Part I: Proposals I-A; I-B;		
	Annex II: Part II: Proposals II-A; II-B; II-C; II-D; II-E; II-F; II-G		

- 9. The TC agreed that the TWA should consider the classes in Annex II. The TC requested that the TWF and the TWV review the classes in document Annex IV (Group classes used in Japan) and consider if the proposals in Annex II should be modified in light of those classes. It agreed that the comments of the TWPs should be reported to the CAJ for consideration at its fifty-second session.
- 10. In response to concerns expressed by the Delegation of South Africa, the TC invited the TWO to review the proposed deletion of the class for Proteaceae.
 - 11. The TWV is invited to review the classes in document Annex IV (Group classes used in Japan) and consider if the proposals in Annex II should be modified in light of those classes.

[Annexes follow]

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

<u>Class 4</u>: Agrostis, Alopecurus, Arrhenatherum, Bromus, Cynosurus, Dactylis, Festuca, Lolium, Phalaris, Phleum, Poa, Trisetum

<u>Class 5</u>: 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

<u>Class 11</u>: 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 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

<u>Class 26</u>: Epiphyllum, Rhipsalidopsis, Schlumbergera, Zygocactus

<u>Class 27</u>: 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.

<u>Class 31</u>: Species of <u>Beta</u> + subdivisions of the species <u>Beta vulgaris</u> 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.

 $\begin{array}{l} \underline{Class~34} \hbox{:}~ Species~of~\underline{Nicotiana}~other~than\\ \hbox{(in Class~22)}~Nicotiana~rustica~L.,~N.~tabacum~L. \end{array}$

<u>Class 35</u>: Species of <u>Helianthus</u> 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.

	Old class Botanical names		<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	Class 2.2 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	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	ss 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) - to be considered further by TC / TWO		HIBIS_ROS / other HIBIS		
Proposal I-B (WG-VD)	1		POTEN_FRU / other POTEN	
Proposal I-C (WG-VD)			MANGI_IND / other MANGI	

^{*} indicates old class has been modified

[&]quot;Proposal" indicates that the introduction of a class has not been agreed at present.

	Old class	Botanical names	<u>UPOV codes</u>	
Proposal I-D (WG-VD /	possible new	classes within Prunus - to be considered further by TC / TWF		
TWF Chairman)		Group D.1: Almond, Apricot, Peach, Nectarine (plus hybrids within the Group)	PRUNU_DUL; PRUNU_ARM; PRUNU_PER; (PRUNU_AMY); (PRUNU_DUP)	
		Group D.2: Sweet Cherry, Sour Cherry (plus hybrids within the Group)	PRUNU_AVI; PRUNU_CSS; (PRUNU_GON)	
		Group D.3: Japanese Apricot	PRUNU_MUM	
		Group D.4: Japanese Plum	PRUNU_SAL	
		Group D.5: Ornamental Group	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	
		Group D.6: Plum	PRUNU_DOM	
		Group D.7: Rootstocks (plus hybrids within the Group)	PRUNU_CAN; PRUNU_CSF; PRUNU_MAH; PRUNU_MRN; PRUNU_PAV; PRUNU_PUM; PRUNU_TOM; (PRUNU_CTO); (PRUNU_PCF); (PRUNU_TCS);	
		Group 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;	

	Old class	Botanical names	<u>UPOV codes</u>
Proposal I-E (TWF	possible new	classes within Ribes - to be considered further by TC / TWF	
Chairman))	Group E.1: Black currant	RIBES_NIG
		Group E.2: Gooseberry	RIBES_UVA
		Group E.3: Jostaberry	RIBES_CUL; RIBES_NID;
		Group E.4: Red Currant, White Currant	RIBES_RUB; RIBES_NIV
		Group E.5: Other	to include: RIBES_AUR; RIBES_PAU; RIBES_SAN
Proposal I-F	possible new	classes within Rubus - to be considered further by TC	/ TWF
(TWF Chairman)	nan)	Group F.1: Blackberry	RUBUS_EUB; RUBUS_LAC
		Group F.2: Raspberry	RUBUS_IDA; RUBUS_ILL; RUBUS_OCC
		Group 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.

	Old class	Botanical names	<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)	•		
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) Hylocereeae (Britton & Rose) Buxb. (tribe within Cactaceae): Disocactus Lindl. + Epiphyllum Haw. + Hylocereus (A. Berger) 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)			[no codes]
Proposal II-F (WG-VD)			CHMCP; CUPRE
Proposal II-G (WG-VD)			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".

Old class	Botanical names		
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	& 29 Lupinus albus L., L. angustifolius L., L. luteus L. / other Lupinus		
9 & 30	9 & 30 Vicia faba L. / other Vicia		
22 & 34	Nicotiana rustica L., N. tabacum L. / other Nicotiana		
23, 24 & 35			

[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. + Sophronitis 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

Botanical Name	UPOV Code
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 annuum 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. <u>Leaf Vegetables</u>

Botanical Name	UPOV Code
Asparagus L.	ASPAR
Apium graveolens L.	APIUM_GRA
Allium bakeri Regal; Allium cepa L.; Allium fistulosum 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.	CHRYS_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

Botanical Name	UPOV Code
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. <u>Mushrooms</u>

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Al	l mushrooms	

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