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

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Replacing botanical nomenclature by variety groups

Document prepared by experts from the European Union and the Netherlands

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The annexes to this document contain a document prepared by the experts from the Netherlands on “Replacing Botanical Nomenclature by Variety Groups” (Annex I); and a copy of a presentation prepared by the experts from the European Union on “Replacing botanical nomenclature by variety groups, some practical consequences” (Annex II), to be presented at the fifty-seventh session of the TWV.

[Annexes follow]

# Replacing botanical nomenclature by variety groups

The purpose of this document is to propose that variety groups should be used to replace complex infraspecific botanical names for *Beta vulgaris*, *Brassica oleracea* and *Cichorium intybus*.

The TWV, at its fifty-sixth session, received a presentation concerning the ‘Use of Variety Groups in the UPOV system for *Brassica oleracea* and other vegetable crops’ (document TWV/56/13). It was stated that group classification is flexible in time and follows new trends in breeding (new groups can be proposed and accepted), and recommended that groups in the UPOV system would be useful for several vegetables.

The TWV agreed to invite the Netherlands to further develop the proposal to create variety groups for *B. vulgaris, B. oleracea* and *C. intybus*, to be presented at the fifty-seventh session of the TWV.

## Cichorium intybus

### Background

The TWV at its 56th session recalled that, at its fifty-fourth session, it had noted that approximately 1200 varieties with UPOV code CICHO\_INT in the PLUTO database could not be allocated with certainty to any variety group. The TWV agreed to invite contributors to the PLUTO database to further precise whether the varieties belonged to the groups “forage-”, “industrial-”, “leaf-” or “witloof-chicory”.

The Netherlands made a presentation (TWV/56/15) on the UPOV codes for Cichorium intybus.

It was noted that in the PLUTO database, when selecting for CICHO\_INT there were 1569 entries, selected one level further down for CICHO\_INT\_FOL 184 entries, for CICHO\_INT\_SAT 362 entries and for CICHO\_INT 1023 entries.

Studies of these entries led to conclusions that

* many entries are not allocated or are allocated wrongly to the subspecies and GENIE code;
* Witloof does not have a unique GENIE code and ends up in all 3 Cichorium intybus codes;
* Forage varieties do not have a GENIE code and thus are not allocated to one

These conclusions were followed by proposals

* To create the following variety groups in GENIE with GENIE codes for Cichorium intybus:
  + Witloof Chicory Group
  + Leaf Chicory Group
  + Industrial (Root) Chicory Group

And to add • Forage Chicory Group

The English, French, German and Spanish common names in GENIE could also be part of the confusion in allocating the entries to the applicable subspecies, and the proposal therefore includes a revision of those common names.

Proposal for variety groups in *Cichorium intybus* and revision of the English, French, German and Spanish common names in GENIE

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| UPOV code | BOTANICAL NAMES | GRIN | **Proposal Group name** | English | French | German | Spanish |
| CICHO\_INT | Cichorium intybus L. | Cichorium intybus L. | Cichorium intybus L. (Witloof Chicory Group) | ~~Chicory~~;Witloof chicory | Chicorée Endive | ~~Salatzichorie;~~ ~~Wurzelzichorie;~~ Chicorée | ~~Achicoria;~~ Endivia |
| CICHO\_INT\_FOL | Cichorium intybus L. var. foliosum Hegi | Cichorium intybus L. | Cichorium intybus L. (Leaf Chicory Group) | Salad Chicory; Leaf chicory | Chicorée amère | Salatzichorie | Achicoria amarga |
| CICHO\_INT\_SAT | Cichorium intybus L. var. sativum DC. | Cichorium intybus L. | Cichorium intybus L. (Industrial Chicory Group) | Industrial Chicory; Large-rooted Chicory | Chicorée à café | Wurzelzichorie | Achicoria de café |
| CICHO\_INT\_ | Cichorium intybus L. | Cichorium intybus L. | Cichorium intybus L. (Forage Chicory Group) | Forage Chicory | Chicoree Fourrage | Futterzichorie | Achicoria forraje |

Proposal to invite contributors to the PLUTO database to further precise whether the varieties belong to the groups.

## Brassica oleracea

### Background

The TWV at its 55th session considered the proposal from the Netherlands to replace 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. ~~vulgaris~~* oleracea L. var. *sabellica* (synonym of *B. ~~vulgaris~~* oleracea L. convar. *acephala* (DC.) Alef. var. *sabellica* L.). At its 56th session it received a presentation on the ‘Use of Variety Groups in the UPOV system for Brassica oleracea and other vegetable crops’ The proposal for variety groups for *Brassica oleracea* is based on the content of this presentation.

Proposal for variety groups in *Brassica oleracea*

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| UPOV code | BOTANICAL NAMES | GRIN | **Proposal Group name** |
| BRASS\_OLE\_ALB | Brassica oleracea L. var. alboglabra (L. H. Bailey) Musil  Brassica alboglabra L. H. Bailey; Brassica oleracea var. albiflora auct. | Brassica oleracea L. var. alboglabra (L. H. Bailey) Musil (Brassica oleracea Chinese Kale or Kailaan Group) | Brassica oleracea L. (Chinese Kale or Kailaan Group) |
| BRASS\_OLE\_COS | Brassica oleracea L. var. costata DC.  Brassica capitata subsp. costata (DC.) Lizg.; Brassica oleracea convar. acephala var. luteola Alef.; Brassica oleracea subsp. oleracea convar. costata (DC.) Gladis; Brassica oleracea var. tronchuda L.H. Bailey | Brassica oleracea L. var. costata DC. (Brassica oleracea Portuguese Kale Group) | Brassica oleracea L. (Tronchuda Group) |
| BRASS\_OLE\_COS | Brassica oleracea L. convar. acephala (DC.) Alef. | Brassica oleracea L. var. sabellica L. (Brassica oleracea Kale Group) | Brassica oleracea L. (Kale Group) |
| BRASS\_OLE\_GAM | Brassica oleracea L. convar. acephala (DC.) Alef. var. medullosa Thell.  Brassica oleracea L. var. medullosa Thell. | Brassica oleracea L. var. medullosa Thell. (Brassica oleracea Marrowstem Kale Group) | Brassica oleracea L. (Marrowstem Kale Group) |
| BRASS\_OLE\_GAR | Brassica oleracea L. var. ramosa DC. | Brassica oleracea L. var. ramosa DC. (Brassica oleracea Thousand Head Kale Group) | Brassica oleracea L. (Thousand Head Kale Group) |
| BRASS\_OLE\_GAS | Brassica oleracea L. convar. acephala (DC.) Alef. var. sabellica L.  Brassica oleracea L. var. sabellica L. | Brassica oleracea L. var. sabellica L. (Brassica oleracea Acephala Group) | Brassica oleracea L. (Curly kale Group) |
| BRASS\_OLE\_GBB | Brassica oleracea L. convar. acephala (DC.) Alef. var. viridis L.  Brassica oleracea L. var. viridis L. | Brassica oleracea L. var. viridis L. (Brassica oleracea Collard Group) | Brassica oleracea L. (Collard Group) |
| BRASS\_OLE\_GBC | Brassica oleracea L. var. italica Plenck  Brassica oleracea L. var. botrytis L. subvar. cymosa Duchesne; Brassica oleracea L. var. cymosa (Duchesne) DC.; Brassica oleracea subvar. cymosa Duchesne | Brassica oleracea L. var. italica Plenck (Brassica oleracea Broccoli Group) | Brassica oleracea L. (Broccoli Group) |
| BRASS\_OLE\_GC | Brassica oleracea L. convar. capitata (L.) Alef.  Brassica oleracea L. convar. capitata (L.) Alef. var. alba DC. x Brassica oleracea L. convar. capitata (L.) Alef. var. rubra (L.) Thell.; Brassica oleracea L. convar. capitata (L.) Alef. var. capitata (L.) Alef.; Brassica oleracea L. var. capitata L. | Brassica oleracea L. var. capitata L. (Brassica oleracea Red Cabbage and White/Green Cabbage Groups) | Brassica oleracea L. (Cabbage Group) |
| 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. | Brassica oleracea L. var. capitata L. (Brassica oleracea White Cabbage Group) | Brassica oleracea L. (White Cabbage Group) |
| 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. | Brassica oleracea L. var. capitata L. (Brassica oleracea Red Cabbage Group) | Brassica oleracea L. (Red Cabbage Group) |
| BRASS\_OLE\_GCS | Brassica oleracea L. convar. capitata (L.) Alef. var. sabauda L.  Brassica oleracea L. convar. capitata (L.) Alef. var. bullata DC. | Brassica oleracea L. var. sabauda L. (Brassica oleracea Savoy Cabbage Group) | Brassica oleracea L. (Savoy Cabbage Group) |
| BRASS\_OLE\_GGM | Brassica oleracea L. var. gemmifera Zenker  Brassica oleracea L. convar. oleracea var. gemmifera DC.; Brassica subspontanea lizg | Brassica oleracea L. var. gemmifera DC. (Brassica oleracea Brussels Sprouts Group) | Brassica oleracea L. (Brussels Sprouts Group) |
| BRASS\_OLE\_GGO | Brassica oleracea L. var. gongylodes L.  Brassica caulorapa (DC.) Pasq.; Brassica oleracea L. convar. acephala (DC.) Alef. var. gongylodes L.; Brassica oleracea var. caulorapa DC. | Brassica oleracea L. var. gongylodes L. (Brassica oleracea Kohlrabi Group) | Brassica oleracea L. (Kohlrabi Group) |
| BRASS\_OLE\_PAL | Brassica oleracea L. var. palmifolia DC. | Brassica oleracea L. var. palmifolia DC. (Brassica oleracea Jersey Kale or Palmtree Kale Group) | Brassica oleracea L. (Palm Kale Group) |

In this proposal hybrids and crossings between subspecies are not included. They could be considered to belong to the group to which they morphologically resemble most.

## Beta vulgaris

### Background

The TWV at its 54th session recalled that, at its fifty-second session, it had agreed that the information on type of varieties was useful for grouping varieties and organizing growing trials and should remain in the database (see document TWV/52/20 “Report”, paragraph 94). The TWV agreed that the same approach should be used for UPOV codes of the different types of beet varieties.

The TWV at its 55th session agreed to append information on denomination classes to 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”).

Proposal for variety groups in *Beta vulgaris*

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| UPOV code |  |  |  |
| BETAA\_VUL\_GVA | 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 | Beta vulgaris L (Fodder Beet Group) | Beta vulgaris L. (Fodder Beet Group) |
| BETAA\_VUL\_GVC | Beta vulgaris L. ssp. vulgaris var. conditiva Alef.  Beta vulgaris L. ssp. vulgaris var. esculenta L.; Beta vulgaris L. ssp. vulgaris var. hortensis | Beta vulgaris L (Garden Beet Group) | Beta vulgaris L (Garden Beet Group) |
| BETAA\_VUL\_GVF | Beta vulgaris L. ssp. vulgaris var. flavescens DC. f. crispa  Beta vulgaris L. ssp. vulgaris var. cicla (L.) Ulrich; Beta vulgaris L. ssp. vulgaris var. vulgaris | Beta vulgaris L (Leaf Beet Group) | Beta vulgaris L (Leaf Beet Group) |
| BETAA\_VUL\_GVS | Beta vulgaris L. ssp. vulgaris var. saccharifera Alef.  Beta vulgaris L. ssp. vulgaris var. altissima Doell | Beta vulgaris L (Sugar Beet Group) | Beta vulgaris L (Sugar Beet Group) |

Proposal to change the present (iii) Beetroot group for the purpose of denomination classes, to Garden beet group, as in the proposal for the group name: *Beta vulgaris* L. (Garden Beet Group) and to change the notation, adding brackets, for the other groups accordingly.

[Annex II follows]

*Please see the pdf version*

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