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

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| Technical Working Party for Vegetables  Fifty-Sixth Session Virtual meeting, April 18 to 22, 2022 | TWV/56/19  Original: English  Date: March 11, 2022 |

Partial revision of the Test Guidelines for Kohlrabi

Document prepared by an expert from the Netherlands

Disclaimer: this document does not represent UPOV policies or guidance

The purpose of this document is to present a proposal for a partial revision of the Test Guidelines for Kohlrabi (document TG/65/4 Rev.).

The Technical Working Party for Vegetables (TWV), at its fifty-fifth session organized by electronic means, from May 3 to May 7, 2021, agreed that the Test Guidelines for Kohlrabi (*Brassica oleracea* L. convar. *acephala* (DC.) Alef. var. *gongylodes* L.; *Brassica oleracea* L. *Gongylodes* Group) (document TG/65/4 Rev.) be partially revised for deleting Characteristic 11 “Leaf blade: divisions to midrib (on lower part of leaf)” and revising Characteristic 20 “Kohlrabi: color of skin” (see document TWV/55/16 “Report”, Annex III).

The following changes are proposed:

1. Deletion of Characteristic 11 “Leaf blade: divisions to midrib (on lower part of leaf)” from Chapter VII. “Table of Characteristics”;
2. Revision of explanation Ad. 11-13 in Chapter VIII. “Explanations on the Table of Characteristics” by removing the indication of Characteristic 11 from the illustration;
3. Revision of Characteristic 20 “Kohlrabi: color of skin” in Chapter VII. “Table of Characteristics”
4. Revision of Chapter X “Technical Questionnaire”, Section 5 “Characteristics of the variety to be given”:
   1. Deletion of Characteristic 11 “Leaf blade: divisions to midrib (on lower part of leaf)”
   2. Revision of Characteristic 20 “Kohlrabi: color of skin”

The proposed changes are presented below in highlight and underline (insertion) and ~~strikethrough~~ (deletion).

## Proposal to delete Characteristic 11 “Leaf blade: divisions to midrib (on lower part of leaf)” from Chapter VII. “Table of Characteristics”

*Current wording*

|  | English | français | deutsch | español | Example Varieties Exemples Beispielssorten Variedades ejemplo | Note/ Nota |
| --- | --- | --- | --- | --- | --- | --- |
| 10.  (+) | Leaf blade: shape of apex | Limbe: forme de la partie apicale | Blattspreite: Form des oberen Teils | Limbo: forma del ápice |  |  |
|  | acute | aigüe | schmal spitz | aguda |  | 1 |
|  | pointed | pointue | spitz | puntiaguda |  | 2 |
|  | obtuse | obtuse | stumpf | obtusa | Avanti, Expreß Forcer | 3 |
|  | rounded | arrondie | abgerundet | redondeada | Noriko, Spree | 4 |
|  | broadly rounded | arrondie large | breit abgerundet | redondeada ancha | Gigant, Superschmelz | 5 |
| 11. (\*) (+) | Leaf blade: divisions to midrib (on lower part of leaf) | Limbe: incisions jusqu’à la nervure principale (partie inférieure de la feuille) | Blattspreite: Einschnitte bis zur Mittelrippe (am unteren Teil des Blattes) | Limbo: divisiones de la nervadura principal (en la parte inferior de la hoja) |  |  |
|  | absent or very few | absentes ou très peu | fehlend oder  sehr wenige | ausentes o  muy escasas |  | 1 |
|  | few | peu | wenige | escasas | Azur-Star | 3 |
|  | medium | moyennes | mittel | medias | Noriko | 5 |
|  | many | nombreuses | viele | numerosas | Avanti, Korist | 7 |
|  | very many | très nombreuses | sehr viele | muy numerosas | Lanro | 9 |
| 12.   (+) | Leaf blade: number of margin incisions (on upper part of leaf) | Limbe: nombre d’incisions du bord (partie supérieure de la feuille) | Blattspreite: Anzahl Randeinschnitte  (am oberen Teil des Blattes) | Limbo: número de incisiones del borde (en la parte superior de la hoja) |  |  |
|  | absent or very few | nul ou très petit | fehlend oder  sehr gering | ausentes o  muy escasas |  | 1 |
|  | few | petit | gering | escasas | Azur-Star | 3 |
|  | medium | moyen | mittel | medias | Expreß Forcer | 5 |
|  | many | grand | groß | numerosas |  | 7 |
|  | very many | très grand | sehr groß | muy numerosas |  | 9 |

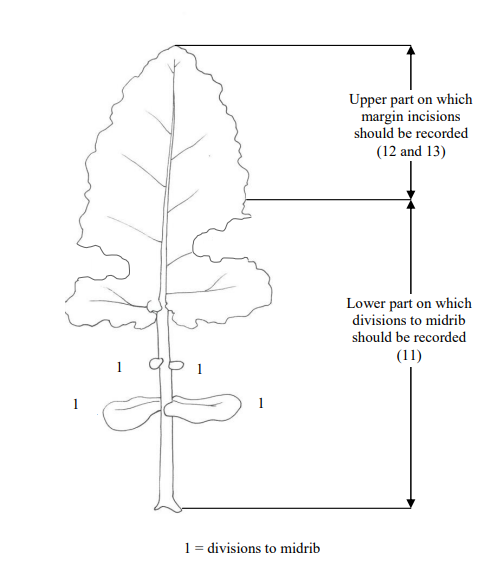
*Proposed new wording*

|  | English | français | deutsch | español | Example Varieties Exemples Beispielssorten Variedades ejemplo | Note/ Nota |
| --- | --- | --- | --- | --- | --- | --- |
| 10.  (+) | Leaf blade: shape of apex | Limbe: forme de la partie apicale | Blattspreite: Form des oberen Teils | Limbo: forma del ápice |  |  |
|  | acute | aigüe | schmal spitz | aguda |  | 1 |
|  | pointed | pointue | spitz | puntiaguda |  | 2 |
|  | obtuse | obtuse | stumpf | obtusa | Avanti, Expreß Forcer | 3 |
|  | rounded | arrondie | abgerundet | redondeada | Noriko, Spree | 4 |
|  | broadly rounded | arrondie large | breit abgerundet | redondeada ancha | Gigant, Superschmelz | 5 |
| ~~11. (\*) (+)~~ | ~~Leaf blade: divisions to midrib (on lower part of leaf)~~ | ~~Limbe: incisions jusqu’à la nervure principale (partie inférieure de la feuille)~~ | ~~Blattspreite: Einschnitte bis zur Mittelrippe (am unteren Teil des Blattes)~~ | ~~Limbo: divisiones de la nervadura principal (en la parte inferior de la hoja)~~ |  |  |
|  | ~~absent or very few~~ | ~~absentes ou très peu~~ | ~~fehlend oder  sehr wenige~~ | ~~ausentes o  muy escasas~~ |  | ~~1~~ |
|  | ~~few~~ | ~~peu~~ | ~~wenige~~ | ~~escasas~~ | ~~Azur-Star~~ | ~~3~~ |
|  | ~~medium~~ | ~~moyennes~~ | ~~mittel~~ | ~~medias~~ | ~~Noriko~~ | ~~5~~ |
|  | ~~many~~ | ~~nombreuses~~ | ~~viele~~ | ~~numerosas~~ | ~~Avanti, Korist~~ | ~~7~~ |
|  | ~~very many~~ | ~~très nombreuses~~ | ~~sehr viele~~ | ~~muy numerosas~~ | ~~Lanro~~ | ~~9~~ |
| ~~12.~~ 11.   (+) | Leaf blade: number of margin incisions (on upper part of leaf) | Limbe: nombre d’incisions du bord (partie supérieure de la feuille) | Blattspreite: Anzahl Randeinschnitte  (am oberen Teil des Blattes) | Limbo: número de incisiones del borde (en la parte superior de la hoja) |  |  |
|  | absent or very few | nul ou très petit | fehlend oder  sehr gering | ausentes o  muy escasas |  | 1 |
|  | few | petit | gering | escasas | Azur-Star | 3 |
|  | medium | moyen | mittel | medias | Expreß Forcer | 5 |
|  | many | grand | groß | numerosas |  | 7 |
|  | very many | très grand | sehr groß | muy numerosas |  | 9 |

## Proposal to revise explanation Ad. 11-13 in Chapter VIII. “Explanations on the Table of Characteristics” removing the indication of Characteristic 11 from the illustration

*Current wording*

Ad. 11-13: Leaf blade: divisions to midrib (11), margin incisions (12 and 13)

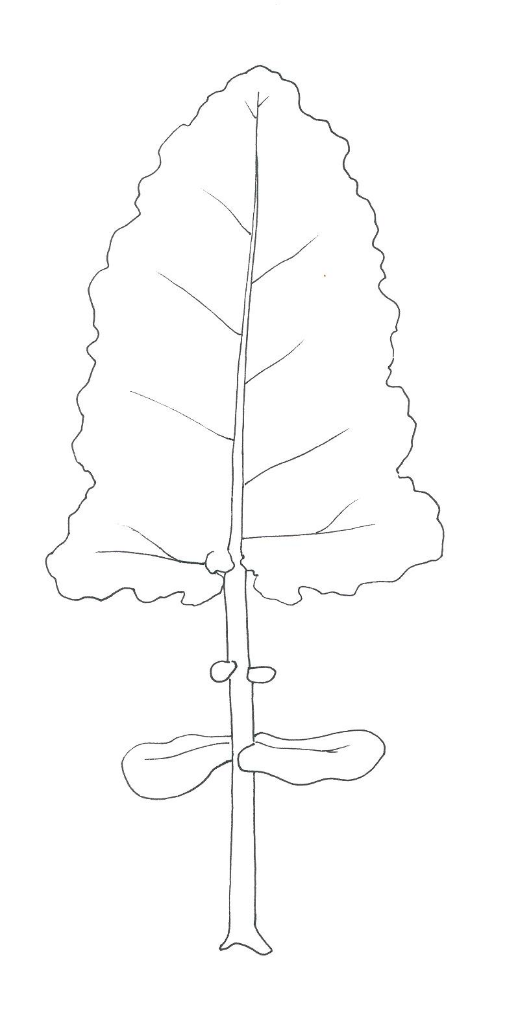


*Proposed new wording*

Ad. ~~11~~-~~13~~ 11-12: Leaf blade: ~~divisions to midrib (11)~~, margin incisions ~~(12 and 13~~) (11 and 12)

lobes: parts of the leaf blade are considered as lobes if the upper notch has at least half the length of the lobe itself.

Lappen: Teile der Blattspreite werden als Lappen angesehen, wenn der obere Einschnitt mindestens die Hälfte der Länge des Lappens ausmacht.



2

~~1~~

1

~~1~~

1

~~Lower part on which  
divisions to midrib  
should be recorded~~

~~(11)~~

Upper part on which  
margin incisions  
should be recorded  
(~~12~~ 11 and ~~13~~ 12)

~~1~~

~~1~~

~~1 = divisions to midrib~~

## Proposal to revise Characteristic 20 “Kohlrabi: color of skin” in Chapter VII. “Table of Characteristics”

*Current wording*

|  | English | français | deutsch | español | Example Varieties Exemples Beispielssorten Variedades ejemplo | Note/ Nota |
| --- | --- | --- | --- | --- | --- | --- |
| 20. (\*) | Kohlrabi: color of skin | Rave: couleur de l’épiderme | Kohlrabi: Farbe der Haut | Colinabo: color de la epidermis |  |  |
|  | white green | vert blanc | weißgrün | verde blanquecino | Expreß Forcer, Lanro | 1 |
|  | green | vert | grün | verde | Erko, Noriko | 2 |
|  | pale violet | violet clair | hellviolett | violeta pálido |  | 3 |
|  | dark violet | violet foncé | dunkelviolett | violeta oscuro | Azur-Star | 4 |

*Proposed new wording*

|  | English | français | deutsch | español | Example Varieties Exemples Beispielssorten Variedades ejemplo | Note/ Nota |
| --- | --- | --- | --- | --- | --- | --- |
| 20. (\*) | Kohlrabi: color of skin | Rave: couleur de l’épiderme | Kohlrabi: Farbe der Haut | Colinabo: color de la epidermis |  |  |
|  | white | blanc | weiß | blanco | Beas | 1 |
|  | white green | vert blanc | weißgrün | verde blanquecino | Bode, Expreß Forcer, Lanro, Timpano | ~~1~~ 2 |
|  | green | vert | grün | verde | Avaya, Erko, Gaston, Noriko | ~~2~~ 3 |
|  | ~~pale violet~~ | ~~violet clair~~ | ~~hellviolett~~ | ~~violeta pálido~~ |  | ~~3~~ |
|  | ~~dark~~ violet | violet ~~foncé~~ | ~~dunkel~~violett | violeta ~~oscuro~~ | Azur-Star, Oder, Purpuran | 4 |

## Proposal to revise Chapter X “Technical Questionnaire”, Section 5 “Characteristics of the variety to be given”

*Current wording*

|  |  |  |  |
| --- | --- | --- | --- |
| 5. Characteristics of the variety to be given (the number in brackets refers to the corresponding characteristics in the Test Guidelines; please mark the state of expression which best corresponds) | | | |
|  | Characteristics | Example Varieties | Note |
| 5.1 (1) | Seedling: anthocyanin coloration of cotyledons |  |  |
|  | absent | Expreß Forcer | 1[ ] |
|  | present | Azur-Star | 9[ ] |
| 5.2 (11) | Leaf blade: divisions to midrib (on lower part of leaf) |  |  |
|  | absent or very few |  | 1[ ] |
|  | few | Azur-Star | 3[ ] |
|  | medium | Noriko | 5[ ] |
|  | many | Avanti, Korist | 7[ ] |
|  | very many | Lanro | 9[ ] |
| 5.3 (15) | Leaf blade: blistering |  |  |
|  | weak | Avanti | 3[ ] |
|  | medium | Spree | 5[ ] |
|  | strong | Lanro | 7[ ] |
| 5.4 (18) | Leaf blade: intensity of green color |  |  |
|  | very light |  | 1[ ] |
|  | light |  | 3[ ] |
|  | medium | Noriko, Quickstar | 5[ ] |
|  | dark | Avanti, Lanro | 7[ ] |
|  | very dark | Pader | 9[ ] |
| 5.5 (20) | Kohlrabi: color of skin |  |  |
|  | white green | Expreß Forcer, Lanro | 1[ ] |
|  | green | Erko, Noriko | 2[ ] |
|  | pale violet |  | 3[ ] |
|  | dark violet | Azur-Star | 4[ ] |
|  | […] |  |  |

*Proposed new wording*

|  |  |  |  |
| --- | --- | --- | --- |
| 5. Characteristics of the variety to be given (the number in brackets refers to the corresponding characteristics in the Test Guidelines; please mark the state of expression which best corresponds) | | | |
|  | Characteristics | Example Varieties | Note |
| 5.1 (1) | Seedling: anthocyanin coloration of cotyledons |  |  |
|  | absent | Expreß Forcer | 1[ ] |
|  | present | Azur-Star | 9[ ] |
| ~~5.2 (11)~~ | ~~Leaf blade: divisions to midrib (on lower part of leaf)~~ |  |  |
|  | ~~absent or very few~~ |  | ~~1[ ]~~ |
|  | ~~few~~ | ~~Azur-Star~~ | ~~3[ ]~~ |
|  | ~~medium~~ | ~~Noriko~~ | ~~5[ ]~~ |
|  | ~~many~~ | ~~Avanti, Korist~~ | ~~7[ ]~~ |
|  | ~~very many~~ | ~~Lanro~~ | ~~9[ ]~~ |
| 5.~~3~~ 2 (15) | Leaf blade: blistering |  |  |
|  | weak | Avanti | 3[ ] |
|  | medium | Spree | 5[ ] |
|  | strong | Lanro | 7[ ] |
| 5.~~4~~ 3 (18) | Leaf blade: intensity of green color |  |  |
|  | very light |  | 1[ ] |
|  | light |  | 3[ ] |
|  | medium | Noriko, Quickstar | 5[ ] |
|  | dark | Avanti, Lanro | 7[ ] |
|  | very dark | Pader | 9[ ] |
| 5.~~5~~ 4 (20) | Kohlrabi: color of skin |  |  |
|  | white | Beas | 1[ ] |
|  | white green | Bode, Expreß Forcer, Lanro, Timpano | ~~1~~ 2[ ] |
|  | green | Avaya, Erko, Gaston, Noriko | ~~2~~ 3[ ] |
|  | ~~pale violet~~ |  | ~~3[ ]~~ |
|  | ~~dark~~ violet | Azur-Star, Oder, Purpuran | 4[ ] |
|  | […] |  |  |

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