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|  | **DIANTHUS**  UPOV Code: DIANT  *Dianthus* L. | [[1]](#footnote-1)\* |

**GUIDELINES**

**FOR THE CONDUCT OF TESTS**

**FOR DISTINCTNESS, UNIFORMITY AND STABILITY**

prepared by experts from the Netherlands

*to be considered by the*

Technical Committee at its fifty-first session,  
to be held in Geneva from March 23 to 25, 2015

Disclaimer: this document does not represent UPOV policies or guidance

Alternative Names:\*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Botanical name* | *English* | *French* | *German* | *Spanish* |
| *Dianthus* L. | Carnation, Clove Pink, Pink, Sweet William | Oeillet | Nelke | Clavel |

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| --- |
| The purpose of these guidelines (“Test Guidelines”) is to elaborate the principles contained in the General Introduction (document TG/1/3), and its associated TGP documents, into detailed practical guidance for the harmonized examination of distinctness, uniformity and stability (DUS) and, in particular, to identify appropriate characteristics for the examination of DUS and production of harmonized variety descriptions. |

**ASSOCIATED DOCUMENTS**

These Test Guidelines should be read in conjunction with the General Introduction and its associated TGP documents.

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# Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Dianthus* L..

# Material Required

2.1 The competent authorities decide on the quantity and quality of the plant material required for testing the variety and when and where it is to be delivered. Applicants submitting material from a State other than that in which the testing takes place must ensure that all customs formalities and phytosanitary requirements are complied with.

2.2 The material is to be supplied in the form of rooted cuttings.

2.3 The minimum quantity of plant material, to be supplied by the applicant, should be:

20 rooted cuttings.

2.4 The plant material supplied should be visibly healthy, not lacking in vigor, nor affected by any important pest or disease.

2.5 The plant material should not have undergone any treatment which would affect the expression of the characteristics of the variety, unless the competent authorities allow or request such treatment. If it has been treated, full details of the treatment must be given.

# Method of Examination

## 3.1 Number of Growing Cycles

The minimum duration of tests should normally be a single growing cycle.

## 3.2 Testing Place

Tests are normally conducted at one place. In the case of tests conducted at more than one place, guidance is provided in TGP/9 “Examining Distinctness”.

## 3.3 Conditions for Conducting the Examination

3.3.1 The tests should be carried out under conditions ensuring satisfactory growth for the expression of the relevant characteristics of the variety and for the conduct of the examination.

3.3.2 In particular, it may be necessary for separate growing trials to be established for cut flower types, garden types and pot types in order to ensure the satisfactory growth of varieties of those types (see Chapter 8.3). These Test Guidelines provide information to cover such a situation.

3.3.3 Because daylight varies, color determinations made against a color chart should be made either in a suitable cabinet providing artificial daylight or in the middle of the day in a room without direct sunlight. The spectral distribution of the illuminant for artificial daylight should conform with the CIE Standard of Preferred Daylight D 6500 and should fall within the tolerances set out in the British Standard 950, Part I. These determinations should be made with the plant part placed against a white background. The color chart and version used should be specified in the variety description.

## 3.4 Test Design

3.4.1 Each test should be designed to result in a total of at least 20 plants.

3.4.2 The design of the tests should be such that plants or parts of plants may be removed for measurement or counting without prejudice to the observations which must be made up to the end of the growing cycle.

## 3.5 Additional Tests

Additional tests, for examining relevant characteristics, may be established.

# Assessment of Distinctness, Uniformity and Stability

## 

## 4.1 Distinctness

### 4.1.1 General Recommendations

It is of particular importance for users of these Test Guidelines to consult the General Introduction prior to making decisions regarding distinctness. However, the following points are provided for elaboration or emphasis in these Test Guidelines.

### 4.1.2 Consistent Differences

The differences observed between varieties may be so clear that more than one growing cycle is not necessary. In addition, in some circumstances, the influence of the environment is not such that more than a single growing cycle is required to provide assurance that the differences observed between varieties are sufficiently consistent. One means of ensuring that a difference in a characteristic, observed in a growing trial, is sufficiently consistent is to examine the characteristic in at least two independent growing cycles.

### 4.1.3 Clear Differences

Determining whether a difference between two varieties is clear depends on many factors, and should consider, in particular, the type of expression of the characteristic being examined, i.e. whether it is expressed in a qualitative, quantitative, or pseudo-qualitative manner. Therefore, it is important that users of these Test Guidelines are familiar with the recommendations contained in the General Introduction prior to making decisions regarding distinctness.

### 4.1.4 Number of Plants / Parts of Plants to be Examined

Unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 10 plants or parts taken from each of 10 plants and any other observations made on all plants in the test, disregarding any off-type plants.

### 4.1.5 Method of Observation

The recommended method of observing the characteristic for the purposes of distinctness is indicated by the following key in the second column of the Table of Characteristics (see document TGP/9 “Examining Distinctness”, Section 4 “Observation of characteristics”):

MG: single measurement of a group of plants or parts of plants

MS: measurement of a number of individual plants or parts of plants

VG: visual assessment by a single observation of a group of plants or parts of plants

VS: visual assessment by observation of individual plants or parts of plants

Type of observation: visual (V) or measurement (M)

“Visual” observation (V) is an observation made on the basis of the expert’s judgment. For the purposes of this document, “visual” observation refers to the sensory observations of the experts and, therefore, also includes smell, taste and touch. Visual observation includes observations where the expert uses reference points (e.g. diagrams, example varieties, side-by-side comparison) or non-linear charts (e.g. color charts). Measurement (M) is an objective observation against a calibrated, linear scale e.g. using a ruler, weighing scales, colorimeter, dates, counts, etc.

Type of record: for a group of plants (G) or for single, individual plants (S)

For the purposes of distinctness, observations may be recorded as a single record for a group of plants or parts of plants (G), or may be recorded as records for a number of single, individual plants or parts of plants (S). In most cases, “G” provides a single record per variety and it is not possible or necessary to apply statistical methods in a plant-by-plant analysis for the assessment of distinctness.

In cases where more than one method of observing the characteristic is indicated in the Table of Characteristics (e.g. VG/MG), guidance on selecting an appropriate method is provided in document TGP/9, Section 4.2.

## 4.2 Uniformity

4.2.1 It is of particular importance for users of these Test Guidelines to consult the General Introduction prior to making decisions regarding uniformity. However, the following points are provided for elaboration or emphasis in these Test Guidelines:

4.2.2 For the assessment of uniformity of vegetatively propagated varieties, a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 20 plants, 1 off‑type is allowed.

## 4.3 Stability

4.3.1 In practice, it is not usual to perform tests of stability that produce results as certain as those of the testing of distinctness and uniformity. However, experience has demonstrated that, for many types of variety, when a variety has been shown to be uniform, it can also be considered to be stable.

4.3.2 Where appropriate, or in cases of doubt, stability may be further examined by testing a new plant stock to ensure that it exhibits the same characteristics as those shown by the initial material supplied.

# Grouping of Varieties and Organization of the Growing Trial

5.1 The selection of varieties of common knowledge to be grown in the trial with the candidate varieties and the way in which these varieties are divided into groups to facilitate the assessment of distinctness are aided by the use of grouping characteristics.

5.2 Grouping characteristics are those in which the documented states of expression, even where produced at different locations, can be used, either individually or in combination with other such characteristics: (a) to select varieties of common knowledge that can be excluded from the growing trial used for examination of distinctness; and (b) to organize the growing trial so that similar varieties are grouped together.

5.3 The following have been agreed as useful grouping characteristics:

Only for pot and garden types:

(a) Plant: height (characteristic 2)

(b) Plant: position of flowers compared to foliage (characteristic 4)

For all types (including pot and garden types):

(c) Flower: type (characteristic 37)

(d) Petal: main color (characteristic 50), with the following groups:

Gr. 1: white or near white

Gr. 2: green

Gr. 3: yellow

Gr. 4: orange

Gr. 5: pink

Gr. 6: medium red

Gr. 7: dark red

Gr. 8: violet red

Gr. 9: purple

Gr. 10: pink purple

Gr. 11: purple violet

Gr. 12: violet

Gr. 13: brownish

(e) Petal: secondary color (characteristic 51), with the following groups:

Gr. 1: none

Gr. 2: white or near white

Gr. 3: green

Gr. 4: yellow

Gr. 5: orange

Gr. 6: pink

Gr. 7: medium red

Gr. 8: dark red

Gr. 9: violet red

Gr. 10: purple

Gr. 11: pink purple

Gr. 12: purple violet

Gr. 13: violet

Gr. 14: brownish

(f) Petal: color pattern of secondary color, if present, with the following groups (combination of Characteristics 52 to 56):

1: marginated

2: striped

3: speckled

4: flushed

5: maculated

5.4 Guidance for the use of grouping characteristics, in the process of examining distinctness, is provided through the General Introduction and document TGP/9 “Examining Distinctness”.

5.5 Where separate growing trials are used for cut flower types (C), garden types (G) and pot types (P) (see Section 3.3.2), it may be necessary to include individual varieties in different growing trial(s) in order to ensure an effective examination of distinctness. In particular, it may be necessary to include a variety in both the garden type trial and the pot type trial.

Furthermore, in cut flower types (C) three sub-types can be distinguished which could be useful for grouping:

- one flower per stem (Co)

- spray (Cs)

- umbrella – *D. barbatus* (Cu)

# Introduction to the Table of Characteristics

## 

## 6.1 Categories of Characteristics

### 6.1.1 Standard Test Guidelines Characteristics

Standard Test Guidelines characteristics are those which are approved by UPOV for examination of DUS and from which members of the Union can select those suitable for their particular circumstances.

### 6.1.2 Asterisked Characteristics

Asterisked characteristics (denoted by \*) are those included in the Test Guidelines which are important for the international harmonization of variety descriptions and should always be examined for DUS and included in the variety description by all members of the Union, except when the state of expression of a preceding characteristic or regional environmental conditions render this inappropriate.

## 6.2 States of Expression and Corresponding Notes

6.2.1 States of expression are given for each characteristic to define the characteristic and to harmonize descriptions. Each state of expression is allocated a corresponding numerical note for ease of recording of data and for the production and exchange of the description.

6.2.2 In the case of qualitative and pseudo‑qualitative characteristics (see Chapter 6.3), all relevant states of expression are presented in the characteristic. However, in the case of quantitative characteristics with 5 or more states, an abbreviated scale may be used to minimize the size of the Table of Characteristics. For example, in the case of a quantitative characteristic with 9 states, the presentation of states of expression in the Test Guidelines may be abbreviated as follows:

|  |  |
| --- | --- |
| State | Note |
| small | 3 |
| medium | 5 |
| large | 7 |

However, it should be noted that all of the following 9 states of expression exist to describe varieties and should be used as appropriate:

|  |  |
| --- | --- |
| State | Note |
| very small | 1 |
| very small to small | 2 |
| small | 3 |
| small to medium | 4 |
| medium | 5 |
| medium to large | 6 |
| large | 7 |
| large to very large | 8 |
| very large | 9 |

6.2.3 Further explanation of the presentation of states of expression and notes is provided in document TGP/7 “Development of Test Guidelines”.

## 6.3 Types of Expression

An explanation of the types of expression of characteristics (qualitative, quantitative and pseudo‑qualitative) is provided in the General Introduction.

## 6.4 Example Varieties

Where appropriate, example varieties are provided to clarify the states of expression of each characteristic. The type is indicated in brackets after the name of the example variety as follows:

(C) cut flower type:

- (Co): one flower per stem

- (Cs): spray

- (Cu): umbrella (D. *barbatus*)

(G) garden type

(P) pot type

## 6.5 Legend

(\*) Asterisked characteristic – see Chapter 6.1.2

QL Qualitative characteristic – see Chapter 6.3

QN Quantitative characteristic – see Chapter 6.3

PQ Pseudo-qualitative characteristic – see Chapter 6.3

MG, MS, VG, VS – see Chapter 4.1.5

(a)-(d) See Explanations on the Table of Characteristics in Chapter 8.1

(+) See Explanations on the Table of Characteristics in Chapter 8.2.

[C] to be examined in cut flower types

[Cs] to be examined in cut flower ‘spray’ types

[G] to be examined in garden types

[P] to be examined in pot types

(C) cut flower type:

- (Co): one flower per stem

- (Cs): spray

- (Cu): umbrella (D. *barbatus*)

(G) garden type

(P) pot type

# Table of Characteristics/Tableau des caractères/Merkmalstabelle/Tabla de caracteres

|  |  | English | Français | Deutsch | Español | Example varieties/ Exemples/ Beispielssorten/ Variedades ejemplo | Note/ Nota |
| --- | --- | --- | --- | --- | --- | --- | --- |
| (\*) (+) | [C] VG/MS | Plant: length of stem | Plante : longueur de la tige | Pflanze: Länge des Stengels | Planta: longitud del tallo |  |  |
| QN |  | short | courte | kurz | corto | Barmalyn (Cs),  Hilbrequeen (Cu) | 3 |
|  |  | medium | moyenne | mittel | medio | Fire Queen (Cs),  Hilbacer (Cs) | 5 |
|  |  | long | longue | lang | largo | Fransesco (Co),  White Giant (Co) | 7 |
| (\*)  (+) | [G] [P] VG/MS | Plant: height | Plante : hauteur | Pflanze: Höhe | Planta: altura |  |  |
| QN |  | short | basse | niedrig | baja | Hiljoli (P),  Shooting Star (G) | 3 |
|  |  | medium | moyenne | mittel | media | Houndspool Cheryl (G), WP08 IAN04 (G) | 5 |
|  |  | tall | haute | hoch | alta | Devon Wizard (G) | 7 |
| (+) | [G] [P] VG | Plant: density | Plante : densité | Pflanze: Dichte | Planta: densidad |  |  |
| QN |  | sparse | faible | locker | laxa | Devon Wizard (G), Fontaine Darkred (P) | 1 |
|  |  | medium | moyenne | mittel | media | Koviol (P),  Waterloo Sunset (G) | 2 |
|  |  | dense | forte | dicht | densa | Coral Reef (G),  Hiljoli (P) | 3 |
| (\*) (+) | [G] [P] VG | Plant: position of flowers compared to foliage | Plante : position des fleurs par rapport au feuillage | Pflanze: Stellung der Blüten im Vergleich zum Laub | Planta: posición de las flores en relación con el follaje |  |  |
| QN |  | same level or slightly above | au même niveau ou juste au‑dessus | auf gleicher Höhe oder etwas oberhalb | al mismo nivel o ligeramente por encima | Coral Reef (G),  Hiljoli (P) | 1 |
|  |  | moderately above | légèrement au‑dessus | mäßig oberhalb | moderadamente por encima | Houndspool Cheryl (G),  Koviol (P) | 2 |
|  |  | far above | nettement au‑dessus | weit oberhalb | muy por encima | Waterloo Sunset (G) | 3 |
| (+) | [Cs] VG | Plant: laterals without flower buds or flowers | Plante : rameaux latéraux sans boutons floraux ni fleurs | Pflanze: Seitentriebe ohne Blütenknospen oder Blüten | Planta: ramificaciones laterales sin yemas florales o flores |  |  |
| **QL** |  | absent | absents | fehlend | ausentes | Hilboska (Cs) | 1 |
|  |  | present | présents | vorhanden | presentes | Martina (Cs) | 9 |
| (\*) (+) | [Cs] VG | Plant: laterals with flower buds or flowers of second order | Plante : rameaux latéraux avec des boutons floraux ou des fleurs de deuxième ordre | Pflanze: Seitentriebe mit Blütenknospen oder Blüten zweiter Ordnung | Planta: ramificaciones laterales con yemas florales o flores de segundo orden |  |  |
| **QN** |  | absent or very few | absents ou très peu nombreux | fehlend oder sehr wenige | ausentes o muy pocas | Barnita (Cs) | 1 |
|  |  | few | peu nombreux | wenige | pocas | KLEDM10631 (Cs) | 3 |
|  |  | medium | assez nombreux | mittel | medio | Barocior (Cs),  Weslupe (Cs) | 5 |
|  |  | many | nombreux | viele | muchas | KLEDM10629 (Cs) | 7 |
| (\*) (+) | [Cs] VG | Plant: flower clustering on lateral branches | Plante : bouquets de fleurs sur les rameaux latéraux | Pflanze: Blütenbüschel an den Seitenzweigen | Planta: flores agrupadas en las ramas laterales |  |  |
| **QN** |  | none | aucun | keine | ausentes | Barnita (Cs),  Lekprewi (Cs) | 1 |
|  |  | in some lateral branches | sur certains rameaux latéraux | an einigen Seitenzweigen | en algunas ramas laterales | Beam Cherry (Cs),  Martina (Cs) | 2 |
|  |  | in all lateral branches | sur tous les rameaux latéraux | an allen Seitenzweigen | en todas las ramas laterales | Westcherry (Cs) | 3 |
| (\*) (+) | [Cs] VG/MS | Stem: number of internodes | Tige : nombre d’entre-nœuds | Stengel: Anzahl Internodien | Tallo: número de entrenudos |  |  |
| **QN** |  | four | quatre | vier | cuatro | KLEDM06005 (Cs) | 1 |
|  |  | five | cinq | fünf | cinco | Hilboska (Cs),  Martina (Cs) | 2 |
|  |  | six | six | sechs | seis | Barocior (Cs),  Hilqueen (Cs) | 3 |
|  |  | more than six | plus de six | mehr als sechs | más de seis | Hilbacer (Cs) | 4 |
| (\*) | VG/MS | Stem: length of internode | Tige : longueur de l’entre-nœud | Stengel: Länge der Internodie | Tallo: longitud del entrenudo |  |  |
| **QN** | **(a)** | short | court | kurz | cortos | Devon Wizard (G) | 3 |
|  |  | medium | moyen | mittel | medios | Komari (Co),  Lonaveiro (Cs) | 5 |
|  |  | long | long | lang | largos | KLEDS06013 (Co) | 7 |
| (\*) | VG/MS | Stem: thickness of internode | Tige : épaisseur de l’entre-nœud | Stengel: Dicke der Internodie | Tallo: grosor del entrenudo |  |  |
| **QN** | **(a)** | very thin | très fin | sehr dünn | muy delgados | Hiljoli (P) | 1 |
|  |  | thin | fin | dünn | delgados | Devon Glow (G) | 3 |
|  |  | medium | moyen | mittel | medios | Komari (Co),  Lekprewi (Cs) | 5 |
|  |  | thick | épais | dick | gruesos | Hilbrequeen (Cu),  Tico Tico (Co) | 7 |
|  |  | very thick | très épais | sehr dick | muy gruesos | Westcrystal (Cs) | 9 |
| (\*) (+) | VG | Stem: shape in cross section | Tige : forme en section transversale | Stengel: Form im Querschnitt | Tallo: forma en sección transversal |  |  |
| **PQ** | **(a)** | circular | circulaire | kreisförmig | circular | Hilbreking (Cu) | 1 |
|  |  | slightly angular | légèrement anguleuse | leicht kantig | ligeramente angular | KLEDP07089 (P) | 2 |
|  |  | strongly angular | fortement anguleuse | stark kantig | fuertemente angular | Komari (Co),  Martina (Cs), SUNRRB126 (P) | 3 |
| (\*) (+) | VG | Stem: hollowness | Tige : cavité | Stengel: Hohlraum | Tallo: ahuecamiento |  |  |
| **QL** | **(a)** | absent | absente | fehlend | ausente | Komari (Co),  Martina (Cs), SUNRRB126 (P) | 1 |
|  |  | present | présente | vorhanden | presente | Hilbreking (Cu) | 9 |
| (\*) (+) | VG | Leaf: shape | Feuille : forme | Blatt: Form | Hoja: forma |  |  |
| **PQ** | **(b)** | ovate | ovale | eiförmig | oval | Tico Tico (Co) | 1 |
|  |  | elliptic | elliptique | elliptisch | elíptica | Komari (Co),  Martina (Cs) | 2 |
|  |  | linear | linéaire | linear | lineal |  | 3 |
|  |  | obovate | obovale | verkehrt eiförmig | oboval | Shooting Star (G) | 4 |
| (\*) | VG/MS | Leaf: length | Feuille : longueur | Blatt: Länge | Hoja: longitud |  |  |
| **QN** | **(b)** | short | courte | kurz | corta | Shooting Star (G) | 3 |
|  |  | medium | moyenne | mittel | media | Hilbrebar (Cu),  Martina (Cs) | 5 |
|  |  | long | longue | lang | larga | KLEDS06542 (Co),  Komari (Co) | 7 |
| (\*) | VG/MS | Leaf: width | Feuille : largeur | Blatt: Breite | Hoja: anchura |  |  |
| **QN** | **(b)** | narrow | étroite | schmal | estrecha | Lonaveiro (Cs), SUNRWB135 (P) | 3 |
|  |  | medium | moyenne | mittel | media | Hyslam (Co),  Komari (Co) | 5 |
|  |  | broad | large | breit | ancha | Hilbreking (Cu) | 7 |
| **(\*) (+)** | **VG** | **Leaf: curvature** | **Feuille : courbure** | **Blatt: Biegung** | **Hoja: curvatura** |  |  |
| **QN** | **(b)** | absent or very weakly recurved | absente ou très faiblement recourbée | fehlend oder sehr schwach zurückgebogen | ausente o muy débilmente curvada | Devon Wizard (G),  Komari (Co),  SUNRWB135 (P) | 1 |
|  |  | weakly recurved | faiblement recourbée | schwach zurückgebogen | débilmente curvada | Shooting Star (G) | 2 |
|  |  | moderately recurved | moyennement recourbée | mäßig zurückgebogen | moderadamente curvada | Hilbrebar (Cu),  Martina (Cs) | 3 |
|  |  | strongly recurved | fortement recourbée | stark zurückgebogen | fuertemente curvada | Prado Pino (Co) | 4 |
|  |  | very strongly recurved | très fortement recourbée | sehr stark zurückgebogen | muy fuertemente curvada | Raspberry Ripple (G) | 5 |
| **(\*) (+)** | **VG** | **Leaf: cross section** | **Feuille : section transversale** | **Blatt: Querschnitt** | **Hoja: sección transversal** |  |  |
| **QN** | **(b)** | flat or very weakly concave | plate ou très faiblement concave | flach oder sehr schwach konkav | plana o muy débilmente cóncava | Beam Cherry (Cs),  KLEDP09102 (P) | 1 |
|  |  | weakly concave | faiblement concave | schwach konkav | débilmente cóncava | Leila (Co),  Martina (Cs),  Tico Tico (Co) | 2 |
|  |  | moderately concave | moyennement concave | mäßig konkav | moderadamente cóncava | Hilbreking (Cu),  Lonkiro (Co),  SUNRRB126 (P) | 3 |
|  |  | strongly concave | fortement concave | stark konkav | fuertemente cóncava | Barabril (Cs),  Wesroman (Cs) | 4 |
| **(\*)** | **VG** | **Leaf: color** | **Feuille : couleur** | **Blatt: Farbe** | **Hoja: color** |  |  |
| **PQ** | **(b)** | medium green | vert moyen | mittelgrün | verde medio | Leila (Co),  Hilbreking (Cu), SUNRRB126 (P) | 1 |
|  |  | dark green | vert foncé | dunkelgrün | verde oscuro | Hilmose (Co),  KLET04064 (P),  Starburst (G) | 2 |
|  |  | grey green | vert‑gris | graugrün | verde grisáceo | Barcoquette (Cs),  Devon Winnie (G),  White Liberty (Co) | 3 |
| **(\*)** | **VG** | **Leaf: glaucosity** | **Feuille : glaucescence** | **Blatt: Bereifung** | **Hoja: glauescencia** |  |  |
| **QN** | **(b)** | weak | faible | schwach | débil | Hilbreking (Cu), SUNRRB126 (P) | 1 |
|  |  | medium | moyenne | mittel | media | Hyslam (Co),  Tico Tico (Co) | 2 |
|  |  | strong | forte | stark | fuerte | Komari (Co),  Lekprewi (Cs) | 3 |
| (\*) (+) | VG | Leaf: spiny ciliation of margin | Feuille : ciliation épineuse du bord | Blatt: dornartige Bewimperung des Rands | Hoja: ciliación espinosa del borde |  |  |
| **QL** | **(b)** | absent | absente | fehlend | ausente | Komari (Co),  Martina (Cs) | 1 |
|  |  | present | présente | vorhanden | presente | Hilbreking (Cu),  Whatfield Can Can (G) | 9 |
| (+) | [Cs] VG | Inflorescence: form | Inflorescence : forme | Blütenstand: Form | Inflorescencia: forma |  |  |
| **QN** |  | flat or slightly domed | plate ou légèrement dôme | flach oder leicht gewölbt | plana o ligeramente abovedada |  | 1 |
|  |  | moderately domed | moyennement en dôme | mäßig gewölbt | moderadamente abovedada | Martina (Cs) | 2 |
|  |  | strongly domed | fortement en dôme | stark gewölbt | muy abovedada | Hilopta (Cs) | 3 |
| (\*) (+) | VG | Bud: shape | Bouton : forme | Knospe: Form | Yema: forma |  |  |
| **PQ** |  | ovate | ovale | eiförmig | oval | KLEDCS05045 (Co) | 1 |
|  |  | circular | circulaire | kreisförmig | circular | Baryetar (Co) | 2 |
|  |  | elliptic | elliptique | elliptisch | elíptica | Fontaine Darkred (P),  Hiltespret (Cs) | 3 |
|  |  | oblong | oblong | breitrund | oblonga | Lonkiro (Co) | 4 |
|  |  | obovate | obovale | verkehrt eiförmig | oboval | Komari (Co),  Leila (Co),  Martina (Cs) | 5 |
| (\*) (+) | VG | Bud: extrusion of styles | Bouton : extrusion des styles | Knospe: Hervortreten der Griffel | Yema: extrusión de los estilos |  |  |
| **QL** |  | absent | absente | fehlend | ausente | Komari (Co),  Leila (Co),  Martina (Cs) | 1 |
|  |  | present | présente | vorhanden | presente | Hilvulca (P),  KLEDS07504 (Co) | 9 |
| (+) | VG | Epicalyx: position of outer lobes in relation to calyx | Calicule : position des lobes externes par rapport au calice | Außenkelch: Stellung der äußeren Lappen am Kelch | Epicáliz: posición de los lóbulos externos en relación con el cáliz |  |  |
| **QN** |  | adpressed | apprimés | anliegend | adpresa | Komari (Co),  Martina (Cs),  Tico Tico (Co) | 1 |
|  |  | adpressed and free | apprimés et libres | anliegend und freistehend | adpresa y libre |  | 2 |
|  |  | free | libres | freistehend | libre | Leila (Co),  KLEDC05008 (Cs) | 3 |
| (+) | VG | Epicalyx: apex of outer lobes | Calicule : apex des lobes externes | Außenkelch: Spitze der äußeren Lappen | Epicáliz: ápice de los lóbulos externos |  |  |
| **QN** |  | acute | aigu | spitz | agudo | Komari (Co),  Martina (Cs),  Tico Tico (Co) | 1 |
|  |  | short acuminate | court acuminé | kurz zugespitzt | acuminado corto |  | 2 |
|  |  | medium acuminate | moyennement acuminé | mittel zugespitzt | acuminado medio | Lonkiro (Co) | 3 |
| (+) | VG/MS | Epicalyx: length of tip of outer lobes | Calicule : longueur de l’extrémité des lobes externes | Außenkelch: Länge der Spitze der äußeren Lappen | Epicáliz: longitud del extremo de los lóbulos externos |  |  |
| **QN** |  | absent or very short | absente ou très courte | fehlend oder sehr kurz | ausente o muy corto |  | 1 |
|  |  | short | courte | kurz | corto | Komari (Co),  Martina (Cs),  Tico Tico (Co) | 2 |
|  |  | medium | moyenne | mittel | medio | Devon Glow (G),  Leila (Co) | 3 |
|  |  | long | longue | lang | largo | SUNRRB126 (P), Westcrystal (Cs) | 4 |
| (+) | VG | Epicalyx: apex of inner lobes | Calicule : apex des lobes internes | Außenkelch: Spitze der inneren Lappen | Epicáliz: ápice de los lóbulos internos |  |  |
| **QN** |  | acute | aigu | spitz | agudo | Komari (Co),  Martina (Cs),  Tico Tico (Co) | 1 |
|  |  | short acuminate | court acuminé | kurz zugespitzt | acuminado corto |  | 2 |
|  |  | medium acuminate | moyennement acuminé | mittel zugespitzt | acuminado medio | Lonkiro (Co) | 3 |
| (+) | VG/MS | Epicalyx: length of tip of inner lobes | Calicule : longueur de l’extrémité des lobes internes | Außenkelch: Länge der Spitze der inneren Lappen | Epicáliz: longitud del extremo de los lóbulos internos |  |  |
| **QN** |  | absent or very short | absente ou très courte | fehlend oder sehr kurz | ausente o muy corto |  | 1 |
|  |  | short | courte | kurz | corto | Komari (Co),  Martina (Cs) | 2 |
|  |  | medium | moyenne | mittel | medio | SUNRRB126 (P) | 3 |
|  |  | long | longue | lang | largo | Westcrystal (Cs) | 4 |
| (\*) (+) | VG/MS | Calyx: length | Calice : longueur | Kelch: Länge | Cáliz: longitud |  |  |
| **QN** |  | short | court | kurz | corto | Hilbreking (Cu),  Whatfield Can Can (G) | 3 |
|  |  | medium | moyen | mittel | medio | Komari (Co),  Leila (Co),  Martina (Cs) | 5 |
|  |  | long | long | lang | largo | KLEDS10624 (Co), Princess (P) | 7 |
| **(\*) (+)** | **VG/MS** | **Calyx: width** | **Calice : largeur** | **Kelch: Breite** | **Cáliz: anchura** |  |  |
| **QN** |  | narrow | étroit | schmal | estrecho | SUNRRB126 (P) | 3 |
|  |  | medium | moyen | mittel | medio | Komari (Co) | 5 |
|  |  | broad | large | breit | ancho | KLEDS10624 (Co) | 7 |
| (\*) (+) | VG | Calyx: shape | Calice : forme | Kelch: Form | Cáliz: forma |  |  |
| **PQ** |  | funnel-shaped | en entonnoir | trichterförmig | en forma de embudo | Lonkiro (Co),  Tico Tico (Co) | 1 |
|  |  | cylindrical | cylindrique | zylindrisch | cilíndrico | Hilbreking (Cu),  Martina (Cs),  SUNRRB126 (P) | 2 |
|  |  | campanulate | campanulé | glockenförmig | acampanado | Gaudina (Co),  Komari (Co),  Leila (Co) | 3 |
| (\*) (+) | VG | Calyx: longitudinal axis of lobes | Calice : axe longitudinal des lobes | Kelch: Längsachse der Lappen | Cáliz: eje longitudinal de los lóbulos |  |  |
| **PQ** |  | straight | droit | gerade | recto | SUNRRB126 (P),  Whatfield Can Can (G) | 1 |
|  |  | concave | concave | konkav | cóncavo | Martina (Cs),  Tico Tico (Co) | 2 |
|  |  | angled | formant un angle | winklig | en ángulo | Hilopta (Cs) | 3 |
|  |  | convex | convexe | konvex | convexo | Gaudina (Co),  Komari (Co),  Leila (Co) | 4 |
| (\*) | VG | Calyx: intensity of anthocyanin coloration | Calice : intensité de la pigmentation anthocyanique | Kelch: Intensität der Anthocyanfärbung | Cáliz: intensidad de la pigmentación antociánica |  |  |
| QN |  | absent or very weak | absente ou très faible | fehlend oder sehr schwach | ausente o muy débil |  | 1 |
|  |  | weak | faible | schwach | débil | Lonaveiro (Cs) | 2 |
|  |  | medium | moyenne | mittel | media | Shooting Star (G) | 3 |
|  |  | strong | forte | stark | fuerte | Simba (P),  SUNRE130 (P) | 4 |
| (\*) | VG | Calyx: distribution of anthocyanin coloration | Calice : distribution de la pigmentation anthocyanique | Kelch: Verteilung der Anthocyanfärbung | Cáliz: distribución de la pigmentación antociánica |  |  |
| **PQ** |  | margin of lobe | bord du lobe | Randzone des Lappens | margen del lóbulo | Lonaveiro (Cs), SUNRRB126 (P) | 1 |
|  |  | whole lobe | lobe entier | ganzer Lappen | todo el lóbulo | Hilbrebar (Cu),  Houndspool Cheryl (G) | 2 |
|  |  | whole calyx | calice entier | ganzer Kelch | todo el cáliz | Calypso Star (G) | 3 |
| (+) | VG | Calyx: shape of apex of lobe | Calice : forme de l’apex du lobe | Kelch: Form der Spitze des Lappens | Cáliz: forma del ápice de los lóbulos |  |  |
| **QN** |  | acute | aigu | spitz | agudo | Komari (Co),  Lonaveiro (Cs),  Lonkiro (Co),  SUNRRB126 (P) | 1 |
|  |  | acute to acuminate | aigu à acuminé | spitz bis zugespitzt | agudo a acuminado |  | 2 |
|  |  | acuminate | acuminé | zugespitzt | acuminado | Barfenix (Co) | 3 |
| (\*) | VG | Calyx: length of lobe | Calice : longueur du lobe | Kelch: Länge des Lappens | Cáliz: longitud del lóbulo |  |  |
| **QN** |  | short | court | kurz | corto | Komari (Co),  Lonkiro (Co),  Tico Tico (Co) | 3 |
|  |  | medium | moyen | mittel | medio | Leila (Co),  Lonaveiro (Cs) | 5 |
|  |  | long | long | lang | largo | Hilbreking (Cu) | 7 |
| (\*) (+) | VG | Flower: type | Fleur : type | Blüte: Typ | Flor: tipo |  |  |
| **QL** |  | single | simple | einfach | simple | Calypso Star (G),  Hilbreking (Cu) | 1 |
|  |  | double | double | gefüllt | doble | Sam’s Pride (Cs),  William Sim (Co) | 2 |
| (\*) | **VG/MS** | Flower: diameter | **Fleur : diamètre** | Blüte: Durchmesser | Flor: diámetro |  |  |
| **QN** |  | small | petit | klein | pequeño | Hilbrebar (Cu),  Shooting Star (G),  SUNRWB135 (P) | 3 |
|  |  | medium | moyen | mittel | medio | Devon Wizard (G) | 5 |
|  |  | large | grand | groß | grande | Farida (Co),  Komari (Co),  Leila (Co) | 7 |
| (\*) | VG/MS | Only varieties with flower type: double: Flower: number of petals | Seulement variétés à type de fleur : double : Fleur : nombre de pétales | Nur Sorten mit Blütentyp: gefüllt: Blüte: Anzahl der Blütenblätter | Solo variedades con tipo de flor: doble: Flor: número de pétalos |  |  |
| **QN** |  | few | petit | wenige | bajo | Lekclaudia (Cs), SUNRRB126 (P) | 3 |
|  |  | medium | moyen | mittel | medio | Komari (Co),  Martina (Cs) | 5 |
|  |  | many | grand | viele | alto | Hyslam (Co),  Tico Tico (Co) | 7 |
| (\*) (+) | VG/MS | Corolla: height | Corolle : hauteur | Krone: Höhe | Corola: altura |  |  |
| **QN** |  | short | basse | kurz | baja | SUNRWB135 (P),  Whatfield Can Can (G) | 3 |
|  |  | medium | moyenne | mittel | media | Farida (Co) | 5 |
|  |  | tall | haute | hoch | alta | KLEDS13A01 (Co) | 7 |
| (\*) (+) | VG | Corolla: profile of upper part in lateral view | Corolle : profil de la partie supérieure en vue latérale | Krone: Profil des oberen Teils in Seitenansicht | Corola: perfil de la parte superior en vista lateral |  |  |
| **PQ** |  | concave | concave | konkav | cóncava | Night Star (G) | 1 |
|  |  | flat | droit | flach | plana | Hilbrequeen (Cu),  Shooting Star (G) | 2 |
|  |  | flat convex | convexe aplati | flach konvex | plana convexa | Komari (Co),  Lonkiro (Co), SUNRRB126 (P) | 3 |
|  |  | convex | convexe | konvex | convexa | Leila (Co),  Martina (Cs),  Tico Tico (Co) | 4 |
| (\*) (+) | VG | Corolla: profile of lower part in lateral view | Corolle : profil de la partie inférieure en vue latérale | Krone: Profil des unteren Teils in Seitenansicht | Corola: perfil de la parte inferior en vista lateral |  |  |
| **PQ** |  | concave | concave | konkav | cóncava | Komari (Co),  Martina (Cs), SUNRRB126 (P) | 1 |
|  |  | flat | droit | flach | plana | Hilbrequeen (Cu),  Whatfield Can Can (G) | 2 |
|  |  | flat convex | convexe aplati | flach konvex | plana convexa | Leila (Co),  Night Star (G) | 3 |
|  |  | convex | convexe | konvex | convexa | Coral Reef (G),  Waterloo Sunset (G) | 4 |
| (+) | VG | Petal: predominant shape | Pétale : forme prédominante | Blütenblatt: überwiegende Form | Pétalo: forma predominante |  |  |
| **PQ** | **(c)** | type 1 | type 1 | Typ 1 | tipo 1 | Martina (Cs),  Tico Tico (Co) | 1 |
|  |  | type 2 | type 2 | Typ 2 | tipo 2 | Baltico (Co) | 2 |
|  |  | type 3 | type 3 | Typ 3 | tipo 3 | Hilbreking (Cu), SUNRWB135 (P) | 3 |
|  |  | type 4 | type 4 | Typ 4 | tipo 4 | Nobroc (Co),  SUNRRB126 (P) | 4 |
|  |  | type 5 | type 5 | Typ 5 | tipo 5 | Barlgraa (Co),  WP08 IAN04 (G) | 5 |
|  |  | type 6 | type 6 | Typ 6 | tipo 6 | Gaudina (Co) | 6 |
|  |  | type 7 | type 7 | Typ 7 | tipo 7 | Hilstertes (Cs),  Minitiara Pink (Cs) | 7 |
| (+) | VG | Petal: undulation | Pétale : ondulation | Blütenblatt: Randwellung | Pétalo: ondulación |  |  |
| **QN** | **(c)** | absent or weak | absente ou faible | fehlend oder schwach | ausente o débil | Hilbrequeen (Cu),  Hilstertes (Cs) | 1 |
|  |  | medium | moyenne | mittel | media | Calypso Star (G),  Komari (Co) | 2 |
|  |  | strong | forte | stark | fuerte |  | 3 |
| (\*) (+) | VG | Petal: number of incisions of margin | Pétale : nombre d’incisions du bord | Blütenblatt: Anzahl Randeinschnitte | Pétalo: número de incisiones del borde |  |  |
| QN | (c) | absent or few | nul ou petit | fehlend oder wenige | ausentes o bajo | Barmalyn (Cs),  Koyevi (Co) | 1 |
|  |  | medium | moyen | mittel | medio | Barlitar (Co) | 2 |
|  |  | many | grand | viele | alto | Komari (Co),  Martina (Cs), Wesroman (Cs) | 3 |
| (+) | VG | Petal: type of incisions of margin | Pétale : type d’incisions du bord | Blütenblatt: Typ der Randeinschnitte | Pétalo: tipo de incisiones del borde |  |  |
| **PQ** | **(c)** | sinuate | sinué | gebuchtet | sinuado | Farida (Co) | 1 |
|  |  | crenate | crénelé | gekerbt | crenado | Hyslam (Co) | 2 |
|  |  | spinose-dentate | dentelé‑ épineux | dornartig-gezähnt | espinoso-dentado | Leila (Co) | 3 |
|  |  | dentate | dentelé | gezähnt | dentado | Hilbrebar (Cu), SUNRWB135 (P) | 4 |
|  |  | crenate-dentate | dentelé‑crénelé | gekerbt-gezähnt | crenado-dentado | Komari (Co),  Martina (Cs) | 5 |
| (\*) (+) | VG | Petal: depth of incisions of margin | Pétale : profondeur des incisions du bord | Blütenblatt: Tiefe der Randeinschnitte | Pétalo: profundidad de las incisiones del borde |  |  |
| **QN** | **(c)** | very shallow | très faible | sehr flach | muy poco profundas | Fleurette (Cs),  Leila (Co) | 1 |
|  |  | shallow | faible | flach | poco profundas | Intermezzo (Cs) | 3 |
|  |  | medium | moyenne | mittel | medias | Hilbrebar (Cu) | 5 |
|  |  | deep | forte | tief | profundas | Pop Star (G) | 7 |
|  |  | very deep | très forte | sehr tief | muy profundas | CFPC Unforgettable (P) | 9 |
| (\*) | VG/MS | Petal: length | Pétale : longueur | Blütenblatt: Länge | Pétalo: longitud |  |  |
| **QN** | **(c)** | short | court | kurz | corto | Whatfield Can Can (G) | 3 |
|  |  | medium | moyen | mittel | medio | Barcandela (Cs) | 5 |
|  |  | long | long | lang | largo | Gaudina (Co),  Komari (Co) | 7 |
| (\*) | VG/MS | Petal: width | Pétale : largeur | Blütenblatt: Breite | Pétalo: anchura |  |  |
| **QN** | **(c)** | narrow | étroit | schmal | estrecho | Hilbrebar (Cu),  Whatfield Can Can (G) | 3 |
|  |  | medium | moyen | mittel | medio | Leila (Co),  Lonkiro (Co),  Tico Tico (Co) | 5 |
|  |  | broad | large | breit | ancho | Bartorbel (Co), KLEDS10625 (Co) | 7 |
| (\*) | VG | Petal: main color | Pétale : couleur principale | Blütenblatt: Hauptfarbe | Pétalo: color principal |  |  |
| **PQ** | **(c) (d)** | RHS Colour Chart (indicate reference number) | Code RHS des couleurs (indiquer le numéro de reference) | RHS-Farbkarte (Nummer angeben) | Carta de colores RHS (indíquese el número de referencia) |  |  |
| (\*) | VG | Petal: secondary color | Pétale : couleur secondaire | Blütenblatt: Sekundärfarbe | Pétalo: color secundario |  |  |
| **PQ** | **(c) (d)** | RHS Colour Chart (indicate reference number) | Code RHS des couleurs (indiquer le numéro de reference) | RHS-Farbkarte (Nummer angeben) | Carta de colores RHS (indíquese el número de referencia) |  |  |
| **(\*) (+)** | **VG** | **Petal: width of differently colored margin** | **Pétale : largeur du bord de couleur différente** | **Blütenblatt: Breite des andersfarbigen Rands** | **Pétalo: anchura del margen de color diferente** |  |  |
| **QN** | **(c)** | absent | absent | fehlend | ausente | Fleurette (Cs),  Pop Star (G) | 1 |
|  |  | narrow | étroit | schmal | estrecho | Komari (Co), Rodin (P) | 2 |
|  |  | medium | moyen | mittel | medio | Hilbreking (Cu) | 3 |
|  |  | broad | large | breit | ancho | Barlaxiaga (Cs),  Hilqueen (Cs) | 4 |
| **(\*) (+)** | **VG** | **Petal: number of stripes** | **Pétale : nombre de stries** | **Blütenblatt: Anzahl Streifen** | **Pétalo: número de rayas** |  |  |
| **QN** | **(c)** | none | nul | keiner | ninguna | SUNRE130 (P) | 1 |
|  |  | few | petit | wenige | bajo | Konali (Co),  Martina (Cs) | 2 |
|  |  | medium | moyen | mittel | medio | Barmarie (Co),  Bartaina (Cs) | 3 |
|  |  | many | grand | viele | alto | Komonte (Co),  Navidad (Co) | 4 |
| **(\*) (+)** | **VG** | **Petal: number of speckles** | **Pétale : nombre de tachetures** | **Blütenblatt: Anzahl Sprenkel** | **Pétalo: número de manchas** |  |  |
| **QN** | **(c)** | none | nul | keine | ninguna | Westcrystal (Cs) | 1 |
|  |  | few | petit | wenige | bajo | Barlitar (Co),  CFPC Aztec (P) | 2 |
|  |  | medium | moyen | mittel | medio | Devon Winnie (G), KLEN03037 (P),  WS05-402 (Cu) | 3 |
|  |  | many | grand | viele | alto | Whatfield Gem (G) | 4 |
| **(\*) (+)** | **VG** | **Petal: area of flush** | **Pétale : zone de traces diffuses** | **Blütenblatt: geflammter Bereich** | **Pétalo: superficie de la pátina** |  |  |
| **QN** | **(c)** | absent | absente | fehlend | ausente | KLEDS06013 (Co) | 1 |
|  |  | small | petite | klein | pequeña | WP07 OPR04 (G) | 2 |
|  |  | medium | moyenne | mittel | media | Hilnotre (Co),  Sidra (Co) | 3 |
|  |  | large | grande | groß | grande | Antigua (Co),  KLEDS06513 (Co) | 4 |
| **(\*) (+)** | **VG** | **Petal: size of macule** | **Pétale : taille de la macule** | **Blütenblatt: Größe des Flecks** | **Pétalo: tamaño de la mácula** |  |  |
| **QN** | **(c)** | absent | absente | fehlend | ausente | Lonaveiro (Cs) | 1 |
|  |  | small | petite | klein | pequeña | DICZ0003 (G), KLEDP11109 (P) | 2 |
|  |  | medium | moyenne | mittel | media | Hilbreye (P),  WP10 HEL01 (G) | 3 |
|  |  | large | grande | groß | grande | Hilmetal (P),  WP08 UNI02 (G) | 4 |
| (\*) (+) | VG | Petal: color pattern of tertiary color | Pétale : répartition de la couleur tertiaire | Blütenblatt: Verteilung der Tertiärfarbe | Pétalo: pauta de distribución del color terciario |  |  |
| PQ | (c) | absent | absente | fehlend | ausente |  | 1 |
|  | (d) | marginated | au bord | begrenzt | marginal | Margarita (P), SUNRWB135 (P) | 2 |
|  |  | striped | striée | gestreift | rayado |  | 3 |
|  |  | speckled | tachetée | gesprenkelt | manchado | DICZ0001 (G) | 4 |
|  |  | flushed | traces diffuses | flächig | difuso | Starlette (G) | 5 |
|  |  | maculated | maculée | gepunktet | maculado | Rodin (P) | 6 |
| (\*) | VG | Petal: tertiary color | **Pétale : couleur tertiaire** | Blütenblatt: Tertiärfarbe | Pétalo: color terciario |  |  |
| **PQ** | **(c)** | RHS Colour Chart (indicate reference number) | Code RHS des couleurs (indiquer le numéro de reference) | RHS-Farbkarte (Nummer angeben) | Carta de colores RHS (indíquese el número de referencia) |  |  |
| (\*) (+) | VG | Ovary: shape | Ovaire : forme | Fruchtknoten: Form | Ovario: forma |  |  |
| **PQ** |  | ovate | ovale | eiförmig | oval | Lekprewi (Cs) | 1 |
|  |  | rhombic | rhombique | rautenförmig | rómbico | Martina (Cs) | 2 |
|  |  | elliptic | elliptique | elliptisch | elíptico | Hilbreking (Cu) | 3 |
|  |  | oblong | oblong | breitrund | oblongo | Shooting Star (G) | 4 |
|  |  | obovate | obovale | verkehrt eiförmig | obovado | Komari (Co),  Leila (Co), SUNRWB135 (P) | 5 |
| (+) | VG | Ovary: color of base | Ovaire : couleur de la base | Fruchtknoten: Farbe der Basis | Ovario: color de la base |  |  |
| **PQ** |  | whitish | blanchâtre | weißlich | blanquecino | Komari (Co),  Lekprewi (Cs) | 1 |
|  |  | yellowish | jaunâtre | gelblich | amarillento | KLEDG10119 (G),  Koviol (P) | 2 |
|  |  | green | verte | grün | verde | Leila (Co),  Shooting Star (G) | 3 |
| (\*) | VG | Ovary: surface | Ovaire : surface | Fruchtknoten: Oberfläche | Ovario: superficie |  |  |
| **QN** |  | smooth | lisse | glatt | lisa | Leila (Co),  Lekclaudia (Cs) | 1 |
|  |  | slightly ribbed | légèrement côtelée | leicht gerippt | ligeramente acanalada | SUNRRB126 (P) | 2 |
|  |  | strongly ribbed | fortement côtelée | stark gerippt | muy acanalada | Komari (Co),  Martina (Cs) | 3 |
| (\*) | VG/MG | Style: number | Style : nombre | Griffel: Anzahl | Estilo: número |  |  |
| **PQ** |  | only two | seulement deux | nur zwei | solo uno | Hilbreking (Cu), SUNRWB135 (P),  Tico Tico (Co) | 1 |
|  |  | two and three | deux et trois | zwei und drei | dos y tres | Komari (Co),  Lonaveiro (Cs) | 2 |
|  |  | only three | seulement trois | nur drei | solo tres | Barjine (Co),  Wesroman (Cs) | 3 |
|  |  | three and four | trois et quatre | drei und vier | tres y cuatro | KLEDS07504 (Co) | 4 |
|  |  | only four | seulement quatre | nur vier | solo cuatro | Baruqedu (Co), KLEDS10624 (Co) | 5 |
|  |  | two, three, four and five | deux, trois, quatre et cinq | zwei, drei, vier und fünf | dos, tres, cuatro y cinco | Gaudina (Co) | 6 |
| (\*) | VG/MS | Style: length | Style : longueur | Griffel: Länge | Estilo: longitud |  |  |
| **QN** |  | short | court | kurz | corto | Hilbreking (Cu),  Shooting Star (G) | 1 |
|  |  | medium | moyen | mittel | medio | Lonaveiro (Cs), SUNRWB135 (P),  Tico Tico (Co) | 2 |
|  |  | long | long | lang | largo | Liberty (Co) | 3 |
| (\*) (+) | VG | Style: shoulder | Style : épaulement | Griffel: Schulter | Estilo: hombro |  |  |
| **QL** |  | absent | absent | fehlend | ausente | Martina (Cs),  SUNRWB135 (P) | 1 |
|  |  | present | présent | vorhanden | presente | Komari (Co),  Lonaveiro (Cs),  Tico Tico (Co) | 9 |
| (\*) (+) | VG | Stigma: color | Stigmate : couleur | Narbe: Farbe | Estigma: color |  |  |
| **PQ** |  | white | blanc | weiß | blanco | Komari (Co),  Martina (Cs),  Tico Tico (Co) | 1 |
|  |  | white with red flush | blanc avec traces diffuses de rouge | weiß mit roter Flammung | blanco con pátina roja | Lonaveiro (Cs) | 2 |
|  |  | white with purple flush | blanc avec traces diffuses de pourpre | weiß mit purpurner Flammung | blanco con pátina púrpura | Shooting Star (G) | 3 |
|  |  | yellow | jaune | gelb | amarillo | Leila (Co) | 4 |
|  |  | pink | rose | rosa | rosa | Barhugo (Co) | 5 |
|  |  | red | rouge | rot | rojo | Hilbrebar (Cu),  Hyslam (Co) | 6 |
|  |  | purple | pourpre | purpurn | púrpura | Burnob (Co),  SUNRRB126 (P) | 7 |

# Explanations on the Table of Characteristics

## 8.1 Explanations covering several characteristics

## 

Unless otherwise indicated below, all characteristics should be recorded at the time of full flowering.

Characteristics containing the following key in the second column of the Table of Characteristics should be examined as indicated below:

(a) The main stem is the most direct line from the top-flower to the base. In cut flower varieties, the fifth internode directly below the flower should be observed. In pot and garden carnations, the third internode directly below the flower should be observed. Except for length, observations should be made half way between nodes.

(b) In cut flowers varieties, to be observed on leaves of the fifth node directly below the flower. In pot and garden carnations to be observed on leaves of the third node directly below the flower.

(c) For double flowers the observations should be made on a petal of the 3rd outer whorl.

(d) The main color is the color with the largest surface area. The secondary color is the color with the second largest area. In cases where the areas of the main and secondary color are too similar to reliable decide which color has the largest area, the darkest color is considered to be the main color. In cases where the areas of the secondary and tertiary color are approximately the same, the darkest color will be the secondary color.

## 8.2 Explanations for individual characteristics

Ad. 1: Plant: length of stem

Length of stem should be observed from soil level to the top of the plant, excluding the flowers.

Ad. 2: Plant: height

Plant height should be observed from soil level to the top of the plant, including the flowers.

Ad. 3: Plant: density

Plant density is a combination of the amount of branching and the number of leaves.

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 1 | 2 | 3 |
| sparse | medium | dense |

Ad. 4: Plant: position of flowers compared to foliage

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 1 | 2 | 3 |
| same level or slightly above | moderately above | far above |

Ad. 5: Plant: laterals without flower buds or flowers

Ad. 8: Stem: number of internodes

The number of internodes should be observed between the epicalyx and the lowest node with a lateral with flower buds or flowers.



Lateral without flower buds or flowers

**1**

**2**

**3**

**4**

**5**

Ad. 6: Plant: laterals with flower buds or flowers of second order



**1st order**

**2nd order**

Ad. 7: Plant: flower clustering on lateral branches

|  |  |  |
| --- | --- | --- |
| untitled7 |  | untitled8 |
| 1 | 2 | 3 |
| none | in some lateral branches | in all lateral branches |

Ad. 11: Stem: shape in cross section

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 1 | 2 | 3 |
| circular | slightly angular | strongly angular |

Ad. 12: Stem: hollowness

|  |  |
| --- | --- |
| https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcQZGeZtC4ulWvM6ypXs3lT1BE63gjbeBnfcPGGntTo8YhTDR8w6 |  |
| 1 | 9 |
| absent | present |

Ad. 13: Leaf: shape

|  |  |  |  |
| --- | --- | --- | --- |
|  | ← broadest part → | | |
|  | below middle | at middle | above middle |
| broad (*low)* 🡨 width (ratio length/width) 🡪 narrow (*high*) |  | 3  linear |  |
| 1  ovate | 2  elliptic | 4  obovate |

Ad. 16: Leaf: curvature

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 |
| absent or very weakly recurved | weakly recurved | moderately recurved | strongly recurved | very strongly recurved |

Ad. 17: Leaf: cross section

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| 1 | 2 | 3 | 4 |
| flat or very weakly concave | weakly concave | moderately concave | strongly concave |

Ad. 20: Leaf: spiny ciliation of margin

To be observed by gently rubbing to and fro with finger along the margin of the leaf.

|  |  |
| --- | --- |
|  |  |
| 1 | 9 |
| absent | present |

Ad. 21: Inflorescence: form

|  |  |  |
| --- | --- | --- |
|  | untitled4 | untitled6 |
| 1 | 2 | 3 |
| flat or slightly domed | moderately domed | strongly domed |

Ad. 22: Bud: shape

To be observed immediately before color appears.

|  |  |  |  |
| --- | --- | --- | --- |
|  | ← broadest part → | | |
|  | below middle | at middle | above middle |
| broad (*low)* 🡨 width (ratio length/width) 🡪 narrow (*high*) |  | 4  oblong |  |
| 1  ovate | 3  elliptic | 5  obovate |
|  | 2  circular |  |

Ad. 23: Bud: extrusion of styles

To be observed immediately before color appears.

|  |  |
| --- | --- |
|  |  |
| 1 | 9 |
| absent | present |

Ad. 24: Epicalyx: position of outer lobes in relation to calyx

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 1 | 2 | 3 |
| adpressed | adpressed and free | free |

Ad. 25: Epicalyx:  apex of outer lobes

Ad. 27: Epicalyx: apex of inner lobes

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 1 | 2 | 3 |
| acute | short acuminate | medium acuminate |

Ad. 26: Epicalyx:  length of tip of outer lobes

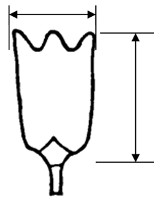
Ad. 28: Epicalyx: length of tip of inner lobes

|  |  |  |  |
| --- | --- | --- | --- |
|  | untitled3 | untitled4 | untitled5 |
| 1 | 2 | 3 | 4 |
| absent or very short | short | medium | long |

Ad. 29: Calyx: length

Ad. 30: Calyx: width

Calyx: width



Calyx: length

Ad. 31: Calyx:  shape

|  |  |  |
| --- | --- | --- |
| untitled6 | untitled7 | untitled26 |
| 1 | 2 | 3 |
| funnel-shaped | cylindrical | campanulate |

Ad. 32: Calyx:  longitudinal axis of lobes

When making this observation, the tip of the lobes should be excluded.

|  |  |  |  |
| --- | --- | --- | --- |
|  | untitled28 | untitled29 | untitled30 |
| 1 | 2 | 3 | 4 |
| straight | concave | angled | convex |

Ad. 35: Calyx: shape of apex of lobe

|  |  |  |
| --- | --- | --- |
|  |  | IMG_1457 |
| 1 | 2 | 3 |
| acute | acute to acuminate | acuminate |

Ad. 37: Flower: type

Double flowers have more than 5 petals.

Ad. 40: Corolla:  height

|  |  |
| --- | --- |
|  |  |

Ad. 41: Corolla: profile of upper part in lateral view

|  |  |  |  |
| --- | --- | --- | --- |
| untitled9 | untitled10 | untitled11 | untitled12 |
| 1 | 2 | 3 | 4 |
| concave | flat | flat convex | convex |

Ad. 42: Corolla: profile of lower part in lateral view

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| 1 | 2 | 3 | 4 |
| concave | flat | flat convex | convex |

Ad. 43: Petal: predominant shape

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| untitled32 | untitled33 | untitled34 | untitled35 | untitled36 | untitled37 |  |
| type 1 | type 2 | type 3 | type 4 | type 5 | type 6 | type 7 |

Ad. 44: Petal: undulation

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 1 | 2 | 3 |
| absent or weak | medium | strong |

Ad. 45: Petal: number of incisions of margin

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 1 | 2 | 3 |
| absent or few | medium | many |

Ad. 46: Petal:  type of incisions of margin

|  |  |  |
| --- | --- | --- |
| 1 | sinuate | untitled40 |
| 2 | crenate | untitled41 |
| 3 | spinose-dentate | untitled42 |
| 4 | dentate | untitled43 |
| 5 | crenate-dentate | untitled44 |

Ad. 47: Petal: depth of incisions of margin

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
| 1 | 3 | 5 | 7 | 9 |
| very shallow | shallow | medium | deep | very deep |

Ad. 52: Petal: width of differently colored margin

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| 1 | 2 | 3 | 4 |
| absent | narrow | medium | broad |

Ad. 53: Petal: number of stripes

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| 1 | 2 | 3 | 4 |
| none | few | medium | many |

Ad. 54: Petal: number of speckles

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  | IMG_1410 |
| 1 | 2 | 3 | 4 |
| none | few | medium | many |

Ad. 55: Petal: area of flush

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| 1 | 2 | 3 | 4 |
| absent | small | medium | large |

Ad. 56: Petal: size of macule

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | kenmerk 56-3 (3) |  |
| 1 | 2 | 3 | 4 |
| absent | small | medium | large |

Ad. 57: Petal: color pattern of tertiary color

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
| 2 | 3 | 4 | 5 | 6 |
| marginated | striped | speckled | flushed | maculated |

Ad. 59: Ovary: shape

|  |  |  |  |
| --- | --- | --- | --- |
|  | ← broadest part → | | |
|  | below middle | at middle | above middle |
| broad (*low)* 🡨 width (ratio length/width) 🡪 narrow (*high*) |  | Kenmerk58-8  4 oblong |  |
| cid:image002.jpg@01CF9CF2.83D951F0  1  ovate | Kenmerk54-1  3  elliptic | Kenmerk52-4  5  obovate |
|  | Kenmerk58-5  2 rhombic |  |

Ad. 60: Ovary: color of base

base

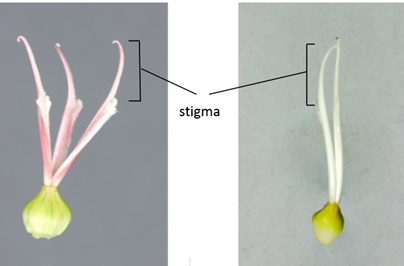


Ad. 64: Style:  shoulder

|  |  |
| --- | --- |
|  | shoulder |
| 1 | 9 |
| absent | present |

# 

Ad. 65: Stigma: color



stigma

## 8.3 Growing types

As explained in Chapter 3.3.2, it may be necessary for separate growing trials to be established for cut flower types, garden types and pot types in order to ensure the satisfactory growth of varieties of those types. The following information is provided with regard to growing conditions for different types of varieties and information which may help in deciding on the type of trial(s) which may be appropriate for a variety:

*Cut flower types (C)*

In general varieties bred as cut flower have the following features:

* not very tolerant to low temperatures: heated greenhouses required for good crop development in temperate zones;
* to grow the varieties properly, sufficient support (horizontal nets) need to be provided

*spray (Cs) and one flower per stem (Co)*

* Breeding is done in a limited gene pool. In general, such types of variety belong to *D. caryophyllus*
* in varieties bred to be grown as one flower per stem carnation, the lateral flower heads or lateral shoots (if existing) are removed at an early stage to leave just the terminal flower head
* most varieties have double flowers

*umbrella (*D. *barbatus) (Cu)*

* All types of varieties belong to *D. barbatus*
* produce clusters of flowers
* most varieties have single flowers

*Garden types (G)*

Breeding is done in a rather large gene pool, in most cases much broader and different from other types. Varieties mainly come from *D. plumarius, D. x allwoodii* and related species. In general, such types of variety have the following features:

* tolerant to lower temperatures in general;
* plants with limited plant height;
* all flower types (single and double) can be seen in garden types;

*Pot types (P)*

Breeding is mainly done in a gene pool which is different from garden types. In general, such types of variety belong to *D. caryophyllus* and have the following features:

* not very tolerant to low temperatures: heated greenhouses required for good crop development in temperate zones;
* concern only types produced in greenhouses or other sheltered conditions;
* plants with limited plant height;
* nearly always have double flowers.

# Literature

Galbally, J., Galbally, E., 1997: Carnations and Pinks. Timber Press Inc., Portland, Oregon,   
ISBN 0-88192-382-6

# Technical Questionnaire

| TECHNICAL QUESTIONNAIRE | | | | | Page {x} of {y} | | Reference Number: | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | |  | |  | | | | | |
|  | | | | |  | | Application date: | | | | | |
|  | | | | |  | | (not to be filled in by the applicant) | | | | | |
| TECHNICAL QUESTIONNAIRE  to be completed in connection with an application for plant breeders’ rights | | | | | | | | | | | | |
|  | | | |  | | | | | |  | | |
| 1. Subject of the Technical Questionnaire | | | | | | | | | | | | |
|  | | | |  | | | | | |  | | |
| 1.1 Genus | | | | | | | | | | | | |
|  | | | | | | | | | | | | |
| 1.1.1 Botanical name | | | | *Dianthus* L. | | | | | |  | | |
|  | | | |  | | | | | |  | | |
| 1.1.2 Common name | | | | Carnation | | | | | |  | | |
|  | | | | | | | | | | | | |
| 1.2 Species | | | | | | | | | | | | |
|  | | | | | | | | | | | | |
| 1.2.1 Botanical name | | | |  | | | | | |  | | |
|  | | | |  | | | | | |  | | |
| 1.2.2 Common name | | | |  | | | | | |  | | |
|  | | | |  | | | | | | | |  |
|  | | | |  | | | | | |  | | |
| 2. Applicant | | | | | | | | | | | | |
|  | | | |  | | | | | |  | | |
| Name | | | |  | | | | | |  | | |
|  | | | |  | | | | | |  | | |
| Address | | | |  | | | | | |  | | |
|  | | | |  | | | | | |  | | |
| Telephone No. | | | |  | | | | | |  | | |
|  | | | |  | | | | | |  | | |
| Fax No. | | | |  | | | | | |  | | |
|  | | | |  | | | | | |  | | |
| E-mail address | | | |  | | | | | |  | | |
|  | | | |  | | | | | |  | | |
| Breeder (if different from applicant) | | | | | | | | | |  | | |
|  | | | |  | | | | | |  | | |
|  | | | |  | | | | | |  | | |
|  | | | |  | | | | | |  | | |
| 3. Proposed denomination and breeder’s reference | | | | | | | | | | | | |
|  | | | |  | | | | | |  | | |
| Proposed denomination | | | |  | | | | | |  | | |
| (if available) | | | |  | | | | | |  | | |
| Breeder’s reference | | | |  | | | | | |  | | |
|  | | | |  | | | | | |  | | |
| [[2]](#footnote-2)#4. Information on the breeding scheme and propagation of the variety  4.1 Breeding scheme  Variety resulting from:  4.1.1 Crossing  (a) controlled cross [ ]  (please state parent varieties)  (…………………..……………..…) x (……………..…………………..…)  female parent male parent  (b) partially known cross [ ]  (please state known parent variety(ies))  (…………………..……………..…) x (……………..…………………..…)  female parent male parent  (c) unknown cross [ ]  4.1.2 Mutation [ ]  (please state parent variety)     |  | | --- | |  |   4.1.3 Discovery and development [ ]  (please state where and when discovered and how developed)   |  | | --- | |  |   4.1.4 Other [ ]  (please provide details)   |  | | --- | |  | | | | | | | | | | | | | |
| 4.2 Method of propagating the variety  4.2.1 Vegetative propagation  (a) cuttings [ ]  (b) *in vitro* propagation [ ]  (c) other (state method) [ ]   |  | | --- | |  |   4.2.2 Seed [ ]  4.2.3 Other [ ]  (please provide details)   |  | | --- | |  | | | | | | | | | | | | | |
| 5. Characteristics of the variety to be indicated (the number in brackets refers to the corresponding characteristic in Test Guidelines; please mark the note which best corresponds). | | | | | | | | | | | | |
|  | Characteristics | | | | | | | Example Varieties | | | Note | |
| **5.1 (2)** | **Plant: height (only for pot and garden types)** | | | | | | |  | | |  | |
|  | very short | | | | | | |  | | | 1 [ ] | |
|  | very short to short | | | | | | |  | | | 2 [ ] | |
|  | short | | | | | | | Hiljoli (P), Shooting Star (G) | | | 3 [ ] | |
|  | short to medium | | | | | | |  | | | 4 [ ] | |
|  | medium | | | | | | | Houndspool Cheryl (G), WP08 IAN04 (G) | | | 5 [ ] | |
|  | medium to tall | | | | | | |  | | | 6 [ ] | |
|  | tall | | | | | | | Devon Wizard (G) | | | 7 [ ] | |
|  | tall to very tall | | | | | | |  | | | 8 [ ] | |
|  | very tall | | | | | | |  | | | 9 [ ] | |
| **5.2 (4)** | **Plant: position of flowers compared to foliage (only for pot and garden types)** | | | | | | |  | | |  | |
|  | same level or slightly above | | | | | | | Coral Reef (G), Hiljoli (P) | | | 1 [ ] | |
|  | moderately above | | | | | | | Houndspool Cheryl (G), Koviol (P) | | | 2 [ ] | |
|  | far above | | | | | | | Waterloo Sunset (G) | | | 3 [ ] | |
| **5.3 (37)** | **Flower: type** | | | | | | |  | | |  | |
|  | single | | | | | | | Calypso Star (G),  Hilbreking (Cu) | | | 1 [ ] | |
|  | double | | | | | | | Sam’s Pride (Cs),  William Sim (Co) | | | 2 [ ] | |
| **5.4 (45)** | **Petal: number of incisions of margin** | | | | | | |  | | |  | |
|  | absent or few | | | | | | | Barmalyn (Cs), Koyevi (Co) | | | 1 [ ] | |
|  | medium | | | | | | | Barlitar (Co) | | | 2 [ ] | |
|  | many | | | | | | | Komari (Co), Martina (Cs), Wesroman (Cs) | | | 3 [ ] | |
|  | Characteristics | | | | | | | Example Varieties | | | Note | |
| **5.5 i (50)** | **Petal: main color** | | | | | | |  | | |  | |
|  | RHS Colour Chart (indicate reference number) | | | | | | |  | | |  | |
| **5.5 ii (50)** | **Petal: main color** | | | | | | |  | | |  | |
|  | white or near white | | | | | | |  | | | 1 [ ] | |
|  | green | | | | | | |  | | | 2 [ ] | |
|  | yellow | | | | | | |  | | | 3 [ ] | |
|  | orange | | | | | | |  | | | 4 [ ] | |
|  | pink | | | | | | |  | | | 5 [ ] | |
|  | medium red | | | | | | |  | | | 6 [ ] | |
|  | dark red | | | | | | |  | | | 7 [ ] | |
|  | violet red | | | | | | |  | | | 8 [ ] | |
|  | purple | | | | | | |  | | | 9 [ ] | |
|  | pink purple | | | | | | |  | | | 10 [ ] | |
|  | purple violet | | | | | | |  | | | 11 [ ] | |
|  | violet | | | | | | |  | | | 12 [ ] | |
|  | brownish | | | | | | |  | | | 13 [ ] | |
| **5.6 i (51)** | | **Petal: secondary color** | | | | | |  | | |  | |
|  | | RHS Colour Chart (indicate reference number) | | | | | |  | | |  | |
| **5.6 ii (51)** | | **Petal: secondary color** | | | | | |  | | |  | |
|  | | none | | | | | |  | | | 1 [ ] | |
|  | | white or near white | | | | | |  | | | 2 [ ] | |
|  | | green | | | | | |  | | | 3 [ ] | |
|  | | yellow | | | | | |  | | | 4 [ ] | |
|  | | orange | | | | | |  | | | 5 [ ] | |
|  | | pink | | | | | |  | | | 6 [ ] | |
|  | | medium red | | | | | |  | | | 7 [ ] | |
|  | | dark red | | | | | |  | | | 8 [ ] | |
|  | | violet red | | | | | |  | | | 9 [ ] | |
|  | | purple | | | | | |  | | | 10 [ ] | |
|  | | pink purple | | | | | |  | | | 11 [ ] | |
|  | | purple violet | | | | | |  | | | 12 [ ] | |
|  | | violet | | | | | |  | | | 13 [ ] | |
|  | | brownish | | | | | |  | | | 14 [ ] | |
|  | | Characteristics | | | | | | Example Varieties | | | Note | |
| **5.7** | | **Petal: color pattern of secondary color (if present)** | | | | | |  | | |  | |
|  | | marginated | | | | | | Hilbreking (Cu), Komari (Co) | | | 1 [ ] | |
|  | | striped | | | | | | Komonte (Co) | | | 2 [ ] | |
|  | | speckled | | | | | | Barlitar (Co), CFPC Aztec (P) | | | 3 [ ] | |
|  | | flushed | | | | | | Antigua (Co), Hilnotre (Co) | | | 4 [ ] | |
|  | | maculated | | | | | | Hilmetal (P) | | | 5 [ ] | |
| 6. Similar varieties and differences from these varieties  *Please use the following table and box for comments to provide information on how your candidate variety differs from the variety (or varieties) which, to the best of your knowledge, is (or are) most similar. This information may help the examination authority to conduct its examination of distinctness in a more efficient way.* | | | | | | | | | | | | |
| Denomination(s) of variety(ies) similar to your candidate variety | | | Characteristic(s) in which your candidate variety differs from the similar variety(ies) | | | Describe the expression of the characteristic(s) for the **similar** variety(ies) | | | Describe the expression of the characteristic(s) for **your** candidate variety | | | |
| *Example* | | | *Flower: color* | | | *orange* | | | *orange red* | | | |
|  | | |  | | |  | | |  | | | |
|  | | |  | | |  | | |  | | | |
|  | | |  | | |  | | |  | | | |
| Comments: | | | | | | | | | | | | |
| [[3]](#footnote-3)#7. Additional information which may help in the examination of the variety  7.1 In addition to the information provided in sections 5 and 6, are there any additional characteristics which may help to distinguish the variety?  Yes [ ] No [ ]  (If yes, please provide details)  7.2 Are there any special conditions for growing the variety or conducting the examination?  Yes [ ] No [ ]  (If yes, please provide details)  7.3 Main use  (a) cut flower  - one flower per stem [ ]  - spray [ ]  - umbrella (D. *barbatus*) [ ] (b) garden plant [ ]  (c) pot plant [ ]  (d) other [ ]  (please provide details)  7.4. A representative color image of the variety should accompany the Technical Questionnaire. | | | | | | | | | | | | |
| 8. Authorization for release  (a) Does the variety require prior authorization for release under legislation concerning the protection of the environment, human and animal health?  Yes [ ] No [ ]  (b) Has such authorization been obtained?  Yes [ ] No [ ]  If the answer to (b) is yes, please attach a copy of the authorization. | | | | | | | | | | | | |
| 9. Information on plant material to be examined or submitted for examination.  9.1 The expression of a characteristic or several characteristics of a variety may be affected by factors, such as pests and disease, chemical treatment (e.g. growth retardants or pesticides), effects of tissue culture, different rootstocks, scions taken from different growth phases of a tree, etc.  9.2 The plant material should not have undergone any treatment which would affect the expression of the characteristics of the variety, unless the competent authorities allow or request such treatment. If the plant material has undergone such treatment, full details of the treatment must be given. In this respect, please indicate below, to the best of your knowledge, if the plant material to be examined has been subjected to:  (a) Microorganisms (e.g. virus, bacteria, phytoplasma) Yes [ ] No [ ]  (b) Chemical treatment (e.g. growth retardant, pesticide) Yes [ ] No [ ]  (c) Tissue culture Yes [ ] No [ ]  (d) Other factors Yes [ ] No [ ]  Please provide details for where you have indicated “yes”.  …………………………………………………………… | | | | | | | | | | | | |
| 10. I hereby declare that, to the best of my knowledge, the information provided in this form is correct:  Applicant’s name  Signature Date | | | | | | | | | | | | |

[End of document]

1. \* These names were correct at the time of the introduction of these Test Guidelines but may be revised or updated. [Readers are advised to consult the UPOV Code, which can be found on the UPOV Website (www.upov.int), for the latest information.] [↑](#footnote-ref-1)
2. # Authorities may allow certain of this information to be provided in a confidential section of the Technical Questionnaire. [↑](#footnote-ref-2)
3. # Authorities may allow certain of this information to be provided in a confidential section of the Technical Questionnaire. [↑](#footnote-ref-3)