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|  | **GREVILLEA**  UPOV Code: GREVI  *Grevillea* R. Br. corr. R. Br. | [[1]](#footnote-1)\* |

**GUIDELINES  
  
FOR THE CONDUCT OF TESTS  
  
FOR DISTINCTNESS, UNIFORMITY AND STABILITY**

prepared by (an) expert(s) from Australia

to be considered by the

Enlarged Editorial Committee at its meeting

to be held in Geneva, on January 6 and 7, 2016

Disclaimer: this document does not represent UPOV policies or guidance

Alternative Names:\*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Botanical name* | *English* | *French* | *German* | *Spanish* |
| *Grevillea* R. Br. corr. R. Br.,  *Grevillea* hybrid, *Grevillea* R. Br | Grevillea | Grevillea | Grevillea | Grevillea |

|  |
| --- |
| 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 *Grevillea* R. Br. corr. R. Br..

# 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.

* 1. The material is to be supplied in the form of plants expressing relevant characteristics of the variety in the first growing cycle.

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

10 plants.

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

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.

## 3.4 Test Design

3.4.1 Each test should be designed to result in a total of at least 10 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 9 plants or parts taken from each of 9 plants and any other observations made on all plants in the test, disregarding any off-type plants. In the case of observations of parts taken from single plants, the number of parts to be taken from each of the plants should be 9.

### 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

* + 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, a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 10 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 seed or 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:

(a) Plant: habit (characteristic 1)

(b) Leaf: division of blade (characteristic 10)

(c) Inflorescence: type (characteristic 33)

(d) Inflorescence: predominant color (characteristic 35)

(e) Perianth: color (characteristic 50)

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”.

# 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.

## 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

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

|  |  | English | français | deutsch | español | Example Varieties Exemples Beispielssorten Variedades ejemplo | Note/ Nota |
| --- | --- | --- | --- | --- | --- | --- | --- |
| (\*) (+) | VG | **Plant: habit** | **Plante: port** | **Pflanze: Wuchsform** | **Planta: hábito** |  |  |
| PQ | (a) | upright | dressé | aufrecht | erguida | Callum’s Gold | 1 |
|  |  | semi upright | demi-dressé | halbaufrecht | semierguida | Honey Gem | 2 |
|  |  | spreading | étalé | breitwüchsig | extendida | Ninderry-Sunrise | 3 |
|  |  | prostrate | rampant | liegend | postrada | Raptor | 4 |
| (\*) | VG/MG | **Plant: height** | **Plante: hauteur** | **Pflanze: Höhe** | **Planta: altura** |  |  |
| QN | (a) | short | courte | niedrig | corta |  | 3 |
|  |  | medium | moyenne | mittel | mediana |  | 5 |
|  |  | tall | haute | hoch | alta |  | 7 |
|  | VG | **Plant: density of foliage** | **Plante: densité du feuillage** | **Pflanze: Dichte des Laubes** | **Planta: densidad del follaje** |  |  |
| QN | (a) | sparse | clairsemée | locker | escaso | Raptor | 1 |
|  |  | medium | moyenne | mittel | medio | Callum’s Gold | 2 |
|  |  | dense | dense | dicht | denso | Billy Bonkers | 3 |
| (+) | VG | **Young stem: color** | **Jeune tige: couleur** | **Jungtrieb: Farbe** | **Tallo joven: color** |  |  |
| PQ | (b) | yellow green | vert jaune | gelbgrün | verde amarillento | Honey Gem | 1 |
|  |  | green | vert | grün | verde | Coastal Prestige, Fireworks | 2 |
|  |  | orange | orange | orange | naranja | Callum’s Gold | 3 |
|  |  | purple | pourpre | purpurn | púrpura | Raptor | 4 |
|  |  | brown | brun | braun | marrón | Autumn Waterfall | 5 |
| (\*) (+) | VG | **Stem: color** | **Tige: couleur** | **Trieb: Farbe** | **Tallo: color** |  |  |
| PQ | (a) | yellow green | vert jaune | gelbgrün | verde amarillento | New Blood | 1 |
|  |  | green | vert | grün | verde | Burke 3 | 2 |
|  |  | orange | orange | orange | naranja | Ninderry-Sunrise | 3 |
|  |  | purple | pourpre | purpurn | púrpura | Callum’s Gold | 4 |
|  |  | brown | brun | braun | marrón | Honey Gem | 5 |
| (+) | VG/MS | **Leaf: length of blade** | **Feuille: longueur du limbe** | **Blatt: Länge der Blattspreite** | **Hoja: longitud del limbo** |  |  |
| QN | (a) | short | court | kurz | corto |  | 3 |
|  |  | medium | moyen | mittel | mediano |  | 5 |
|  |  | long | long | lang | largo |  | 7 |
|  | VG/MS | **Leaf: width of blade** | **Feuille: largeur du limbe** | **Blatt: Breite der Blattspreite** | **Hoja: anchura del limbo** |  |  |
| QN | (a) | narrow | étroit | schmal | estrecho |  | 3 |
|  |  | medium | moyen | mittel | medio |  | 5 |
|  |  | broad | large | breit | ancho |  | 7 |
| (\*) | VG | **Leaf: attitude relative to stem** | **Feuille: orientation par rapport à la tige** | **Blatt: Haltung im Verhältnis zum Trieb** | **Hoja: porte en relación con el tallo** |  |  |
| QN | (a) | erect | dressée | aufrecht | erecta | Raptor | 1 |
|  |  | erect to semi-erect | dressée à demi‑dressée | aufrecht bis halbaufrecht | erecta a semierecta | Honey Gem | 2 |
|  |  | semi erect | demi-dressée | halbaufrecht | semierecta | Callum’s Gold | 3 |
|  |  | semi-erect to horizontal | demi-dressée à horizontale | halbaufrecht bis waagerecht | semierecta a horizontal | Billy Bonkers | 4 |
|  |  | horizontal | horizontale | waagerecht | horizontal | Prostrate Yellow | 5 |
|  | VG | **Leaf: undulation of margin** | **Feuille: ondulation du bord** | **Blatt: Wellung des Randes** | **Hoja: ondulación del borde** |  |  |
| QN | (a) | weak | faible | schwach | débil | Callum’s Gold | 3 |
|  |  | medium | moyenne | mittel | media | Raptor | 5 |
|  |  | strong | forte | stark | fuerte | Entrée | 7 |
| (\*) | VG | **Leaf: division of blade** | **Feuille: division du limbe** | **Blatt: Fiederung der Blattspreite** | **Hoja: división del limbo** |  |  |
| QL | (a) | absent | absente | fehlend | ausente | Fire Cracker | 1 |
|  |  | present | présente | vorhanden | presente | Callum’s Gold | 9 |
| (\*) (+) | VG | **Leaf: blade shape** | **Feuille: forme du limbe** | **Blatt: Form der Blattspreite** | **Hoja: forma del limbo** |  |  |
| PQ | (a) | ovate | ovale | eiförmig | oval | Burke 3 | 1 |
|  |  | lanceolate | lancéolé | lanzettlich | lanceolado | H22 | 2 |
|  |  | circular | circulaire | kreisförmig | circular |  | 3 |
|  |  | rhombic | rhombique | rautenförmig | rómbico | Molly | 4 |
|  |  | elliptic | elliptique | elliptisch | elíptico | TWD01 | 5 |
|  |  | oblong | oblong | breitrund | oblongo |  | 6 |
|  |  | linear | linéaire | linear | lineal | Fire Cracker | 7 |
|  |  | obovate | obovale | verkehrt eiförmig | oboval |  | 8 |
| (\*) (+) | VG | **Leaf: type of division of blade** | **Feuille: type de division du limbe** | **Blatt: Art der Fiederung der Blattspreite** | **Hoja: tipo de división del limbo** |  |  |
| QL | (a) | primary | primaire | primär | primaria | Raptor | 1 |
|  |  | secondary | secondaire | sekundär | secundaria | Autumn Waterfall | 2 |
|  |  | tertiary | tertiaire | tertiär | terciaria | Callum’s Gold | 3 |
| (+) | VG | **Leaf: depth of sinus** | **Feuille: profondeur du sinus** | **Blatt: Tiefe der Buchten** | **Hoja: profundidad de los senos** |  |  |
| QN | (a) | less than one third to midrib | à moins d’un tiers de la nervure médiane | weniger als ein Drittel zur Mittelrippe | menos de un tercio hasta el nervio central |  | 1 |
|  |  | from one to two thirds to midrib | de un tiers à deux tiers de la nervure médiane | ein bis zwei ein Drittel zur Mittelrippe | de uno a dos tercios hasta el nervio central | Bedspread | 2 |
|  |  | greater than two thirds to midrib | à plus des deux tiers de la nervure médiane | über zwei Drittel zur Mittelrippe | más de dos tercios hasta el nervio central | Callum’s Gold | 3 |
| (\*) (+) | VG | **Leaf: number of lobes** | **Feuille: nombre de lobes** | **Blatt: Anzahl Lappen** | **Hoja: número de lóbulos** |  |  |
| QN | (a) | few | petit | niedrig | bajo | Parakeet Pink | 3 |
|  |  | medium | moyen | mittel | medio | Callum’s Gold | 5 |
|  |  | many | grand | hoch | alto | Honey Gem | 7 |
| (+) | VG | **Leaf: attitude of primary lobes in relation to midrib** | **Feuille: port des lobes primaires par rapport à la nervure médiane** | **Blatt: Haltung der Lappen erster Ordnung im Verhältnis zur Mittelrippe** | **Hoja: porte de los lóbulos primarios en relación con el nervio central** |  |  |
| QN | (a) | erect | dressé | aufrecht | erectos |  | 1 |
|  |  | erect to semi-erect | dressé à demi-dressé | aufrecht bis halbaufrecht | erectos a semierectos | Honey Gem | 2 |
|  |  | semi-erect | demi-dressé | halbaufrecht | semierectos | Callum’s Gold | 3 |
|  |  | semi-erect to horizontal | demi-dressé à horizontal | halbaufrecht bis waagerecht | semierectos a horizontales |  | 4 |
|  |  | horizontal | horizontal | waagerecht | horizontales |  | 5 |
| (+) | VG | **Leaf: shape of apex of sinus** | **Feuille: forme de l’apex du sinus** | **Blatt: Form der Spitze der Buchten** | **Hoja: forma del ápice de los senos** |  |  |
| PQ | (a) | pointed | pointu | spitz | puntiagudo | Ninderry-Sunrise | 1 |
|  |  | rounded | arrondi | abgerundet | redondeado |  | 2 |
|  |  | flattened | aplati | abgeflacht | aplanado |  | 3 |
| (+) | VG/MS | **Leaf: width of sinus** | **Feuille: largeur du sinus** | **Blatt: Breite der Buchten** | **Hoja: anchura de los senos** |  |  |
| QN | (a) | very narrow | très étroit | sehr schmal | muy estrechos |  | 1 |
|  |  | narrow | étroit | schmal | estrechos |  | 3 |
|  |  | medium | moyen | mittel | medios | Billy Bonkers | 5 |
|  |  | broad | large | breit | anchos | Callum’s Gold | 7 |
|  |  | very broad | très large | sehr breit | muy anchos |  | 9 |
| (\*) (+) | VG/MS | **Leaf: length of lobe** | **Feuille: longueur du lobe** | **Blatt: Länge des Lappens** | **Hoja: longitud de los lóbulos** |  |  |
| QN | (a) | short | court | kurz | cortos | Autumn Waterfall | 3 |
|  |  | medium | moyen | mittel | medianos | Billy Bonkers | 5 |
|  |  | long | long | lang | largos | Callum’s Gold | 7 |
| (\*) (+) | VG/MS | **Leaf: width of lobe** | **Feuille: largeur du lobe** | **Blatt: Breite des Lappens** | **Hoja: anchura de los lóbulos** |  |  |
| QN | (a) | narrow | étroit | schmal | estrechos | Callum's Gold | 3 |
|  |  | medium | moyen | mittel | medios | Ivory Whip | 5 |
|  |  | broad | large | breit | anchos | Bedspread | 7 |
| (+) | VG | **Leaf: shape of apex** | **Feuille: forme de l’apex** | **Blatt: Form der Spitze** | **Hoja: forma del ápice** |  |  |
| PQ | (a) | acute | aigu | spitz | agudo | Little Honey | 1 |
|  |  | obtuse | obtus | stumpf | obtuso |  | 2 |
|  |  | truncate | tronqué | gerade | truncado |  | 3 |
|  |  | apiculate | apiculé | fein zugespitzt | apiculado | New Blood | 4 |
|  |  | mucronate | mucroné | mit kurzer aufgesetzter Spitze | mucronado | H22 | 5 |
| (+) | VG | **Leaf: profile in cross section** | **Feuille: profil en section transversale** | **Blatt: Profil im Querschnitt** | **Hoja: perfil en sección transversal** |  |  |
| PQ | (a) | flat or slightly recurved | plat ou légèrement incurvé | flach oder leicht zurückgebogen | plana o ligeramente recurvada | Raptor | 1 |
|  |  | strongly recurved | fortement incurvé | stark zurückgebogen | muy recurvada | Callum’s Gold | 2 |
|  |  | angularly revolute to the mid vein | révoluté de façon angulaire jusqu’à la nervure principale | kantig abwärts zur Hauptader gerollt | revoluta angulada hasta el nervio central |  | 3 |
|  |  | smoothly revolute to the mid vein | révoluté de façon lisse jusqu’à la nervure principale | glatt abwärts zur Hauptader gerollt | revoluta lisa hasta el nervio central | Little Honey | 4 |
|  | VG | **Leaf: intensity of green color of upper side** | **Feuille: intensité de la couleur verte de la face supérieure** | **Blatt: Intensität der Grünfärbung der Oberseite** | **Hoja: intensidad del color verde del haz** |  |  |
| QN | (a) | light | claire | hell | claro | Autumn Waterfall | 1 |
|  |  | medium | moyenne | mittel | medio | Raptor | 2 |
|  |  | dark | foncée | dunkel | oscuro | Callum’s Gold | 3 |
| (+) | VG | **Leaf: color of lower side** | **Feuille: couleur de la face inférieure** | **Blatt: Farbe der Unterseite** | **Hoja: color del envés** |  |  |
| PQ | (a) | white | blanche | weiß | blanco | Callum’s Gold | 1 |
|  |  | light green | vert pâle | hellgrün | verde claro | Raptor | 2 |
|  |  | medium green | vert moyen | mittelgrün | verde medio | Ninderry-Sunrise | 3 |
|  |  | dark green | vert foncé | dunkelgrün | verde oscuro |  | 4 |
|  |  | red green | vert-rouge | rotgrün | verde rojizo |  | 5 |
|  | VG | **Leaf: hairiness of upper side** | **Feuille: pilosité de la face supérieure** | **Blatt: Behaarung der Oberseite** | **Hoja: vellosidad del haz** |  |  |
| QN | (a) | weak | faible | schwach | escasa | Ninderry-Sunrise | 1 |
|  |  | medium | moyenne | mittel | media | Callum’s Gold | 2 |
|  |  | strong | forte | stark | abundante |  | 3 |
|  | VG | **Leaf: hairiness of lower side** | **Feuille: pilosité de la face inférieure** | **Blatt: Behaarung der Unterseite** | **Hoja: vellosidad del envés** |  |  |
| QN | (a) | weak | faible | schwach | escasa | Little Honey | 1 |
|  |  | medium | moyenne | mittel | media | Blood Orange | 2 |
|  |  | strong | forte | stark | abundante | Ninderry-Sunrise | 3 |
|  | VG | **Leaf: color of hairs on lower side** | **Feuille: couleur de la pilosité de la face inférieure** | **Blatt: Farbe der Behaarung der Unterseite** | **Hoja: color de la vellosidad del envés** |  |  |
| QL | (a) | white | blanche | weiß | blanca | Callum’s Gold | 1 |
|  |  | red brown | brun-rouge | rotbraun | marrón rojiza | Honey Gem | 2 |
|  | VG/MS | **Leaf: length of petiole** | Feuille: longueur du pétiole | **Blatt: Länge des Blattstiels** | **Hoja: longitud del pecíolo** |  |  |
| QN | (a) | short | court | kurz | corto | Raptor | 3 |
|  |  | medium | moyen | mittel | mediano | Callum’s Gold | 5 |
|  |  | long | long | lang | largo | Red Rover | 7 |
|  | VG | **Flowering branch: position of inflorescence** | **Rameau florifère: position de l'inflorescence** | **Blühender Zweig: Position des Blütenstandes** | **Rama en floración: posición de la inflorescencia** |  |  |
| PQ | (c) | terminal only | seulement terminale | nur terminal | solamente terminal | Ninderry-Sunrise | 1 |
|  |  | both terminal and axillary | terminale et axillaire | sowohl terminal als auch axilar | terminal y axilar | Callum’s Gold | 2 |
|  |  | axillary only | seulement axillaire | nur axilar | solamente axilar |  | 3 |
| (\*) (+) | VG | **Inflorescence: attitude** | **Inflorescence: port** | **Blütenstand: Haltung** | **Inflorescencia: porte** |  |  |
| QN | (c) | erect | dressée | aufrecht | erecta | Red Rover | 1 |
|  |  | semi-erect | demi-dressée | halbaufrecht | semierecta | Honey Gem | 2 |
|  |  | horizontal | horizontale | waagerecht | horizontal | Callum’s Gold | 3 |
|  |  | semi-drooping | demi-retombante | halbüberhängend | semicolgante |  | 4 |
|  |  | drooping | retombante | überhängend | colgante | Entrée | 5 |
|  | VG | **Inflorescence: branching** | **Inflorescence: ramification** | **Blütenstand: Verzweigung** | **Inflorescencia: ramificación** |  |  |
| QN | (c) | absent or very weak | nulle ou très faible | fehlend or sehr schwach | ausente o muy escasa | Ninderry-Sunrise | 1 |
|  |  | weak | faible | schwach | escasa | Red Rover | 2 |
|  |  | medium | moyenne | mittel | media | Autumn Waterfall | 3 |
|  |  | strong | forte | stark | abundante |  | 4 |
| (\*) | VG/MS | **Inflorescence: length** | **Inflorescence: longueur** | **Blütenstand: Länge** | **Inflorescencia: longitud** |  |  |
| QN | (c) | short | courte | kurz | corta | Raptor | 3 |
|  |  | medium | moyenne | mittel | mediana | Callum’s Gold | 5 |
|  |  | long | longue | lang | larga | Autumn Waterfall | 7 |
| (\*) | VG/MS | **Inflorescence: width** | **Inflorescence: largeur** | **Blütenstand: Breite** | **Inflorescencia: anchura** |  |  |
| QN | (c) | narrow | étroite | schmal | estrecha | Raptor | 1 |
|  |  | medium | moyenne | mittel | media | Callum’s Gold | 2 |
|  |  | broad | large | breit | ancha | Red Rover | 3 |
| (\*) (+) | VG | **Inflorescence: type** | **Inflorescence: type** | **Blütenstand: Typ** | **Inflorescencia: tipo** |  |  |
| PQ | (c) | secund | secunde | einseitswendig | unilateral | Ninderry-Sunrise | 1 |
|  |  | irregular | irrégulière | unregelmäßig | irregular | LadyO | 2 |
|  |  | cylindrical | cylindrique | zylindrisch | cilíndrica | Callum’s Gold | 3 |
|  |  | triangular | triangulaire | dreieckig | triangular | Fireworks | 4 |
|  |  | umbellate | ombelle | doldenförmig | umbelada |  | 5 |
|  |  | ovoid | ovoïde | eiförmig | ovoidal |  | 6 |
|  |  | domed | bombée | gewölbt | abovedada | H22 | 7 |
| (\*) (+) | VG | **Inflorescence: sequence of flower opening** | **Inflorescence: séquence de l’ouverture de la fleur** | **Blütenstand: Abfolge des Öffnens der Blüten** | **Inflorescencia: orden de apertura de las flores** |  |  |
| QL | (c) | acropetal | acropète | akropetal | acrópeta | Callum’s Gold | 1 |
|  |  | basipetal | basipète | basipetal | basípeta | Knockout | 2 |
|  |  | synchronous | synchrone | synchron | sincrónica | Coastal Prestige | 3 |
| (\*) | VG | **Inflorescence: predominant color** | **Inflorescence: couleur prédominante** | **Blütenstand: vorwiegende Farbe** | **Inflorescencia: color predominante** |  |  |
| PQ | (c) | white | blanc | weiß | blanco | Ivory Whip | 1 |
|  |  | green | vert | grün | verde |  | 2 |
|  |  | yellow | jaune | gelb | amarillo | Callum’s Gold | 3 |
|  |  | orange | orange | orange | naranja | Ninderry-Sunrise | 4 |
|  |  | pink | rose | rosa | rosa | Blood Orange | 5 |
|  |  | red | rouge | rot | rojo | Raptor | 6 |
|  |  | black | noir | schwarz | negro |  | 7 |
|  | VG | **Inflorescence: density of flowers** | **Inflorescence: densité des fleurs** | **Blütenstand: Dichte der Blüten** | **Inflorescencia: densidad de las flores** |  |  |
| QN | (c) | sparse | clairsemée | locker | baja | Coastal Dawn | 3 |
|  |  | medium | moyenne | mittel | media | Honey Gem | 5 |
|  |  | dense | dense | dicht | alta | Callum’s Gold | 7 |
|  | VG/MG | **Inflorescence: number of flowers** | **Inflorescence: nombre de fleurs** | **Blütenstand: Anzahl der Blüten** | **Inflorescencia: número de flores** |  |  |
| QN | (c) | few | faible | wenige | bajo | Fire Cracker | 3 |
|  |  | medium | moyen | mittel | medio | Raptor | 5 |
|  |  | many | élevé | viele | alto | Red Rover | 7 |
|  | VG/MS | **Rachis: length** | **Rachis: longueur** | **Spindel: Länge** | **Raquis: longitud** |  |  |
| QN | (c) | short | court | kurz | corto | Raptor | 3 |
|  |  | medium | moyen | mittel | mediano | Callum’s Gold | 5 |
|  |  | long | long | lang | largo | Honey Gem | 7 |
| (+) | VG | **Pedicel: attitude in relation to rachis** | **Pédicelle: port par rapport au rachis** | **Blütenstiel: Haltung im Verhältnis zur Spindel** | **Pedicelo: porte en relación con el raquis** |  |  |
| QN | (c) | leaning towards the apex | penché vers l’apex | zur Spitze geneigt | inclinado hacia el ápice | Callum’s Gold | 1 |
|  |  | perpendicular | perpendiculaire | rechtwinklig | perpendicular | Ninderry-Sunrise | 2 |
|  |  | leaning towards the base | penché vers la base | zur Basis geneigt | inclinado hacia la base | Autumn Waterfall | 3 |
|  | VG/MS | **Pedicel: length** | **Pédicelle: longueur** | **Blütenstiel: Länge** | **Pedicelo: longitud** |  |  |
| QN | (c) | very short | très courte | sehr kurz | muy corto |  | 1 |
|  |  | short | courte | kurz | corto | Callum’s Gold | 2 |
|  |  | medium | moyenne | mittel | mediano | Billy Bonkers | 3 |
|  |  | long | longue | lang | largo | Autumn Waterfall | 4 |
| (+) | VG | **Flower bud: attitude of limb in relation to longitudinal axis of bud** | **Bouton floral: port du limbe par rapport à l’axe longitudunal du bouton** | **Blütenknospe: Haltung des Kelchsaumes im Verhältnis zur Längsachse der Knospe** | **Botón floral: porte del limbo en relación con el eje longitudinal del botón** |  |  |
| QN | (d) | upright | dressé | aufrecht | erecto | Ninderry-Sunrise | 1 |
|  |  | horizontal | horizontal | waagerecht | horizontal | New Blood | 2 |
|  |  | drooping | retombant | überhängend | colgante | Callum’s Gold | 3 |
| (\*) | VG | **Flower bud: color of limb** | **Bouton floral: couleur du limbe** | **Blütenknospe: Farbe des Kelchsaumes** | **Botón floral: color del limbo** |  |  |
| PQ | (d) | green | vert | grün | verde | Callum’s Gold | 1 |
|  |  | yellow | jaune | gelb | amarillo | Honey Gem | 2 |
|  |  | orange | orange | orange | naranja | Sylvia | 3 |
|  |  | pink | rose | rosa | rosa |  | 4 |
|  |  | red | rouge | rot | rojo | Raptor | 5 |
|  |  | reddish brown | brun rougeâtre | rötlich braun | marrón rojizo |  | 6 |
|  |  | brown | brun | braun | marrón | New Blood | 7 |
|  |  | black | noir | schwarz | negro |  | 8 |
| (\*) | VG | **Flower bud: perianth color** | **Bouton floral: couleur du périanthe** | **Blütenknospe: Farbe der Blütenhülle** | **Botón floral: color del perianto** |  |  |
| PQ | (d) | white | blanc | weiß | blanco | Ivory Whip | 1 |
|  |  | green | vert | grün | verde | Ninderry-Sunrise | 2 |
|  |  | yellow | jaune | gelb | amarillo | Callum’s Gold | 3 |
|  |  | orange | orange | orange | naranja | Entrée | 4 |
|  |  | pink | rose | rosa | rosa | Molly | 5 |
|  |  | red | rouge | rot | rojo | Raptor | 6 |
|  |  | black | noir | schwarz | negro |  | 7 |
| (\*) | VG/MS | **Perianth: length** | **Périanthe: longueur** | **Blütenhülle: Länge** | **Perianto: longitud** |  |  |
| QN | (c) | short | court | kurz | corto | Raptor | 3 |
|  |  | medium | moyen | mittel | mediano | Callum’s Gold | 5 |
|  |  | long | long | lang | largo | Red Rover | 7 |
| (\*) | VG/MS | **Perianth: width** | **Périanthe: largeur** | **Blütenhülle: Breite** | **Perianto: anchura** |  |  |
| QN | (c) | narrow | étroit | schmal | estrecho | Callum’s Gold | 3 |
|  |  | medium | moyen | mittel | medio | Ninderry-Sunrise | 5 |
|  |  | broad | large | breit | ancho | Entrée | 7 |
| (\*) (+) | VG | **Perianth: hairiness** | **Périanthe: pilosité** | **Blütenhülle: Behaarung** | **Perianto: vellosidad** |  |  |
| QN | (c) | absent or very weak | nulle ou très faible | fehlend or sehr schwach | ausente o muy escasa | Ninderry-Sunrise | 1 |
|  |  | weak | faible | schwach | escasa | Honey Gem | 2 |
|  |  | medium | moyenne | mittel | media | Raptor | 3 |
|  |  | strong | forte | stark | abundante | Callum’s Gold | 4 |
|  | VG | **Perianth: hair color** | **Périanthe: couleur de la pilosité** | **Blütenhülle: Farbe der Behaarung** | **Perianto: color de la vellosidad** |  |  |
| QL | (c) | white | blanc | weiß | blanca | Raptor | 1 |
|  |  | red brown | brun-rouge | rotbraun | marrón rojiza | Callum’s Gold | 2 |
| (+) | VG | **Perianth: coherence of tepals on dorsal side** | **Périanthe: cohérence des tépales dorsaux** | **Blütenhülle: Kohärenz der Perigonbätter auf der Rückenseite** | **Perianto: cohesión de los tépalos de la cara dorsal** |  |  |
| QN | (c) | less than one third | moins d’un tiers | weniger als ein Drittel | menos de un tercio | Ninderry-Sunrise | 1 |
|  |  | one third to two thirds | un tiers à deux tiers | ein Drittel bis zwei Drittel | de un tercio a dos tercios | Molly | 2 |
|  |  | greater than two thirds | plus des deux tiers | mehr als zwei Drittel | más de dos tercios | Callum’s Gold | 3 |
| (+) | VG | **Perianth: coherence of tepals on ventral side** | **Périanthe: cohérence des tépales ventraux** | **Blütenhülle: Kohärenz der Perigonbätter auf der Bauchseite** | **Perianto: cohesión de los tépalos de la cara ventral** |  |  |
| QN | (c) | less than one third | moins d’un tiers | weniger als ein Drittel | menos de un tercio | Ninderry-Sunrise | 1 |
|  |  | one third to two thirds | un tiers à deux tiers | ein Drittel bis zwei Drittel | de un tercio a dos tercios | Molly | 2 |
|  |  | greater than two thirds | plus des deux tiers | mehr als zwei Drittel | más de dos tercios | Callum’s Gold | 3 |
| (\*) (+) | VG | **Perianth: color** | **Périanthe: couleur** | **Blütenhülle: Farbe** | **Perianto: color** |  |  |
| PQ | (c) | white | blanc | weiß | blanco | Ivory Whip | 1 |
|  |  | green | vert | grün | verde | Sandra Gordon | 2 |
|  |  | yellow | jaune | gelb | amarillo | Callum’s Gold | 3 |
|  |  | orange | orange | orange | naranja | Ninderry-Sunrise | 4 |
|  |  | pink | rose | rosa | rosa | Blood Orange | 5 |
|  |  | red | rouge | rot | rojo | Raptor | 6 |
|  |  | black | noir | schwarz | negro |  | 7 |
|  | VG | **Ovary: hairiness** | **Ovaire: pilosité** | **Fruchtknoten: Behaarung** | **Ovario: vellosidad** |  |  |
| QN | (c) | absent or very weak | nulle ou très faible | fehlend or sehr schwach | ausente o muy escasa | Knockout | 1 |
|  |  | weak | faible | schwach | escasa | Jubilee | 2 |
|  |  | medium | moyenne | mittel | media | Raptor | 3 |
|  |  | strong | forte | stark | abundante | Callum’s Gold | 4 |
|  | VG | **Ovary: color** | Ovaire: couleur | **Fruchtknoten: Farbe** | **Ovario: color** |  |  |
| PQ | (c) | white | blanc | weiß | blanco | Raptor | 1 |
|  |  | green | vert | grün | verde | Callum’s Gold | 2 |
|  |  | yellow | jaune | gelb | amarillo | Honey Gem | 3 |
|  |  | orange | orange | orange | naranja |  | 4 |
|  |  | pink | rose | rosa | rosa |  | 5 |
|  |  | red | rouge | rot | rojo |  | 6 |
|  |  | black | noir | schwarz | negro |  | 7 |
| (+) | VG | **Style: curvature** | **Style: courbure** | **Griffel: Biegung** | **Estilo: curvatura** |  |  |
| QN | (c) | straight | droit | gerade | recto | Callum’s Gold | 1 |
|  |  | slightly curved | légèrement courbé | leicht gebogen | ligeramente curvado | Ninderry-Sunrise | 2 |
|  |  | sharply curved | nettement courbé | scharf gebogen | muy curvado | Pink surprise | 3 |
|  | VG | **Style: hairiness** | **Style: pilosité** | **Griffel: Behaarung** | **Estilo: vellosidad** |  |  |
| QN | (c) | absent or weak | nulle ou faible | fehlend or schwach | ausente o escasa | Callum's Gold, Ivory Whip | 1 |
|  |  | medium | moyenne | mittel | media | Entree | 2 |
|  |  | strong | forte | stark | abundante |  | 3 |
|  | VG | **Style: distribution of hair** | **Style: répartition de la pilosité** | **Griffel: Verteilung der Behaarung** | **Estilo: distribución de la vellosidad** |  |  |
| QN | (c) | concentrated towards style end | concentré vers l’extrémité du style | konzentriert zum Griffelende hin | concentrada hacia el extremo del estilo |  | 1 |
|  |  | evenly distributed along length | répartie uniformément sur la longueur | längs gleichmäßig verteilt | distribuida uniformemente a lo largo | Entrée | 2 |
|  |  | concentrated towards ovary end | concentré vers l’extrémité de l’ovaire | konzentriert zum Fruchtknotenende hin | concentrada hacia el extremo del ovario | Ninderry-Sunrise | 3 |
| (\*) | VG | **Style: color** | **Style: couleur** | **Griffel: Farbe** | **Estilo: color** |  |  |
| PQ | (c) | white | blanc | weiß | blanco | Ivory Whip | 1 |
|  |  | green | vert | grün | verde | Misty Pink | 2 |
|  |  | yellow | jaune | gelb | amarillo | Golden Yul-lo | 3 |
|  |  | orange | orange | orange | naranja | Callum’s Gold | 4 |
|  |  | pink | rose | rosa | rosa | Knockout | 5 |
|  |  | red | rouge | rot | rojo | Raptor | 6 |
|  |  | black | noir | schwarz | negro |  | 7 |
|  | VG | **Pistil: length** | **Pistil: longueur** | **Stempel: Länge** | **Pistilo: longitud** |  |  |
| QN | (c) | short | court | kurz | corto | Knockout | 3 |
|  |  | medium | moyen | mittel | mediano | Ninderry-Sunrise | 5 |
|  |  | long | long | lang | largo | Callum’s Gold | 7 |
|  | VG | **Pistil: length in relation perianth** | **Pistil: longueur par rapport au périanthe** | **Stempel: Länge im Verhältnis zur Blütenhülle** | **Pistilo: longitud en relación con el perianto** |  |  |
| QN | (c) | same length | même longueur | gleiche Länge | igual de largo |  | 1 |
|  |  | moderately longer | modérément plus long | mäßig länger | moderadamente más largo | Ivory Whip | 2 |
|  |  | much longer | beaucoup plus long | viel länger | mucho más largo | Callum’s Gold | 3 |
|  | VG | **Stigma: color** | **Stigmates: couleur** | **Narbe: Farbe** | **Estigma: color** |  |  |
| PQ | (c) | white | blanc | weiß | blanco | Knockout | 1 |
|  |  | green | vert | grün | verde | Raptor | 2 |
|  |  | yellow | jaune | gelb | amarillo | Callum’s Gold | 3 |
|  |  | orange | orange | orange | naranja | Jubilee | 4 |
|  |  | pink | rose | rosa | rosa | Billy Bonkers | 5 |
|  |  | red | rouge | rot | rojo | Red Rover | 6 |
|  |  | black | noir | schwarz | negro |  | 7 |
| (\*) (+) | VG | **Pollen presenter: attitude to style** | **Présentateur de pollen: port par rapport au style** | **Pollenträger: Haltung zum Griffel** | **Presentador de polen: posición respecto del estilo** |  |  |
| PQ | (c) | lateral | latéral | seitlich | lateral | Honey Gem | 1 |
|  |  | oblique | oblique | schräg abstehend | oblicuo | Callum’s Gold | 2 |
|  |  | transverse | transversal | quer | transversal |  | 3 |
| (\*) (+) | VG | **Pollen presenter: shape** | **Présentateur de pollen: forme** | **Pollenträger: Form** | **Presentador de polen: forma** |  |  |
| PQ | (c) | domed | bombé | gewölbt | abovedado | Callum’s Gold | 1 |
|  |  | flat | plat | flach | plano | LadyO | 2 |
|  |  | conic | conique | kegelförmig | cónico | Raptor | 3 |
|  |  | cylindric | cylindrique | zylindrisch | cilíndrico | Honey Gem | 4 |
| (\*) | VG | **Pollen presenter: color** | **Présentateur de pollen: couleur** | **Pollenträger: Farbe** | **Presentador de polen: color** |  |  |
| PQ | (c) | white | blanc | weiß | blanco | Billy Bonkers | 1 |
|  |  | green | vert | grün | verde | Raptor | 2 |
|  |  | yellow | jaune | gelb | amarillo | Callum’s Gold | 3 |
|  |  | orange | orange | orange | naranja | Autumn Waterfall | 4 |
|  |  | pink | rose | rosa | rosa | Fireworks | 5 |
|  |  | red | rouge | rot | rojo | LadyO | 6 |
|  |  | black | noir | schwarz | negro |  | 7 |
|  | VG | **Pollen: color** | **Pollen: couleur** | **Pollen: Farbe** | **Polen: color** |  |  |
| PQ | (c) | white | blanc | weiß | blanco | Little Honey | 1 |
|  |  | yellow | jaune | gelb | amarillo | Callum’s Gold | 2 |
|  |  | purple | pourpre | purpurn | púrpura | Raptor | 3 |

# Explanations on the Table of Characteristics

## 8.1 Explanations covering several characteristics

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

(a) The assessment of plant characteristics should be carried out towards the end of active vegetative growth.

(b) Observations on the young stem below the shoot apex should be early in the season during active vegetative growth

(c) Observations on inflorescence and mature flower characteristics should be made on a main flowering branch. Perianth length should be observed from the base to the apex. Perianth width should be observed including the limb.

|  |  |
| --- | --- |
| Grevillea_illust_v2_8_1 | 1 pedicel  2 perianth  3 rachis  4 dorsal tepal  5 ventral tepal  6 ovary  7 style  8 pistil 9 stigma  10 pollen presenter  11 limb |
| 8_1_Inflorescence_DSC05601_V2 | a. inflorescence  b. peduncle  c. rachis |

(d) Observations on flower bud should be made on buds that have just opened.

## 8.2 Explanations for individual characteristics

Ad. 1: Plant: habit

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| 1 | 2 | 3 | 4 |
| upright | semi upright | spreading | prostrate |

Ad. 4: Young stem: color

Sometimes there is a waxy layer covering the stem surface which gives a bluish or whitish appearance. The layer should be removed by rubbing before observing stem color.

Ad. 5: Stem: color

Assessed on side least exposed to sun. Sometimes there is a waxy layer covering the stem surface which gives a bluish or whitish appearance. The layer should be removed by rubbing before observing stem color.

Ad. 6: Leaf: length of blade

Observed on varieties with absent or primary division of leaves only

|  |  |
| --- | --- |
| D:\Users\oertel\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Outlook\GXVSRQ0J\Ad__8_NEW_Leaf length and width (4).jpg | a - leaf length of blade, observed excluding petiole  b - leaf width of blade, observed at widest point |

Ad. 11: Leaf: blade shape

Only leaves with division of blade absent.

|  |  |  |
| --- | --- | --- |
| 🡨 broadest part 🡪 | | |
| below middle | at middle | above middle |
|  |  |  |  |  |
| 🡪 narrow (high) |  |  | 7  linear |  |
| width (ratio length/width) | Ch_20_lanceolate  2  lanceolate | 6  oblong |  |
| 1  ovate | 5  elliptic | 8  obovate |
|  | Ch_20_Rhombic  4  rhombic |  |
| broad (low) 🡨 |  | 3  circular |  |

Ad. 12: Leaf: type of division of blade

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 1 | 2 | 3 |
| primary | secondary | tertiary |

Ad. 13: Leaf: depth of sinus

Varieties with primary division present only.

|  |  |
| --- | --- |
| Alternative text | a: sinus width  b:sinus depth  c: midrib |

Ad. 14: Leaf: number of lobes

Varieties with primary division of blade present only.

Ad. 15: Leaf: attitude of primary lobes in relation to midrib

Only varieties where division of leaf is present.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | | | |
| 1 | 2 | 3 | 4 | 5 |
| erect | erect to  semi-erect | semi-erect | semi-erect to horizontal | horizontal |

Ad. 16: Leaf: shape of apex of sinus

Varieties with primary division present only.

|  |  |  |
| --- | --- | --- |
| ch27_1_pointed | ch27_2_rounded | ch27_3_flattened |
| 1 | 2 | 3 |
| pointed | rounded | flattened |

Ad. 17: Leaf: width of sinus

Observed, at widest point, on varieties with only primary division of blade present.

Ad. 18: Leaf: length of lobe

Varieties with primary division of blade present only.

Ad. 19: Leaf: width of lobe

Varieties with primary division of blade present only.

Ad. 20: Leaf: shape of apex

Observed on varieties with division of blade absent.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Acute | Obtuse | Truncate | Apiculate | Mucronate |
| 1 | 2 | 3 | 4 | 5 |
| acute | obtuse | truncate | apiculate | mucronate |

Ad. 21: Leaf: profile in cross section

|  |  |  |  |
| --- | --- | --- | --- |
| ch12_1_slightly_recurved | ch12_2_moderately recurved | ch12_3_angularly_revolute | ch12_4_smoothly_revolute |
| 1 | 2 | 3 | 4 |
| flat or slightly recurved | strongly recurved | angularly revolute to the mid vein | smoothly revolute to the mid vein |

Ad. 23: Leaf: color of lower side

Overall appearance of color with hairs present.

Ad. 29: Inflorescence: attitude

Observed on natural position on plant.

Ad. 33: Inflorescence: type

|  |  |
| --- | --- |
| Ch36_1_Secund_drawing | Ch36_2_Irregular_drawing |
| 1 | 2 |
| secund | irregular |
| Ch36_3_Cylindric_drawing_2 | Ch36_4_Triangular_drawing |
| 3 | 4 |
| cylindric | triangular |
| Ch36_5_Umbellate_drawing | Ch36_6_Ovoid_drawing |
| 5 | 6 |
| umbellate | ovoid |
| Ch36_7_Domed_drawing |  |
| 7 |  |
| domed |  |

Ad. 34: Inflorescence: sequence of flower opening

Acropetal - flowers open sequentially towards the top of the inflorescence.

Basipetal - flowers open sequentially towards the base of the inflorescence.

Synchronous - flowers open approximately the same time across the length of the inflorescence.

|  |  |  |
| --- | --- | --- |
| Ch38_1 Centripetal - acropetal | Ch38_2 Centrifugal- basipetal | Ch38_3 Synchronous |
| 1 | 2 | 3 |
| acropetal | basipetal | synchronous |

Ad. 39: Pedicel: attitude in relation to rachis

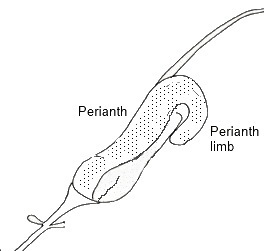
|  |  |  |
| --- | --- | --- |
| ch43_01_leaning away_v1 | ch43_02_perpendicular_v1 | ch43_03_leaning towards_v1 |
| 1 | 2 | 3 |
| leaning towards the apex | perpendicular | leaning towards the base |

Ad. 41: Flower bud: attitude of limb in relation to longitudinal axis of bud

Observed during late bud prior to anthesis.

Ad. 46: Perianth: hairiness

Observed on the outer side of perianth and including limb.



Perianth limb

Perianth

Ad. 48: Perianth: coherence of tepals on dorsal side

Observed as the length of tepal sticking (not fused) to the perianth.

Ad. 49: Perianth: coherence of tepals on ventral side

Observed as the length of tepal sticking (not fused) to the perianth.

Ad. 50: Perianth: color

Observed on open flower.

Ad. 53: Style: curvature

Observed after anthesis before dehiscence of perianth.

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 1 | 2 | 3 |
| straight | slightly curved | sharply curved |

Ad. 60: Pollen presenter: attitude to style

|  |  |  |
| --- | --- | --- |
| Ch67_1 lateral | Ch67_2 oblique | Ch67_3 transverse |
| 1 | 2 | 3 |
| lateral | oblique | transverse |

Ad. 61: Pollen presenter: shape

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| 1 | 2 | 3 | 4 |
| domed | flat | conic | cylindric |

# Literature

McGillivray, D. J.,Makinson, R. O., 1993: Grevillea, Proteaceae: a taxonomic revision. Melbourne University Press at the Miegunyah Press, Carlton, Vic. AU, 465 pp.

# 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 Botanical name | | | *Grevillea* R. Br. corr. R. Br. | | | | | | |  | |
|  | | |  | | | | | | |  | |
| 1.2 Common name | | | Grevillea | | | | | | |  | |
|  | | |  | | | | | | |  | |
| 1.3 Species | | |  | | | | | | |  | |
|  | | |  | | | | | |  | | |
|  | | |  | | | | | | |  | |
| 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 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  (1)** | **Plant: habit** | | | | | |  | | | |  |
|  | upright | | | | | | Callum’s Gold | | | | 1[ ] |
|  | semi upright | | | | | | Honey Gem | | | | 2[ ] |
|  | spreading | | | | | | Ninderry-Sunrise | | | | 3[ ] |
|  | prostrate | | | | | | Raptor | | | | 4[ ] |
| **5.2  (10)** | **Leaf: division of blade** | | | | | |  | | | |  |
|  | absent | | | | | | Fire Cracker | | | | 1[ ] |
|  | present | | | | | | Callum’s Gold | | | | 9[ ] |
| **5.3  (33)** | **Inflorescence: type** | | | | | |  | | | |  |
|  | secund | | | | | | Ninderry-Sunrise | | | | 1[ ] |
|  | irregular | | | | | | LadyO | | | | 2[ ] |
|  | cylindrical | | | | | | Callum’s Gold | | | | 3[ ] |
|  | triangular | | | | | | Fireworks | | | | 4[ ] |
|  | umbellate | | | | | |  | | | | 5[ ] |
|  | ovoid | | | | | |  | | | | 6[ ] |
|  | domed | | | | | | H22 | | | | 7[ ] |
| **5.4  (35)** | **Inflorescence: predominant color** | | | | | |  | | | |  |
|  | white | | | | | | Ivory Whip | | | | 1[ ] |
|  | green | | | | | |  | | | | 2[ ] |
|  | yellow | | | | | | Callum’s Gold | | | | 3[ ] |
|  | orange | | | | | | Ninderry-Sunrise | | | | 4[ ] |
|  | pink | | | | | | Blood Orange | | | | 5[ ] |
|  | red | | | | | | Raptor | | | | 6[ ] |
|  | black | | | | | |  | | | | 7[ ] |
|  | Characteristics | | | | | | Example Varieties | | | | Note |
| **5.5  (50)** | **Perianth: color** | | | | | |  | | | |  |
|  | white | | | | | | Ivory Whip | | | | 1[ ] |
|  | green | | | | | | Sandra Gordon | | | | 2[ ] |
|  | yellow | | | | | | Callum’s Gold | | | | 3[ ] |
|  | orange | | | | | | Ninderry-Sunrise | | | | 4[ ] |
|  | pink | | | | | | Blood Orange | | | | 5[ ] |
|  | red | | | | | | Raptor | | | | 6[ ] |
|  | black | | | | | |  | | | | 7[ ] |
| 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* | | *Inflorescence: predominant color* | | | *yellow* | | | *orange* | | | |
|  | |  | | |  | | |  | | | |
|  | |  | | |  | | |  | | | |
|  | |  | | |  | | |  | | | |
| 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 Other information    7.4 A representative color photograph of the variety displaying its main distinguishing feature(s), should accompany the Technical Questionnaire. The photograph will provide a visual illustration of the candidate variety which supplements the information provided in the Technical Questionnaire.  The key points to consider when taking a photograph of the candidate variety are:   * Indication of the date and geographic location * Correct labeling (breeder’s reference) * Good quality printed photograph (minimum 10 cm x 15 cm) and/or sufficient resolution electronic format version (minimum 960 x 1280 pixels)   Further guidance on providing photographs with the Technical Questionnaire is available in document TGP/7 “Development of Test Guidelines”, Guidance Note 35 (<http://www.upov.int/tgp/en/>).  [The link provided may be deleted by members of the Union when developing authorities’ own test guidelines.] | | | | | | | | | | | |
| 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](http://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)