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

|  |  |  |
| --- | --- | --- |
|  |  | **E** |
|  |   |  |
|  | wordml://75.png |

|  |
| --- |
| **TG/ZINNIA(proj.11)** |
| **ORIGINAL:** English |
| **DATE:** 2022-04-26 |

 |
| **INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS** |
|  | Geneva  |  |
|  |

|  |  |  |
| --- | --- | --- |
|  |   |  |
|  | DRAFT |  |
|  |   |  |

 |  |
|  |   |  |
|  |

|  |
| --- |
|   |
| **ZINNIA** |
|   |
|

|  |
| --- |
|  |
|

|  |
| --- |
| UPOV Code(s): ZINNI\_AEL; ZINNI\_ANG; ZINNI\_ELE; ZINNI\_HAA; ZINNI\_PER |

 |
|  |

 |
|   |
|

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

|  |
| --- |
| *Zinnia* ×*marylandica* D. M. Spooner et al.; *Zinnia angustifolia* Kunth; *Zinnia elegans* Jacq.;*Zinnia haageana* Regel;*Zinnia peruviana* (L.) L. |

 |

 |
|   |

 |

|  |
| --- |
| \* |

 |
|  |   |  |
|

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

 |
|  |   |  |
|

|  |
| --- |
| *prepared by experts from Mexico* |
| *to be considered by the* |
|

|  |
| --- |
| *Technical Committee for adoption by correspondence* |

 |

 |
| *Disclaimer: this document does not represent UPOV policies or guidance* |
|

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

|  |
| --- |
| Alternative names:\* |

 |
|

|  |
| --- |
|  |

 |
| *Botanical name* | *English* | *French* | *German* | *Spanish* |
|

|  |
| --- |
| *Zinnia* ×*marylandica* D. M. Spooner et al. |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
|  |

 |
|

|  |
| --- |
| *Zinnia angustifolia* Kunth, *Zinnia linearis* Benth. |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| Schmalblättrige Zinnie |

 |

|  |
| --- |
| Zinnia Naranja |

 |
|

|  |
| --- |
| *Zinnia elegans* Jacq., *Crassina elegans* (Jacq.) Kuntze, *Zinnia violacea* Cav. |

 |

|  |
| --- |
| Common Zinnia, Elegant Zinnia, Garden Zinnia, Youth-and-age, Youth-and-old-age |

 |

|  |
| --- |
| Zinnia, Zinnia élégant |

 |

|  |
| --- |
| Garten-Zinnie, Pracht-Zinnie, Zinnie |

 |

|  |
| --- |
| Rascamoño, Zinnia, Miguelito |

 |
|

|  |
| --- |
| *Zinnia haageana* Regel |

 |

|  |
| --- |
| Mexican Zinnia |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| Zinnia Mexicana |

 |
|

|  |
| --- |
| *Zinnia peruviana* (L.) L., *Chrysogonum peruvianum* L., *Zinnia multiflora* L., *Zinnia pauciflora* L., *Zinnia tenuiflora* Jacq., *Zinnia verticillata* Andrews |

 |

|  |
| --- |
| Field Zinnia, Peruvian Zinnia, Wild Zinnia |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| Mal de Ojo |

 |

 |
|  |   |  |
| 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. |
|  |

 |

 |

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

|  |  |
| --- | --- |
| TABLE OF CONTENTS | PAGE |
|   |  |
|

|  |  |  |
| --- | --- | --- |
| 1. | SUBJECT OF THESE TEST GUIDELINES.......................................................................................................... | [3](#Section1) |
|  |   |  |
| 2. | MATERIAL REQUIRED......................................................................................................................................... | [3](#Section2) |
|  |   |  |
| 3. | METHOD OF EXAMINATION................................................................................................................................ | [3](#Section3) |
|  |   |  |
|  |

|  |  |  |
| --- | --- | --- |
| 3.1 | Number of Growing Cycles........................................................................................................................ | [3](#Section3-1) |
| 3.2 | Testing Place............................................................................................................................................. | [3](#Section3-2) |
| 3.3 | Conditions for Conducting the Examination............................................................................................... | [3](#Section3-3) |
| 3.4 | Test Design................................................................................................................................................ | [4](#Section3-4) |
| 3.5 | Additional Tests......................................................................................................................................... | [4](#Section3-5) |

 |
|  |   |  |
| 4. | ASSESSMENT OF DISTINCTNESS, UNIFORMITY AND STABILITY................................................................. | [4](#Section4) |
|  |   |  |
|  |

|  |  |  |
| --- | --- | --- |
| 4.1 | Distinctness............................................................................................................................................... | [4](#Section4-1) |
| 4.2 | Uniformity.................................................................................................................................................. | [5](#Section4-2) |
| 4.3 | Stability...................................................................................................................................................... | [5](#Section4-3) |

 |
|  |   |  |
| 5. | GROUPING OF VARIETIES AND ORGANIZATION OF THE GROWING TRIAL................................................ | [6](#Section5) |
|  |   |  |
| 6. | INTRODUCTION TO THE TABLE OF CHARACTERISTICS................................................................................ | [6](#Section6) |
|  |   |  |
|  |

|  |  |  |
| --- | --- | --- |
| 6.1 | Categories of Characteristics..................................................................................................................... | [6](#Section6-1) |
| 6.2 | States of Expression and Corresponding Notes........................................................................................ | [6](#Section6-2) |
| 6.3 | Types of Expression.................................................................................................................................. | [7](#Section6-3) |
| 6.4 | Example Varieties...................................................................................................................................... | [7](#Section6-4) |
| 6.5 | Legend....................................................................................................................................................... | [7](#Section6-5) |

 |
|  |   |  |
| 7. | TABLE OF CHARACTERISTICS/TABLEAU DES CARACTÈRES/MERKMALSTABELLE/TABLA DE CARACTERES...................................................................................................................................................... | [8](#Section7) |
|  |   |  |
| 8. | EXPLANATIONS ON THE TABLE OF CHARACTERISTICS............................................................................... | [17](#Section8) |
|  |

|  |   |  |
| --- | --- | --- |
| 8.1 | Explanations covering several characteristics........................................................................................... | [17](#Section8-1) |
|

|  |
| --- |
| 8.2 |

 | Explanations for individual characteristics................................................................................................. | [17](#Section8-2) |

 |
|  |   |  |
| 9. | LITERATURE......................................................................................................................................................... | [22](#Section9) |
|  |   |  |
| 10. | TECHNICAL QUESTIONNAIRE............................................................................................................................ | [23](#Section10) |
|  |   |  |
|  |

|  |
| --- |
|  |

 |  |

 |

 |

|  |  |
| --- | --- |
| 1. | Subject of these Test Guidelines |
|  |   |
|  |

|  |
| --- |
| These Test Guidelines apply to all varieties of *Zinnia* ×*marylandica* D. M. Spooner et al., *Zinnia angustifolia* Kunth, *Zinnia elegans* Jacq., *Zinnia haageana* Regel and *Zinnia peruviana* (L.) L. |

 |

|  |  |
| --- | --- |
|  |   |
|  |   |
| 2. | 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 seeds. |

 |
|  |   |
| 2.3 |

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

 |
|  |   |
|  |

|  |
| --- |
| Hybrid varieties: a sufficient quantity of seed to produce a minimum of 15 plants.Cross-pollinated varieties: a sufficient quantity of seed to produce a minimum of 40 plants. |

 |
|  |   |
|  | The seed should meet the minimum requirements for germination, species and analytical purity, health and moisture content, specified by the competent authority. In cases where the seed is to be stored, the germination capacity should be as high as possible and should, be stated by the applicant. |
|  |   |
| 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. |

 |

|  |  |
| --- | --- |
|  |   |
|  |   |
| 3. | Method of Examination |
|  |   |
| *3.1* | *Number of Growing Cycles* |
|  |   |
|

|  |
| --- |
| 3.1.1 |

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

|  |
| --- |
| 3.1.2 |

 | The testing of a variety may be concluded when the competent authority can determine with certainty the outcome of the test. |
|  |   |
| *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 |

 | 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 |

 |

|  |
| --- |
| In the case of hybrid varieties, each test should be designed to result in a total of at least 15 plants. |

 |
|  |   |
|

|  |
| --- |
| 3.4.2 |

 |

|  |
| --- |
| In the case of cross-pollinated varieties, each test should be designed to result in a total of at least 40 plants. |

 |

 |
|  |   |
|

|  |
| --- |
|  |

*3.5* | *Additional Tests* |
|  |   |
|  | Additional tests, for examining relevant characteristics, may be established. |

|  |  |
| --- | --- |
|  |   |
|  |   |
| 4. | 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 or Parts of Plants to be Examined |

 |
|  |

|  |
| --- |
|   |
|

|  |
| --- |
| In the case of hybrid varieties, 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 observation made on all plants in the test, disregarding any off-type plants. |

 |
|   |
|

|  |
| --- |
| In the case of cross-pollinated varieties, unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 20 plants or parts taken from each of 20 plants and any other observation 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 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 plantsVS: 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 |

 |

|  |
| --- |
| These Test Guidelines have been developed for the examination of seed-propagated varieties. For varieties with other types of propagation, the recommendations in the General Introduction and document TGP/13 "Guidance for new types and species" Section 4.5 "Testing Uniformity" should be followed. |

 |
|  |   |
|

|  |
| --- |
| 4.2.3 |

 | The assessment of uniformity for cross-pollinated should be according to the recommendations for cross-pollinated varieties in the General Introduction. |
|  |   |
| 4.2.4 |

|  |
| --- |
| For the assessment of uniformity of hybrid 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 15 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 stock to ensure that it exhibits the same characteristics as those shown by the initial material supplied.  |

|  |  |
| --- | --- |
| 5. | 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: growth habit (characteristic 1) |

 |
|

|  |
| --- |
| (b) |

 |  |

|  |
| --- |
| Plant: height (characteristic 2) |

 |
|

|  |
| --- |
| (c) |

 |  |

|  |
| --- |
| Flower head: type (characteristic 16) |

 |
|

|  |
| --- |
| (d) |

 |  |

|  |
| --- |
| Ray floret: main color (characteristic 28) with the following groups:Gr. 1: whiteGr. 2: greenGr. 3: yellowGr. 4: orangeGr. 5: pinkGr. 6: redGr. 7: purpleGr. 8: violet |

 |
|

|  |
| --- |
| (e) |

 |  |

|  |
| --- |
| Only varieties with Flower head: type: single or semi-double: Disc: color (characteristic 35) |

 |
|

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

|  |
| --- |
|  |

 |

 |

 |
| 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”. |

|  |  |
| --- | --- |
|  |   |
|  |   |
| 6. | 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 | All relevant states of expression are presented in the characteristic. |
|  |   |
| 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* |
|  |   |
|

|  |  | English | français | deutsch | español | Example VarietiesExemplesBeispielssortenVariedades ejemplo  | Note/Nota |
| --- | --- | --- | --- | --- | --- | --- | --- |
|

|  |
| --- |
| **1** |

 |

|  |
| --- |
| **2** |

 |

|  |
| --- |
| **3** |

 |

|  |
| --- |
| **4** |

 |

|  |
| --- |
| **5** |

 |

|  |
| --- |
| **6** |

 |

|  |
| --- |
| **7** |

 |
|  |  |

|  |
| --- |
| **Name of characteristics in English** |

 |

|  |
| --- |
| **Nom du caractère en français** |

 |

|  |
| --- |
| **Name des Merkmals auf Deutsch** |

 |

|  |
| --- |
| **Nombre del carácter en español** |

 |  |  |
|  |  |

|  |
| --- |
| states of expression |

 |

|  |
| --- |
| types d’expression |

 |

|  |
| --- |
| Ausprägungsstufen |

 |

|  |
| --- |
| tipos de expresión |

 |

|  |
| --- |
|  |

 |  |
|  |  |  |   |  |  |  |  |  |  |

 |
|

|  |  |
| --- | --- |
| 1 | Characteristic number |
|  |   |  |  |
| 2 | (\*) | Asterisked characteristic | – see Chapter 6.1.2 |
|  |   |  |  |
| 3 | Type of expression |
|  | QL | Qualitative characteristic | – see Chapter 6.3 |
|  | QN | Quantitative characteristic | – see Chapter 6.3 |
|  | PQ | Pseudo-qualitative characteristic | – see Chapter 6.3 |
|  |   |  |  |
| 4 | Method of observation (and type of plot, if applicable) |
|  | MG, MS, VG, VS  | – see Chapter 4.1.5 |
|  |   |  |  |
| 5 |

|  |
| --- |
| (+) |

 |

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

|  |
| --- |
| See Explanations on the Table of Characteristics in Chapter 8.2 |

 |

 |
|  |   |  |  |
| 6 |

|  |
| --- |
| (a)-(c) |

 |

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

|  |
| --- |
| See Explanations on the Table of Characteristics in Chapter 8.1 |

 |

 |
|  |   |  |  |
| 7 |

|  |
| --- |
| Not applicable |

 |

 |

|  |  |
| --- | --- |
| 7. | Table of Characteristics/Tableau des caractères/Merkmalstabelle/Tabla de caracteres |
|  |   |

|  |  | English | français | deutsch | español | Example VarietiesExemplesBeispielssortenVariedades ejemplo  | Note/Nota |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **1.** | **(\*)** | **PQ** | **VG** | **(+)** |  |  |
|  |  |

|  |
| --- |
| **Plant: growth habit** |

 |

|  |
| --- |
| **Plante : port** |

 |

|  |
| --- |
| **Pflanze: Wuchsform** |

 |

|  |
| --- |
| **Planta: hábito de crecimiento** |

 |  |  |
|  |  | upright | dressé | aufrecht | erecto | Peppermint Stick | 1 |
|  |  | semi-upright | demi-dressé | halbaufrecht | semierecto | Profusion Red | 2 |
|  |  | spreading | étalé | breitwüchsig | extendido | Solcito | 3 |
| **2.** | **(\*)** | **QN** | **MG/MS/VG** |  |  |  |
|  |  |

|  |
| --- |
| **Plant: height** |

 |

|  |
| --- |
| **Plante : hauteur** |

 |

|  |
| --- |
| **Pflanze: Höhe** |

 |

|  |
| --- |
| **Planta: altura** |

 |  |  |
|  |  | very short | très basse | sehr niedrig | muy baja |  | 1 |
|  |  | very short to short | très basse à basse | sehr niedrig bis niedrig | muy baja a baja |  | 2 |
|  |  | short | basse | niedrig | baja | Profusion Red | 3 |
|  |  | short to medium | basse à moyenne | niedrig bis mittel | baja a media |  | 4 |
|  |  | medium | moyenne | mittel | media | Witworna | 5 |
|  |  | medium to tall | moyenne à haute | mittel bis hoch | media a alta |  | 6 |
|  |  | tall | haute | hoch | alta | Inca, Peppermint Stick | 7 |
|  |  | tall to very tall | haute à très haute | hoch bis sehr hoch | alta a muy alta |  | 8 |
|  |  | very tall | très haute | sehr hoch | muy alta |  | 9 |
| **3.** | **(\*)** | **QN** | **VG** | **(+)** |  |  |
|  |  |

|  |
| --- |
| **Plant: density of branches** |

 |

|  |
| --- |
| **Plante : densité des ramifications** |

 |

|  |
| --- |
| **Pflanze: Dichte der Triebe** |

 |

|  |
| --- |
| **Planta: densidad de las ramas** |

 |  |  |
|  |  | very sparse | très faible | sehr locker | muy escasa | Witworna | 1 |
|  |  | sparse | faible | locker | escasa |  | 2 |
|  |  | medium | moyenne | mittel | media | Peppermint Stick | 3 |
|  |  | dense | forte | dicht | densa |  | 4 |
|  |  | very dense | très forte | sehr dicht | muy densa | Profusion Red | 5 |
| **4.** |  | **QN** | **VG** | **(+)** |  |  |
|  |  |

|  |
| --- |
| **Stem: density of pubescence** |

 |

|  |
| --- |
| **Tige : densité de la pilosité** |

 |

|  |
| --- |
| **Stängel: Dichte der Behaarung** |

 |

|  |
| --- |
| **Tallo: densidad de la pubescencia** |

 |  |  |
|  |  | absent or very sparse | absente ou très lâche | fehlend oder sehr locker | ausente o muy escasa | Zestr | 1 |
|  |  | sparse | lâche | locker | escasa |  | 2 |
|  |  | medium | moyenne | mittel | media | Uproar | 3 |
|  |  | dense | dense | dicht | densa |  | 4 |
|  |  | very dense | très dense | sehr dicht | muy densa | Short Stuff Coral | 5 |
| **5.** | **(\*)** | **QN** | **VG** | **(+)** |  |  |
|  |  |

|  |
| --- |
| **Stem: anthocyanin coloration** |

 |

|  |
| --- |
| **Tige : pigmentation anthocyanique** |

 |

|  |
| --- |
| **Stängel: Anthocyanfärbung** |

 |

|  |
| --- |
| **Tallo: pigmentación antociánica** |

 |  |  |
|  |  | absent or very weak | nulle ou très faible | fehlend oder sehr gering | ausente o muy débil | Profusion Fire | 1 |
|  |  | weak | faible | gering | débil | Lilliput Salmon | 2 |
|  |  | medium | moyenne | mittel | media | Profusion Red | 3 |
|  |  | strong | forte | stark | fuerte |  | 4 |
|  |  | very strong | très forte | sehr stark | muy fuerte |  | 5 |
| **6.** | **(\*)** | **QN** | **MG/MS/VG** |  | **(a)** |  |
|  |  |

|  |
| --- |
| **Leaf: length** |

 |

|  |
| --- |
| **Feuille : longueur** |

 |

|  |
| --- |
| **Blatt: Länge** |

 |

|  |
| --- |
| **Hoja: longitud** |

 |  |  |
|  |  | very short | très courte | sehr kurz | muy corta | Zinnita | 1 |
|  |  | short | courte | kurz | corta |  | 2 |
|  |  | medium | moyenne | mittel | media | Zahara Double Cherry | 3 |
|  |  | long | longue | lang | larga |  | 4 |
|  |  | very long | très longue | sehr lang | muy larga | State Fair | 5 |
| **7.** | **(\*)** | **QN** | **MG/MS/VG** |  | **(a)** |  |
|  |  |

|  |
| --- |
| **Leaf: width** |

 |

|  |
| --- |
| **Feuille : largeur** |

 |

|  |
| --- |
| **Blatt: Breite** |

 |

|  |
| --- |
| **Hoja: anchura** |

 |  |  |
|  |  | very narrow | très étroite | sehr schmal | muy estrecha | Starbright | 1 |
|  |  | narrow | étroite | schmal | estrecha |  | 2 |
|  |  | medium | moyenne | mittel | media | Yellow Flame | 3 |
|  |  | broad | large | breit | ancha |  | 4 |
|  |  | very broad | très large | sehr breit | muy ancha | Short Stuff Coral | 5 |
| **8.** | **(\*)** | **QN** | **MG/MS/VG** | **(+)** | **(a)** |  |
|  |  |

|  |
| --- |
| **Leaf: length/width ratio** |

 |

|  |
| --- |
| **Feuille : rapport longueur/largeur** |

 |

|  |
| --- |
| **Blatt: Verhältnis Länge/Breite** |

 |

|  |
| --- |
| **Hoja: relación longitud/anchura** |

 |  |  |
|  |  | very low | très bas | sehr klein | muy baja | Crystal Yellow | 1 |
|  |  | low | bas | klein | baja |  | 2 |
|  |  | medium | moyen | mittel | media |  | 3 |
|  |  | high | élevé | groß | alta |  | 4 |
|  |  | very high | très élevé | sehr groß | muy alta | Dreamland rose | 5 |
| **9.** |  | **QN** | **VG** |  | **(a)** |  |
|  |  |

|  |
| --- |
| **Leaf: position of broadest part** |

 |

|  |
| --- |
| **Feuille : position de la partie la plus large** |

 |

|  |
| --- |
| **Blatt: Position des breitesten Teils** |

 |

|  |
| --- |
| **Hoja: posición de la parte más ancha** |

 |  |  |
|  |  | at base | à la base | an der Basis | en la base | Dreamland rose | 1 |
|  |  | at middle | au milieu | in der Mitte | en la mitad | Swizzle Cherry Ivory | 2 |
|  |  | towards apex | vers l’apex | zum Apex hin | cerca del ápice | Oklahoma Salmon | 3 |
| **10.** | **(\*)** | **QN** | **VG** | **(+)** | **(a)** |  |
|  |  |

|  |
| --- |
| **Leaf: profile in cross section** |

 |

|  |
| --- |
| **Feuille : profil en section transversale** |

 |

|  |
| --- |
| **Blatt: Profil im Querschnitt** |

 |

|  |
| --- |
| **Hoja: perfil en sección transversal** |

 |  |  |
|  |  | flat | plane | flach | plano | Profusion Knee High Red | 1 |
|  |  | moderately concave | modérément concave | mäßig konkav | moderadamente cóncavo | Lilliput Salmon | 2 |
|  |  | strongly concave | fortement concave | stark konkav | muy cóncavo | State Fair | 3 |
| **11.** |  | **QN** | **VG** | **(+)** | **(a)** |  |
|  |  |

|  |
| --- |
| **Leaf: undulation of margin** |

 |

|  |
| --- |
| **Feuille : ondulation du bord** |

 |

|  |
| --- |
| **Blatt: Randwellung** |

 |

|  |
| --- |
| **Hoja: ondulación del borde** |

 |  |  |
|  |  | absent or weak | nulle ou faible | fehlend oder gering | ausente o débil |  | 1 |
|  |  | medium | moyenne | mittel | media |  | 2 |
|  |  | strong | forte | stark | fuerte |  | 3 |
| **12.** |  | **QN** | **VG** | **(+)** | **(a)** |  |
|  |  |

|  |
| --- |
| **Leaf: intensity of green color** |

 |

|  |
| --- |
| **Feuille : intensité de la couleur verte** |

 |

|  |
| --- |
| **Blatt: Intensität der Grünfärbung** |

 |

|  |
| --- |
| **Hoja: intensidad del color verde** |

 |  |  |
|  |  | very light | très claire | sehr hell | muy clara |  | 1 |
|  |  | light | claire | hell | clara | Oklahoma Salmon | 2 |
|  |  | medium | moyenne | mittel | media |  | 3 |
|  |  | dark | foncée | dunkel | oscura | Starbright | 4 |
|  |  | very dark | très foncée | sehr dunkel | muy oscura |  | 5 |
| **13.** | **(\*)** | **QN** | **VG** | **(+)** | **(a)** |  |
|  |  |

|  |
| --- |
| **Leaf: area of anthocyanin coloration at base** |

 |

|  |
| --- |
| **Feuille : surface de la pigmentation anthocyanique à la base** |

 |

|  |
| --- |
| **Blatt: Fläche der Anthocyanfärbung an der Basis** |

 |

|  |
| --- |
| **Hoja: superficie de la pigmentación antociánica en la base** |

 |  |  |
|  |  | absent or small | absente ou petite | fehlend oder klein | ausente o pequeña | Oklahoma Salmon | 1 |
|  |  | small to medium | petite à moyenne | klein bis mittel | pequeña a media |  | 2 |
|  |  | medium | moyenne | mittel | media | Uproar Rose | 3 |
|  |  | medium to large | moyenne à grande | mittel bis groß | media a grande |  | 4 |
|  |  | large | grande | groß | grande | State Fair | 5 |
| **14.** | **(\*)** | **QN** | **MG/MS/VG** |  |  |  |
|  |  |

|  |
| --- |
| **Peduncle: length** |

 |

|  |
| --- |
| **Pédoncule : longueur** |

 |

|  |
| --- |
| **Blütenstandsstiel: Länge** |

 |

|  |
| --- |
| **Pedúnculo: longitud** |

 |  |  |
|  |  | short | courte | kurz | corta | Zahara Coral Rose | 1 |
|  |  | short to medium | courte à moyenne | kurz bis mittel | corta a media |  | 2 |
|  |  | medium | moyenne | mittel | media | Witworna | 3 |
|  |  | medium to long | moyenne à longue | mittel bis lang | media a larga |  | 4 |
|  |  | long | longue | lang | larga | Uproar Rose | 5 |
| **15.** |  | **QN** | **VG** |  |  |  |
|  |  |

|  |
| --- |
| **Flower head: position in relation to foliage** |

 |

|  |
| --- |
| **Capitule : position par rapport au feuillage** |

 |

|  |
| --- |
| **Blütenstand: Position im Verhältnis zum Laub** |

 |

|  |
| --- |
| **Capítulo: posición en relación con el follaje** |

 |  |  |
|  |  | below | en dessous | unterhalb | por debajo | Short Stuff Scarlet | 1 |
|  |  | same level | au même niveau | auf gleicher Höhe | al mismo nivel | Swizzle Cherry Ivory | 2 |
|  |  | moderately above | modérément au-dessus | mäßig oberhalb | moderadamente por encima | Inca | 3 |
|  |  | highly above | bien au-dessus | weit oberhalb | muy por encima | Oklahoma Salmon | 4 |
| **16.** | **(\*)** | **PQ** | **VG** | **(+)** |  |  |
|  |  |

|  |
| --- |
| **Flower head: type** |

 |

|  |
| --- |
| **Capitule : type** |

 |

|  |
| --- |
| **Blütenstand: Typ** |

 |

|  |
| --- |
| **Capítulo: tipo** |

 |  |  |
|  |  | single | simple | einfach | sencillo | Star Gold, Crystal Yellow | 1 |
|  |  | semi-double | semi-double | halbgefüllt | semidoble | Profusion Red, Yellow Flame | 2 |
|  |  | double | double | gefüllt | doble | Swizzle Scarlet Yellow, Lilliput Salmon | 3 |
| **17.** | **(\*)** | **QL** | **VG** |  |  |  |
|  |  |

|  |
| --- |
| **Only varieties with Flower head: type: single or semi-double Flower head: Disc: type** |

 |

|  |
| --- |
| **Variétés à type de capitule simple ou semi-double seulement : Disque : type** |

 |

|  |
| --- |
| **Nur Sorten mit Blütenstand: Typ: einfacher oder halbgefüllter Blütenstand: Scheibe: Typ** |

 |

|  |
| --- |
| **Solo variedades con Capítulo: tipo: sencillo o semidoble: Disco: tipo** |

 |  |  |
|  |  | daisy | marguerite | margeritenförmig | margarita | Crystal Yellow | 1 |
|  |  | anemone | anémone | anemonenförmig | anémona | Zinderella Lilac | 2 |
| **18.** | **(\*)** | **QN** | **MG/MS/VG** |  |  |  |
|  |  |

|  |
| --- |
| **Flower head: diameter** |

 |

|  |
| --- |
| **Capitule : diamètre** |

 |

|  |
| --- |
| **Blütenstand: Durchmesser** |

 |

|  |
| --- |
| **Capítulo: diámetro** |

 |  |  |
|  |  | very small | très petit | sehr klein | muy pequeño |  | 1 |
|  |  | very small to small | très petit à petit | sehr klein bis klein | muy pequeño a pequeño |  | 2 |
|  |  | small | petit | klein | pequeño | Lilliput Salmon | 3 |
|  |  | small to medium | petit à moyen | klein bis mittel | pequeño a medio |  | 4 |
|  |  | medium | moyen | mittel | medio | Oklahoma Salmon, Crystal Yellow | 5 |
|  |  | medium to large | moyen à grand | mittel bis groß | medio a grande |  | 6 |
|  |  | large | grand | groß | grande | Inca | 7 |
|  |  | large to very large | grand à très grand | groß bis sehr groß | grande a muy grande |  | 8 |
|  |  | very large | très grand | sehr groß | muy grande |  | 9 |
| **19.** | **(\*)** | **QN** | **MG/MS/VG** |  |  |  |
|  |  |

|  |
| --- |
| **Flower head: number of ray florets** |

 |

|  |
| --- |
| **Capitule : nombre de fleurs ligulées** |

 |

|  |
| --- |
| **Blütenstand: Anzahl Zungenblüten** |

 |

|  |
| --- |
| **Capítulo: número de flores liguladas** |

 |  |  |
|  |  | very few | très petit | sehr gering | muy bajo | Star Gold, Crystal Yellow | 1 |
|  |  | very few to few | très petit à petit | sehr gering bis gering | muy bajo a bajo |  | 2 |
|  |  | few | petit | gering | bajo | Profusion Red | 3 |
|  |  | few to medium | petit à moyen | gering bis mittel | bajo a medio |  | 4 |
|  |  | medium | moyen | mittel | medio | Zowwie Yellow Flame | 5 |
|  |  | medium to many | moyen à grand | mittel bis hoch | medio a alto |  | 6 |
|  |  | many | grand | hoch | alto | Uproar Rose | 7 |
|  |  | many to very many | grand à très grand | hoch bis sehr hoch | alto a muy alto |  | 8 |
|  |  | very many | très grand | sehr hoch | muy alto | Swizzle Scarlet Yellow | 9 |
| **20.** | **(\*)** | **QN** | **MG/MS/VG** |  | **(b)** |  |
|  |  |

|  |
| --- |
| **Ray floret: length** |

 |

|  |
| --- |
| **Fleur ligulée : longueur** |

 |

|  |
| --- |
| **Zungenblüte: Länge** |

 |

|  |
| --- |
| **Flor ligulada: longitud** |

 |  |  |
|  |  | very short | très courte | sehr kurz | muy corta |  | 1 |
|  |  | very short to short | très courte à courte | sehr kurz bis kurz | muy corta a corta |  | 2 |
|  |  | short | courte | kurz | corta | Lilliput Salmon | 3 |
|  |  | short to medium | courte à moyenne | kurz bis mittel | corta a media |  | 4 |
|  |  | medium | moyenne | mittel | media | Peppermint Stick, Profusion Knee | 5 |
|  |  | medium to long | moyenne à longue | mittel bis lang | media a larga |  | 6 |
|  |  | long | longue | lang | larga | Inca | 7 |
|  |  | long to very long | longue à très longue | lang bis sehr lang | larga a muy larga |  | 8 |
|  |  | very long | très longue | sehr lang | muy larga |  | 9 |
| **21.** | **(\*)** | **QN** | **MG/MS/VG** |  | **(b)** |  |
|  |  |

|  |
| --- |
| **Ray floret: width** |

 |

|  |
| --- |
| **Fleur ligulée : largeur** |

 |

|  |
| --- |
| **Zungenblüte: Breite** |

 |

|  |
| --- |
| **Flor ligulada: anchura** |

 |  |  |
|  |  | very narrow | très étroite | sehr schmal | muy estrecha | Star Starbright | 1 |
|  |  | narrow | étroite | schmal | estrecha |  | 2 |
|  |  | medium | moyenne | mittel | media | Ruffles | 3 |
|  |  | broad | large | breit | ancha |  | 4 |
|  |  | very broad | très large | sehr breit | muy ancha | Inca | 5 |
| **22.** | **(\*)** | **QN** | **MG/MS/VG** |  | **(b)** |  |
|  |  |

|  |
| --- |
| **Ray floret: length/width ratio** |

 |

|  |
| --- |
| **Fleur ligulée : rapport longueur/largeur** |

 |

|  |
| --- |
| **Zungenblüte: Verhältnis Länge/Breite** |

 |

|  |
| --- |
| **Flor ligulada: relación longitud/anchura** |

 |  |  |
|  |  | very low | très bas | sehr klein | muy baja | Profusion Knee High Red | 1 |
|  |  | low | bas | klein | baja |  | 2 |
|  |  | medium | moyen | mittel | media | Ruffles | 3 |
|  |  | high | élevé | groß | alta |  | 4 |
|  |  | very high | très élevé | sehr groß | muy alta | Swizzle Scarlet Yellow | 5 |
| **23.** |  | **QN** | **VG** | **(+)** | **(b)** |  |
|  |  |

|  |
| --- |
| **Ray floret: profile in cross section** |

 |

|  |
| --- |
| **Fleur ligulée : profil en section transversale** |

 |

|  |
| --- |
| **Zungenblüte: Profil im Querschnitt** |

 |

|  |
| --- |
| **Flor ligulada: perfil de la sección transversal** |

 |  |  |
|  |  | strongly concave | fortement concave | stark konkav | muy cóncavo |  | 1 |
|  |  | weakly concave | légèrement concave | schwach konkav | débilmente cóncavo |  | 2 |
|  |  | flat | plane | flach | plano |  | 3 |
|  |  | weakly convex | légèrement convexe | schwach konvex | débilmente convexo |  | 4 |
|  |  | strongly convex | fortement convexe | stark konvex | muy convexo |  | 5 |
| **24.** | **(\*)** | **PQ** | **VG** | **(+)** | **(b)** |  |
|  |  |

|  |
| --- |
| **Ray floret: curvature of longitudinal axis** |

 |

|  |
| --- |
| **Fleur ligulée : courbure de l’axe longitudinal** |

 |

|  |
| --- |
| **Zungenblüte: Biegung der Längsachse** |

 |

|  |
| --- |
| **Flor ligulada: curvatura del eje longitudinal** |

 |  |  |
|  |  | incurving | incurvée | aufgebogen | incurvada |  | 1 |
|  |  | straight | droite | gerade | recta |  | 2 |
|  |  | reflexing | récurvée | zurückgebogen | curvada hacia abajo |  | 3 |
|  |  | twisted | torsadée | gedreht | retorcida |  | 4 |
| **25.** |  | **QN** | **VG** | **(+)** | **(b)** |  |
|  |  |

|  |
| --- |
| **Ray floret: part of axis curved** |

 |

|  |
| --- |
| **Fleur ligulée : partie de l’axe courbé** |

 |

|  |
| --- |
| **Zungenblüte: gebogener Teil der Achse** |

 |

|  |
| --- |
| **Flor ligulada: parte del eje curvado** |

 |  |  |
|  |  | distal quarter | quart distal | distales Viertel | en el cuarto distal |  | 1 |
|  |  | distal half | moitié distale | distale Hälfte | en la mitad distal |  | 2 |
|  |  | distal three quarters | trois quarts distaux | distale drei Viertel | en los tres cuartos distales |  | 3 |
| **26.** |  | **QN** | **VG** |  | **(b)** |  |
|  |  |

|  |
| --- |
| **Ray floret: degree of curvature** |

 |

|  |
| --- |
| **Fleur ligulée : degré de la courbure** |

 |

|  |
| --- |
| **Zungenblüte: Stärke der Biegung** |

 |

|  |
| --- |
| **Flor ligulada: grado de la curvatura** |

 |  |  |
|  |  | very weak | très faible | sehr gering | muy baja |  | 1 |
|  |  | weak | faible | gering | baja | Uproar Rose | 2 |
|  |  | medium | moyenne | mittel | media | Swizzle Cherry Ivory | 3 |
|  |  | strong | forte | stark | fuerte | Inca | 4 |
|  |  | very strong | très forte | sehr stark | muy fuerte |  | 5 |
| **27.** | **(\*)** | **PQ** | **VG** | **(+)** | **(b)** |  |
|  |  |

|  |
| --- |
| **Ray floret: shape of apex** |

 |

|  |
| --- |
| **Fleur ligulée : forme de l’apex** |

 |

|  |
| --- |
| **Zungenblüte: Form der Spitze** |

 |

|  |
| --- |
| **Flor ligulada: forma del ápice** |

 |  |  |
|  |  | acute | aigue | spitz | aguda |  | 1 |
|  |  | rounded | arrondie | abgerundet | redondeada |  | 2 |
|  |  | truncate | tronquée | gerade | truncada |  | 3 |
|  |  | emarginate | émarginée | eingekerbt | emarginada |  | 4 |
|  |  | dentate | dentée | gezähnt | dentada |  | 5 |
|  |  | mucronate | mucronée | mit kurzer aufgesetzter Spitze | mucronada |  | 6 |
| **28.** | **(\*)** | **PQ** | **VG** |  | **(b), (c)** |  |
|  |  |

|  |
| --- |
| **Ray floret: main color**  |

 |

|  |
| --- |
| **Fleur ligulée : couleur principale** |

 |

|  |
| --- |
| **Zungenblüte: Hauptfarbe**  |

 |

|  |
| --- |
| **Flor ligulada: color principal**  |

 |  |  |
|  |  | RHS Colour Chart (indicate reference number) | Code RHS des couleurs (indiquer le numéro de référence) | RHS-Farbkarte (Nummer angeben) | Carta de colores RHS (indíquese el número de referencia) |  |  |
| **29.** |  | **PQ** | **VG** |  | **(c)** |  |
|  |  |

|  |
| --- |
| **Ray floret: secondary color**  |

 |

|  |
| --- |
| **Fleur ligulée : couleur secondaire**  |

 |

|  |
| --- |
| **Zungenblüte: Sekundärfarbe**  |

 |

|  |
| --- |
| **Flor ligulada: color secundario**  |

 |  |  |
|  |  | RHS Colour Chart (indicate reference number) | Code RHS des couleurs (indiquer le numéro de référence) | RHS-Farbkarte (Nummer angeben) | Carta de colores RHS (indíquese el número de referencia) |  |  |
| **30.** |  | **PQ** | **VG** | **(+)** | **(b)** |  |
|  |  |

|  |
| --- |
| **Ray floret: distribution of secondary color**  |

 |

|  |
| --- |
| **Fleur ligulée : distribution de la couleur secondaire**  |

 |

|  |
| --- |
| **Zungenblüte: Verteilung der Sekundärfarbe** |

 |

|  |
| --- |
| **Flor ligulada: distribución del color secundario**  |

 |  |  |
|  |  | none | aucune | keine | ausente | Ruffles | 1 |
|  |  | distal quarter | quart distal | im distalen Viertel | en el cuarto distal |  | 2 |
|  |  | distal half | moitié distale | in distaler Hälfte | en la mitad distal | Zowwie Yellow Flame | 3 |
|  |  | basal half | moitié basale | in basaler Hälfte | en la mitad basal | Profusion Cherry Bicolor | 4 |
|  |  | basal quarter | quart basal | im basalen Viertel | en el cuarto basal | Zahara Rose Starlight | 5 |
|  |  | on margin | au bord | am Rand | en el borde |  | 6 |
|  |  | central bar | barre centrale | Mittelstreifen | en la franja central | SAKZIN017 | 7 |
|  |  | throughout | partout | überall | en la totalidad | Peppermint Stick | 8 |
| **31.** |  | **PQ** | **VG** | **(+)** | **(b)** |  |
|  |  |

|  |
| --- |
| **Ray floret: pattern of secondary color**  |

 |

|  |
| --- |
| **Fleur ligulée : répartition de la couleur secondaire**  |

 |

|  |
| --- |
| **Zungenblüte: Muster der Sekundärfarbe**  |

 |

|  |
| --- |
| **Flor ligulada: forma de disposición del color secundario** |

 |  |  |
|  |  | solid | uniforme | durchgefärbt | uniforme |  | 1 |
|  |  | blotches | taches | Flecken | en manchas |  | 2 |
|  |  | stripes | rayures | Streifen | en rayas |  | 3 |
| **32.** |  | **PQ** | **VG** |  | **(b), (c)** |  |
|  |  |

|  |
| --- |
| **Ray floret: tertiary color**  |

 |

|  |
| --- |
| **Fleur ligulée : couleur tertiaire**  |

 |

|  |
| --- |
| **Zungenblüte: Tertiärfarbe**  |

 |

|  |
| --- |
| **Flor ligulada: color terciario**  |

 |  |  |
|  |  | RHS colour chart (indicate reference number) | Code RHS des couleurs (indiquer le numéro de référence) | RHS-Farbkarte (Nummer angeben) | Carta de colores RHS (indíquese el número de referencia) |  |  |
| **33.** |  | **PQ** | **VG** | **(+)** | **(b)** |  |
|  |  |

|  |
| --- |
| **Ray floret: distribution of tertiary color**  |

 |

|  |
| --- |
| **Fleur ligulée : distribution de la couleur tertiaire**  |

 |

|  |
| --- |
| **Zungenblüte: Verteilung der Tertiärfarbe**  |

 |

|  |
| --- |
| **Flor ligulada: distribución del color terciario**  |

 |  |  |
|  |  | none | aucune | keine | ausente |  | 1 |
|  |  | distal quarter | quart distal | im distalen Viertel | en el cuarto distal |  | 2 |
|  |  | distal half | moitié distale | in distaler Hälfte | en la mitad distal |  | 3 |
|  |  | basal half | moitié basale | in basaler Hälfte | en la mitad basal |  | 4 |
|  |  | basal quarter | quart basal | im basalen Viertel | en el cuarto basal | Peppermint Stick | 5 |
|  |  | on margin | au bord | am Rand | en el borde |  | 6 |
|  |  | central bar | barre centrale | Mittelstreifen | franja central | SAKZIN017 | 7 |
|  |  | throughout | partout | überall | en la totalidad |  | 8 |
| **34.** |  | **PQ** | **VG** | **(+)** | **(b)** |  |
|  |  |

|  |
| --- |
| **Ray floret: pattern of tertiary color**  |

 |

|  |
| --- |
| **Fleur ligulée : répartition de la couleur tertiaire**  |

 |

|  |
| --- |
| **Zungenblüte: Muster der Tertiärfarbe**  |

 |

|  |
| --- |
| **Flor ligulada: forma de disposición del color terciario**  |

 |  |  |
|  |  | solid | uniforme | durchgefärbt | uniforme |  | 1 |
|  |  | blotches | taches | Flecken | en manchas |  | 2 |
|  |  | stripes | ayures | Streifen | en rayas |  | 3 |
| **35.** |  | **PQ** | **VG** | **(+)** |  |  |
|  |  |

|  |
| --- |
| **Only varieties with Flower head: type: single or semi-double: Disc: color** |

 |

|  |
| --- |
| **Variétés à type de capitule simple ou semi-double seulement : Disque : couleur** |

 |

|  |
| --- |
| **Nur Sorten mit Blütenstand: Typ: einfach oder halbgefüllt: Scheibe: Farbe** |

 |

|  |
| --- |
| **Solo variedades con Capítulo: tipo: sencillo o semidoble: Disco: color** |

 |  |  |
|  |  | yellow green | vert jaune | gelbgrün | verde amarillento | Profusion Lemon | 1 |
|  |  | yellow | jaune | gelb | amarillo | Crystal Yellow | 2 |
|  |  | orange | orange | orange | naranja | Crystal Orange | 3 |
|  |  | purple | pourpre | purpurn | púrpura | Purple prince | 4 |
|  |  | brown | brun | braun | marrón | Zahara Rose Starlight, Profusion Fire | 5 |
| **36.** |  | **QN** | **VG** | **(+)** |  |  |
|  |  |

|  |
| --- |
| **Only varieties with Flower head: type: single or semi-double: Disc: diameter** |

 |

|  |
| --- |
| **Variétés à type de capitule simple ou semi-double seulement : Disque : diamètre** |

 |

|  |
| --- |
| **Nur Sorten mit Blütenstand: Typ: einfach oder halbgefüllt: Scheibe: Durchmesser** |

 |

|  |
| --- |
| **Solo variedades con Capítulo: tipo: sencillo o semidoble: Disco: diámetro** |

 |  |  |
|  |  | very small | très petit | sehr klein | muy pequeño |  | 1 |
|  |  | small | petit | klein | pequeño |  | 2 |
|  |  | medium | moyen | mittel | medio | Profusion Red | 3 |
|  |  | large | grand | groß | grande | Dreamland Scarlet | 4 |
|  |  | very large | très grand | sehr groß | muy grande |  | 5 |

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

|  |  |
| --- | --- |
| 8. | Explanations on the Table of Characteristics |
|   |
| *8.1* | *Explanations covering several characteristics* |
|   |
|  |

|  |
| --- |
| Unless otherwise indicated, observations should be made at the time of full flowering |

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

|  |
| --- |
| (a) |

 |

|  |
| --- |
| Observations should be made on leaves from the middle third of the stem. |

 |
|   |  |  |  |
|

|  |
| --- |
| (b) |

 |

|  |
| --- |
| Observations should be made on the inner side of the ray florets. For varieties with semi-double and double flower heads, observations should be made on the outermost whorl of ray florets. |

 |
|   |  |  |  |
|

|  |
| --- |
| (c) |

 |

|  |
| --- |
| The main color is the color with the largest surface area. The color with the second largest area is the secondary color. In cases where the areas of the colors are too similar to reliably decide which color has the largest area, the darker color is considered to be the main color. The tertiary color is the color with the third largest area. In cases where the areas of the secondary and the tertiary color are too similar to reliably decide which color has the largest area, the lighter color is considered to be the tertiary color. |

 |

 |

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

|  |
| --- |
|   |
|

|  |
| --- |
| *8.2* |

 | *Explanations for individual characteristics* |
|   |
|

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Ad. 1: Plant: growth habit

|  |  |  |
| --- | --- | --- |
| wordml://76.png | wordml://77.png | wordml://78.png |
| 1 upright | 2semi-upright | 3 spreading |

 |

 |
|

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ad. 3: Plant: density of branches

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| wordml://79.png | wordml://80.png | wordml://81.png | wordml://82.png | wordml://83.png |
| 1 very sparse |    2 sparse | 3 medium | 4 dense | 5 very dense |

 |

 |
|

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ad. 4: Stem: density of pubescence

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 |
| absent or very sparse | sparse | medium | dense | very dense |

 |

 |
|

|  |
| --- |
| Ad. 5: Stem: anthocyanin colorationObservations should be made at the middle third of the stem. |

 |

 |

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

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

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ad. 8: Leaf: length/width ratio

|  |  |  |
| --- | --- | --- |
| wordml://89.png | wordml://90.png | wordml://91.png |
| 1 | 3 | 5 |
| very low | medium | very high |

 |

 |
|

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ad. 10: Leaf: profile in cross section

|  |  |  |
| --- | --- | --- |
| wordml://92.png | wordml://93.png | wordml://94.png |
| 1 | 2 | 3 |
| flat | moderately concave | strongly concave |

 |

 |
|

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Ad. 11: Leaf: undulation of margin

|  |  |  |
| --- | --- | --- |
| wordml://95.png | wordml://96.png | wordml://97.png |
| 1 absent or weak | 2 medium | 3 strong |

Ad. 12: Leaf: intensity of green colorObservations should be made on the upper side of a typical leaf. |

 |
|

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ad. 13: Leaf: area of anthocyanin coloration at baseObservations should be made on the upper side of a typical leaf.

|  |  |  |
| --- | --- | --- |
| wordml://98.png | wordml://99.png | wordml://100.png |
| 1 | 3 | 5 |
| absent or small | medium | large |

 |

 |

 |

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

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

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ad. 16: Flower head: type1. Single: flowers with one row of ray florets only.2. Semi-double: flowers with more than one row of ray florets and a clearly visible disc.3. Double: flowers with no visible disc.

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

|  |  |  |
| --- | --- | --- |
| wordml://101.png | wordml://102.png | wordml://103.png |
| 1 | 2 | 3 |
| single | semi-double | double |

 |

 |

 |
|

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ad. 23: Ray floret: profile in cross sectionObservations should be made in the middle of the ray floret.

|  |  |  |
| --- | --- | --- |
| wordml://104.png | wordml://105.png | wordml://106.png |
| 1 strongly concave | 2  weakly concave | 3 flat |
|   |   |   |
| wordml://107.png | wordml://108.png |   |
| 4 weakly convex | 5 strongly convex |   |
|   |   |   |

  |

 |
|

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ad. 24: Ray floret: curvature of longitudinal axis

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

|  |  |  |  |
| --- | --- | --- | --- |
| wordml://109.png | wordml://110.png | wordml://111.png | wordml://112.png |
| 1 | 2 | 3 | 4 |
| incurving | straight | reflexing | twisted |

 |

 |

 |

 |

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

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

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ad. 25: Ray floret: part of axis curved

|  |  |  |
| --- | --- | --- |
| wordml://113.png | wordml://114.png | wordml://115.png |
| 1 | 2 | 3 |
| distal quarter | distal half | distal three quarters |

 |

 |
|

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ad. 27: Ray floret: shape of apex

|  |  |  |
| --- | --- | --- |
| wordml://116.png | wordml://117.png | wordml://118.png |
| 1 acute |    2    rounded | 3 truncate |
| wordml://119.png | wordml://120.png | wordml://121.png |
| 4 emarginate | 5  dentate | 6 mucronate |

   |

 |

 |

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

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

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ad. 30: Ray floret: distribution of secondary color

|  |  |  |  |
| --- | --- | --- | --- |
| wordml://122.png | wordml://123.png | wordml://124.png | wordml://125.png |
| 1 none | 2 distal quarter | 3 distal half   | 4 basal half |
|  |  |  |  |
| wordml://126.png   | wordml://127.png | wordml://128.png | wordml://129.png |
| 5 basal quarter | 6 on margin | 7 central bar | 8 throughout |

   |

 |
|

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Ad. 31: Ray floret: pattern of secondary color

|  |  |  |
| --- | --- | --- |
| wordml://130.png | wordml://131.png | wordml://132.png |
| 1 solid | 2 blotches | 3 stripes |

 |

 |
|

|  |
| --- |
| Ad. 33: Ray floret: distribution of tertiary color See Ad. 30 |

 |
|

|  |
| --- |
| Ad. 34: Ray floret: pattern of tertiary color See Ad. 31 |

 |
|

|  |
| --- |
| Ad. 35: Only varieties with Flower head: type: single or semi-double: Disc: colorObservations should be made before dehiscence. |

 |
|

|  |
| --- |
| Ad. 36: Only varieties with Flower head: type: single or semi-double: Disc: diameterObservation should be made after the flower bud has opened, but before the disc florets begin to dehisce. |

 |

 |
|  |

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

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

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

|  |  |
| --- | --- |
| 9. | Literature |

 |
|   |

|  |
| --- |
| Calderón, G., Rzedowski, J., 2005: Flora Fanerogámica del Valle de México. Instituto de Ecología, A.C. y Comisión Nacional para el Conocimiento y Uso de la Biodiversidad, Pátzcuaro/Michoacán, MX, 909 pp.Smith, A.R., 2006: Flora of North America Editorial Committee. Flora of North America. North of Mexico. Vol. 21. Oxford University Press. Oxford, GB, 71 pp.Torres, A.M., 1963: Taxonomy of zinnia. Brittonia 15: 1-25., Springer/New York Botanical Garden, Bronx/New York, US, pp. 1-25 |

 |

 |

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

|  |  |
| --- | --- |
| 10. | Technical Questionnaire |

 |
|   |
|

|  |  |  |
| --- | --- | --- |
| TECHNICAL QUESTIONNAIRE | Page {x} of {y} | Reference Number: |

 |
|   |
|

|  |  |
| --- | --- |
|  | Application date:(not to be filled in by the applicant) |
| TECHNICAL QUESTIONNAIREto be completed in connection with an application for plant breeders' rights |

 |
|

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |   |  |  |
| 1. | Subject of the Technical Questionnaire |
|  |  |  |   |  |
|  |

|  |
| --- |
| 1.1.1 |

 | Botanical name |

|  |
| --- |
| *Zinnia* ×*marylandica* D. M. Spooner et al. |

 |

|  |
| --- |
| [  ] |

 |
|  |   |  |   |  |
|  |

|  |
| --- |
| 1.1.2 |

 | Common name |

|  |
| --- |
|  |

 |  |
|  |   |   |

|  |
| --- |
|  |

 |  |
|  |  |  |   |  |
|  |

|  |
| --- |
| 1.2.1 |

 | Botanical name |

|  |
| --- |
| *Zinnia angustifolia* Kunth |

 |

|  |
| --- |
| [  ] |

 |
|  |   |  |   |  |
|  |

|  |
| --- |
| 1.2.2 |

 | Common name |

|  |
| --- |
|  |

 |  |
|  |   |   |

|  |
| --- |
|  |

 |  |
|  |  |  |   |  |
|  |

|  |
| --- |
| 1.3.1 |

 | Botanical name |

|  |
| --- |
| *Zinnia elegans* Jacq. |

 |

|  |
| --- |
| [  ] |

 |
|  |   |  |   |  |
|  |

|  |
| --- |
| 1.3.2 |

 | Common name |

|  |
| --- |
| Youth and age, Youth-and-old-age |

 |  |
|  |   |   |

|  |
| --- |
|  |

 |  |
|  |  |  |   |  |
|  |

|  |
| --- |
| 1.4.1 |

 | Botanical name |

|  |
| --- |
| *Zinnia haageana* Regel |

 |

|  |
| --- |
| [  ] |

 |
|  |   |  |   |  |
|  |

|  |
| --- |
| 1.4.2 |

 | Common name |

|  |
| --- |
|  |

 |  |
|  |   |   |

|  |
| --- |
|  |

 |  |
|  |  |  |   |  |
|  |

|  |
| --- |
| 1.5.1 |

 | Botanical name |

|  |
| --- |
| *Zinnia peruviana* (L.) L. |

 |

|  |
| --- |
| [  ] |

 |
|  |   |  |   |  |
|  |

|  |
| --- |
| 1.5.2 |

 | Common name |

|  |
| --- |
| Field zinnia, Peruvian Zinnia, Wild Zinnia |

 |  |
|  |   |   |

|  |
| --- |
|  |

 |  |
|  |  |  |   |  |
|  |

|  |
| --- |
| 1.6.1 |

 | Species or hybrid (please indicate) |

|  |
| --- |
|  |

 |

|  |
| --- |
| [  ] |

 |
|  |   |  |   |  |
|  |

|  |
| --- |
| 1.6.2 |

 | Common name |

|  |
| --- |
|  |

 |  |
|  |   |   |

|  |
| --- |
|  |

 |  |
|  |  |  |  |  |

 |

|  |
| --- |
|  |
|

|  |  |  |
| --- | --- | --- |
| TECHNICAL QUESTIONNAIRE | Page {x} of {y} | Reference Number: |

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

 |

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

|  |  |  |
| --- | --- | --- |
| TECHNICAL QUESTIONNAIRE | Page {x} of {y} | Reference Number: |
|   |
|

|  |
| --- |
| #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 variety)(…………………..……………..…)                          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) | [ ] |
|  |      |
|  |   |

 |

 |

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

|  |  |  |
| --- | --- | --- |
| TECHNICAL QUESTIONNAIRE | Page {x} of {y} | Reference Number: |

 |
|   |
|

|  |  |  |
| --- | --- | --- |
|  |  |   |
|  | 4.2 | Method of propagating the variety |
|  |

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

|  |
| --- |
| 4.2.1 |

 |

|  |
| --- |
| Seed-propagated varieties |

 |  |
|

|  |
| --- |
| (a) |

 |

|  |
| --- |
| Cross-pollination |

 | [ ] |
|

|  |
| --- |
| (b) |

 |

|  |
| --- |
| Hybrid |

 | [ ] |
|

|  |
| --- |
| (c) |

 |

|  |
| --- |
| Other (please provide details) |

 | [ ] |
|  |   |  |
|  |  |  |
|  |   |  |
|

|  |
| --- |
| 4.2.2 |

 | Other(Please provide details) | [ ] |
|  |   |  |
|  |  |  |
|  |   |  |

  |
|  |

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

|  |
| --- |
|  |

 |

 |

 |

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

|  |  |  |
| --- | --- | --- |
| TECHNICAL QUESTIONNAIRE | Page {x} of {y} | Reference Number: |

 |
|   |
|

|  |  |
| --- | --- |
| 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** |

 |  |  |
|  |

|  |
| --- |
| very short |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 1 [   ] |

 |
|  |

|  |
| --- |
| very short to short |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 2 [   ] |

 |
|  |

|  |
| --- |
| short |

 |

|  |
| --- |
|  |

Profusion Red |

|  |
| --- |
| 3 [   ] |

 |
|  |

|  |
| --- |
| short to medium |

 |  |

|  |
| --- |
| 4 [   ] |

 |
|  |

|  |
| --- |
| medium |

 |

|  |
| --- |
| Witworna |

 |

|  |
| --- |
| 5 [   ] |

 |
|  |

|  |
| --- |
| medium to tall |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 6 [   ] |

 |
|  |

|  |
| --- |
| tall |

 |

|  |
| --- |
| Inca, Peppermint Stick |

 |

|  |
| --- |
| 7 [   ] |

 |
|  |

|  |
| --- |
| tall to very tall |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 8 [   ] |

 |
|  |

|  |
| --- |
| very tall |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 9 [   ] |

 |
|  |  |  |  |
|  |  |  |  |
|

|  |
| --- |
| **5.2** |

|  |
| --- |
| **(5)** |

 |

|  |
| --- |
| **Stem: anthocyanin coloration** |

 |  |  |
|  |

|  |
| --- |
| absent or very weak |

 |

|  |
| --- |
| Profusion Fire |

 |

|  |
| --- |
| 1 [   ] |

 |
|  |

|  |
| --- |
| weak |

 |

|  |
| --- |
| Lilliput Salmon |

 |

|  |
| --- |
| 2 [   ] |

 |
|  |

|  |
| --- |
| medium |

 |

|  |
| --- |
| Profusion Red |

 |

|  |
| --- |
| 3 [   ] |

 |
|  |

|  |
| --- |
| strong |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 4 [   ] |

 |
|  |

|  |
| --- |
| very strong |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 5 [   ] |

 |
|  |  |  |  |
|  |  |  |  |
|

|  |
| --- |
| **5.3** |

|  |
| --- |
| **(14)** |

 |

|  |
| --- |
| **Peduncle: length** |

 |  |  |
|  |

|  |
| --- |
| short |

 |

|  |
| --- |
| Zahara Coral Rose |

 |

|  |
| --- |
| 1 [   ] |

 |
|  |

|  |
| --- |
| short to medium |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 2 [   ] |

 |
|  |

|  |
| --- |
| medium |

 |

|  |
| --- |
| Witworna |

 |

|  |
| --- |
| 3 [   ] |

 |
|  |

|  |
| --- |
| medium to long |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 4 [   ] |

 |
|  |

|  |
| --- |
| long |

 |

|  |
| --- |
| Uproar Rose |

 |

|  |
| --- |
| 5 [   ] |

 |
|  |  |  |  |
|  |  |  |  |
|

|  |
| --- |
| **5.4(i)** |

|  |
| --- |
| **(28)** |

 |

|  |
| --- |
| **Ray floret: main color**  |

 |  |  |
|  |

|  |
| --- |
| RHS Colour Chart (indicate reference number) |

 |

|  |
| --- |
|  |

 |  |
|  |  |  |  |
|

|  |
| --- |
| **5.4(ii)** |

|  |
| --- |
| **(28)** |

 |

|  |
| --- |
| **Ray floret: main color**  |

 |  |  |
|  |

|  |
| --- |
| white |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 1 [   ] |

 |
|  |

|  |
| --- |
| green |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 2 [   ] |

 |
|  |

|  |
| --- |
| yellow |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 3 [   ] |

 |
|  |

|  |
| --- |
| orange |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 4 [   ] |

 |
|  |

|  |
| --- |
| pink |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 5 [   ] |

 |
|  |

|  |
| --- |
| red |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 6 [   ] |

 |
|  |

|  |
| --- |
| purple |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 7 [   ] |

 |
|  |

|  |
| --- |
| violet |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 8 [   ] |

 |
|  |

|  |
| --- |
| other (please indicate) |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| [   ] |

 |

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

|  |  |  |
| --- | --- | --- |
| TECHNICAL QUESTIONNAIRE | Page {x} of {y} | Reference Number: |

 |
|   |
|

|  |  |
| --- | --- |
| 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 head: diameter* |

 |

|  |
| --- |
| *small* |

 |

|  |
| --- |
| *medium* |

 |
|     |   |   |   |
|   |   |   |   |
|   |   |   |   |

 |
|  | Comments:    |

 |

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

|  |  |  |
| --- | --- | --- |
| TECHNICAL QUESTIONNAIRE | Page {x} of {y} | Reference Number: |

 |
|   |
|

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

|  |
| --- |
| #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 |
|  |  |   |  |  |
| 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.] |
|  |  |   |  |  |

 |

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

|  |  |  |
| --- | --- | --- |
| TECHNICAL QUESTIONNAIRE | Page {x} of {y} | Reference Number: |

 |
|   |
|

|  |  |
| --- | --- |
| 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] |