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| DRAFT |

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|  | PARSLEYUPOV Code(s): PETRO\_CRI*Petroselinum crispum* (Mill.) Fuss   | \* |

GUIDELINESFOR THE CONDUCT OF TESTS
FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by an expert from Germany

to be considered by the

Technical Working Party for Vegetables at its fifty-ninth session,

to be held virtually from 2025-05-05 to 2025-05-08

Disclaimer: this document does not represent UPOV policies or guidance

Alternative Names:\*

| *Botanical name* | *English* | *French* | *German* | *Spanish* |
| --- | --- | --- | --- | --- |
| *Petroselinum crispum* (Mill.) Fuss  | Parsley | Persil | Petersilie | Perejil |

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 *Petroselinum crispum* (Mill.) Fuss.

# 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 seed.

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

Leaf parsley: 12,000 seeds
Root parsley: 24,000 seeds.

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.

# Method of Examination

## 3.1  Number of Growing Cycles

3.1.1 The minimum duration of tests should normally be two independent growing cycles.

3.1.2 The two independent growing cycles should be in the form of two separate plantings.

3.1.3 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

 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 at least 60 plants for leaf parsley and 160 plants for root parsley, which should be divided between at least 2 replicates.

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 or Parts of Plants to be Examined

Unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 40 plants or parts of plants taken from each of 40 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 1.

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 plants

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

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

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

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

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

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

## 4.2  Uniformity

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

4.2.2 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 should be according to the recommendations for cross-pollinated varieties in the General Introduction.

4.2.4 For the assessment of uniformity of seed-propagated varieties a population standard of 2% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 40 plants, 2 off-types are 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.

# 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) Leaf blade: curling (characteristic 6)

(b) Root: thickening of main root (characteristic 20)

Grouping for varieties of Root and Leaf Parsley is based on characteristic 20: Root: thickening of main root:

- absent: Leaf parsley

- present: Root parsley

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

7 Growth stage key (if applicable) See Explanations on the Table of Characteristics in Chapter 8.3

FL     Flat leaf parsley
CL    Curled leaf parsley
R      Root parsley

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

|  | English | français | deutsch | español | Example VarietiesExemplesBeispielssortenVariedades ejemplo | Note/Nota |
| --- | --- | --- | --- | --- | --- | --- |
| **1.** |  | **QN** | **VG** | **(+)** | **(a)** |  |  |  |  |
|  | **Plant: growth habit** |  |  |  |  |  |
| erect |  |  |  | Laura (FL), Titan (CL) | 1  |
| erect to semi erect |  |  |  | Gigante d'Italia (FL) | 2  |
| semi erect |  |  |  | Grüne Perle (CL) | 3  |
| semi erect to prostrate |  |  |  |  | 4  |
| prostrate |  |  |  |  | 5  |
| **2.** | **(\*)** | **QN** | **MS/VG** |  | **(a)** |  |  |  |  |
|  | **Plant: height** |  |  |  |  |  |
| very short |  |  |  |  | 1  |
| very short to short |  |  |  |  | 2  |
| short |  |  |  |  | 3  |
| short to medium |  |  |  | Grüne Perle (CL) | 4  |
| medium |  |  |  | Kudrnka (CL), Titan (CL) | 5  |
| medium to tall |  |  |  |  | 6  |
| tall |  |  |  | Natalka (FL) | 7  |
| tall to very tall |  |  |  | Monica (R) | 8  |
| very tall |  |  |  | Gigante d'Italia (FL) | 9  |
| **3.** |  | **QN** | **MS/VG** |  | **(a)** |  |  |  |  |
|  | **Plant: width** |  |  |  |  |  |
| very narrow |  |  |  |  | 1  |
| very narrow to narrow |  |  |  |  | 2  |
| narrow |  |  |  | Afrodite (CL) | 3  |
| narrow to medium |  |  |  | Grüne Perle (CL) | 4  |
| medium |  |  |  | Titan (CL) | 5  |
| medium to broad |  |  |  | Laura (FL) | 6  |
| broad |  |  |  |  | 7  |
| broad to very broad |  |  |  |  | 8  |
| very broad |  |  |  |  | 9  |
| **4.** | **(\*)** | **QN** | **VG** | **(+)** | **(a)** |  |  |  |  |
|  | **Plant: density of foliage** |  |  |  |  |  |
| very sparse |  |  |  |  | 1  |
| very sparse to sparse |  |  |  |  | 2  |
| sparse |  |  |  | Gigante d'Italia (FL), Titan (CL) | 3  |
| sparse to medium |  |  |  | Laica (FL), Laura (FL) | 4  |
| medium |  |  |  | Ines (CL) | 5  |
| medium to dense |  |  |  | Bravour (CL), Emma (CL), Kudrnka (CL) | 6  |
| dense |  |  |  |  | 7  |
| dense to very dense |  |  |  | Grüne Perle (CL), Lisette (CL), Starlett (CL) | 8  |
| very dense |  |  |  | Afrodite (CL) | 9  |
| **5.** |  | **QN** | **MG/VG** | **(+)** |  |  |  |  |  |
|  | **Plant: number of petioles** |  |  |  |  |  |
| very few |  |  |  |  | 1  |
| few |  |  |  | Bravour (CL), Ines (CL), Starlett (CL) | 2  |
| medium |  |  |  |  | 3  |
| many |  |  |  |  | 4  |
| very many |  |  |  | Gigante d'Italia (FL) | 5  |
| **6.** | **(\*)** | **QL** | **VG** |  | **(a)** |  |  |  |  |
|  | **Leaf blade: curling** |  |  |  |  |  |
| absent |  |  |  | Gigante d'Italia (FL), Greenso (FL) | 1  |
| present |  |  |  | Grüne Perle (CL), Titan (CL) | 9  |
| **7.** | **(\*)** | **QN** | **VG** | **(+)** | **(a)** |  |  |  |  |
|  | **Only varieties with leaf blade curling: Leaf blade: intensity of curling** |  |  |  |  |  |
| very weak |  |  |  | Titan (CL) | 1  |
| very weak to weak |  |  |  |  | 2  |
| weak |  |  |  | Kudrnka (CL) | 3  |
| weak to medium |  |  |  |  | 4  |
| medium |  |  |  | Ines (CL) | 5  |
| medium to strong |  |  |  |  | 6  |
| strong |  |  |  | Emma (CL) | 7  |
| strong to very strong |  |  |  | Grüne Perle (CL) | 8  |
| very strong |  |  |  |  | 9  |
| **8.** |  | **QN** | **VG** | **(+)** | **(a)** |  |  |  |  |
|  | **Only varieties with leaf blade curling: Leaf: appearance of surface of canopy** |  |  |  |  |  |
| very open |  |  |  |  | 1  |
| very open to open |  |  |  |  | 2  |
| open |  |  |  |  | 3  |
| open to medium |  |  |  |  | 4  |
| medium |  |  |  | Ines (CL), Kudrnka (CL) | 5  |
| medium to close |  |  |  | Emma (CL) | 6  |
| close |  |  |  | Grüne Perle (CL), Gusti (CL), Starlett (CL) | 7  |
| close to very close |  |  |  | Afrodite (CL) | 8  |
| very close |  |  |  |  | 9  |
| **9.** |  | **QL** | **VG** | **(+)** | **(a)** |  |  |  |  |
|  | **Only varieties with leaf blade curling: Leaf blade: upward reflexing of lobes** |  |  |  |  |  |
| absent |  |  |  |  | 1  |
| present |  |  |  | Grüne Perle (CL), Lisette (CL), Thujade (CL), Titan (CL) | 9  |
| **10.** | **(\*)** | **QN** | **MS/VG** | **(+)** | **(a)** |  |  |  |  |
|  | **Leaf blade: length** |  |  |  |  |  |
| very short |  |  |  |  | 1  |
| very short to short |  |  |  |  | 2  |
| short |  |  |  | Afrodite (CL) | 3  |
| short to medium |  |  |  | Lisette (CL), Titan (CL) | 4  |
| medium |  |  |  | Laura (FL), Lion (FL) | 5  |
| medium to long |  |  |  | Gigante d'Italia (FL) | 6  |
| long |  |  |  | Laica (FL) | 7  |
| long to very long |  |  |  |  | 8  |
| very long |  |  |  |  | 9  |
| **11.** | **(\*)** | **QN** | **MS/VG** | **(+)** | **(a)** |  |  |  |  |
|  | **Leaf blade: width** |  |  |  |  |  |
| very narrow |  |  |  |  | 1  |
| very narrow to narrow |  |  |  |  | 2  |
| narrow |  |  |  |  | 3  |
| narrow to medium |  |  |  | Titan (CL) | 4  |
| medium |  |  |  | Emma (CL), Lion (FL) | 5  |
| medium to broad |  |  |  | Laura (FL) | 6  |
| broad |  |  |  | Laica (FL) | 7  |
| broad to very broad |  |  |  |  | 8  |
| very broad |  |  |  |  | 9  |
| **12.** |  | **QN** | **MS/VG** |  | **(a)** |  |  |  |  |
|  | **Leaf blade: ratio length/width** |  |  |  |  |  |
| very low |  |  |  |  | 1  |
| very low to low |  |  |  |  | 2  |
| low |  |  |  |  | 3  |
| low to medium |  |  |  | Grüne Perle (CL) | 4  |
| medium |  |  |  | Laica (FL), Laura (FL), Starlett (CL) | 5  |
| medium to high |  |  |  |  | 6  |
| high |  |  |  | Gigante d'Italia (FL) | 7  |
| high to very high |  |  |  |  | 8  |
| very high |  |  |  |  | 9  |
| **13.** | **(\*)** | **QN** | **VG** |  | **(a)** |  |  |  |  |
|  | **Leaf blade: intensity of green color** |  |  |  |  |  |
| very light |  |  |  |  | 1  |
| very light to light |  |  |  |  | 2  |
| light |  |  |  |  | 3  |
| light to medium |  |  |  | Bravour (CL) | 4  |
| medium |  |  |  | Lisette (CL) | 5  |
| medium to dark |  |  |  | Emma (CL), Starlett (CL) | 6  |
| dark |  |  |  | Ines (CL), Laica (FL), Menuette (CL) | 7  |
| dark to very dark |  |  |  | Lion (FL) | 8  |
| very dark |  |  |  | Greenso (FL), Titan (CL) | 9  |
| **14.** |  | **QN** | **MS/VG** | **(+)** | **(a)** |  |  |  |  |
|  | **Leaf blade: distance between 1st and 2nd pair of leaflets** |  |  |  |  |  |
| very short |  |  |  |  | 1  |
| very short to short |  |  |  |  | 2  |
| short |  |  |  | Afrodite (CL) | 3  |
| short to medium |  |  |  | Grüne Perle (CL), Ines (CL) | 4  |
| medium |  |  |  | Lisette (CL), Titan (CL) | 5  |
| medium to long |  |  |  |  | 6  |
| long |  |  |  | Laura (FL) | 7  |
| long to very long |  |  |  |  | 8  |
| very long |  |  |  |  | 9  |
| **15.** | **(\*)** | **QN** | **VG** | **(+)** | **(a)** |  |  |  |  |
|  | **Only varieties with leaf blade curling: leaf blade: depth of incision** |  |  |  |  |  |
| shallow |  |  |  | Grüne Perle (CL), Ines (CL), Lisette (CL) | 1  |
| medium |  |  |  |  | 2  |
| deep |  |  |  | Menuette (CL) | 3  |
| **16.** |  | **QN** | **VG** | **(+)** | **(a)** |  |  |  |  |
|  | **Only varieties without leaf blade curling: leaflet: shape** |  |  |  |  |  |
| narrow triangular |  |  |  | Gigante d'Italia (FL) | 1  |
| medium triangular |  |  |  |  | 2  |
| broad triangular |  |  |  |  | 3  |
| **17.** |  | **QN** | **MS/VG** | **(+)** | **(a)** |  |  |  |  |
|  | **Petiole: length** |  |  |  |  |  |
| very short |  |  |  |  | 1  |
| very short to short |  |  |  |  | 2  |
| short |  |  |  | Ines (CL) | 3  |
| short to medium |  |  |  | Emma (CL), Grüne Perle (CL) | 4  |
| medium |  |  |  | Laura (FL) | 5  |
| medium to long |  |  |  |  | 6  |
| long |  |  |  |  | 7  |
| long to very long |  |  |  | Monica (R) | 8  |
| very long |  |  |  |  | 9  |
| **18.** |  | **QN** | **MS/VG** | **(+)** | **(a)** |  |  |  |  |
|  | **Petiole: thickness** |  |  |  |  |  |
| thin |  |  |  |  | 1  |
| thin to medium |  |  |  |  | 2  |
| medium |  |  |  | Emma (CL), Menuette (CL) | 3  |
| medium to thick |  |  |  |  | 4  |
| thick |  |  |  |  | 5  |
| **19.** | **(\*)** | **QN** | **VG** |  | **(a)** |  |  |  |  |
|  | **Petiole: anthocyanin coloration** |  |  |  |  |  |
| absent or very weak |  |  |  | Grüne Perle (CL) | 1  |
| weak |  |  |  | Natalka (FL) | 2  |
| medium |  |  |  |  | 3  |
| strong |  |  |  |  | 4  |
| very strong |  |  |  |  | 5  |
| **20.** | **(\*)** | **QL** | **VG** |  | **(b)** |  |  |  |  |
|  | **Root: thickening of main root** |  |  |  |  |  |
| absent |  |  |  | Menuette (CL) | 1  |
| present |  |  |  | Halblange (R) | 9  |
| **21.** | **(\*)** | **QN** | **MS/VG** |  | **(b)** |  |  |  |  |
|  | **Only root parsley varieties: Root: length** |  |  |  |  |  |
| very short |  |  |  | Halblange (R) | 1  |
| very short to short |  |  |  |  | 2  |
| short |  |  |  |  | 3  |
| short to medium |  |  |  |  | 4  |
| medium |  |  |  | A grosse racine gros hâtif (R) | 5  |
| medium to long |  |  |  | Arat (R) | 6  |
| long |  |  |  | Arctica (R) | 7  |
| long to very long |  |  |  |  | 8  |
| very long |  |  |  |  | 9  |
| **22.** | **(\*)** | **QN** | **MS/VG** |  | **(b)** |  |  |  |  |
|  | **Only root parsley varieties: Root: width** |  |  |  |  |  |
| narrow |  |  |  |  | 1  |
| narrow to medium |  |  |  | Arctica (R) | 2  |
| medium |  |  |  | A grosse racine gros hâtif (R), Arat (R) | 3  |
| medium to broad |  |  |  |  | 4  |
| broad |  |  |  |  | 5  |
| **23.** | **(\*)** | **QN** | **MS/VG** |  | **(b)** |  |  |  |  |
|  | **Only root parsley varieties: Root: ratio length/width** |  |  |  |  |  |
| low |  |  |  |  | 1  |
| low to medium |  |  |  |  | 2  |
| medium |  |  |  |  | 3  |
| medium to high |  |  |  | Arctica (R) | 4  |
| high |  |  |  |  | 5  |
| **24.** |  | **QN** | **VG** |  | **(b)** |  |  |  |  |
|  | **Only root parsley varieties: Root: branching** |  |  |  |  |  |
| very weak |  |  |  |  | 1  |
| very weak to weak |  |  |  |  | 2  |
| weak |  |  |  | A grosse racine gros hâtif (R) | 3  |
| weak to medium |  |  |  | Arat (R), Arctica (R) | 4  |
| medium |  |  |  |  | 5  |
| medium to strong |  |  |  |  | 6  |
| strong |  |  |  |  | 7  |
| strong to very strong |  |  |  |  | 8  |
| very strong |  |  |  |  | 9  |

# Explanations on the Table of Characteristics

## 8.1  Explanations covering several characteristics

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

(a) Observations should be made at the time of full development of the foliage.

(b) Observations should be made at the time of full development of the roots.

## 8.2  Explanations for individual characteristics

Ad. 1: Plant: growth habit

Observations should be made visually of the angle between the outer petioles and the soil surface.

1 = erect
2 = semi-erect
3 = intermediate
4 = semi-prostrate
5 = prostrate

Ad. 4: Plant: density of foliage

Observations should be made from above, looking at the foliage in total.

Ad. 5: Plant: number of petioles

Observation should be made at the end of the trial by cutting the whole plant below the first branches.

Ad. 7: Only varieties with leaf blade curling: Leaf blade: intensity of curling

|  |  |  |
| --- | --- | --- |
| A close-up of a plant  AI-generated content may be incorrect. |  |  |
| 1 | 3 | 5 |
| very weak | weak | medium |

|  |  |
| --- | --- |
| A close-up of a green plant  AI-generated content may be incorrect. |  |
| 7 | 9 |
| strong | very strong |

Ad. 8: Only varieties with leaf blade curling: Leaf: appearance of surface of canopy

To be assessed by observation of representative leaves from a plant.

Ad. 9: Only varieties with leaf blade curling: Leaf blade: upward reflexing of lobes

Observations should be made after a sufficiently long time for this characteristic to develop.

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

Ad. 10: Leaf blade: length

Ad. 11: Leaf blade: width

See Ad. 10

Ad. 14: Leaf blade: distance between 1st and 2nd pair of leaflets

See Ad. 10

Ad. 15: Only varieties with leaf blade curling: leaf blade: depth of incision

Observation on the depth of incision can be made at any leaftlet of the leaf blade.

|  |  |  |
| --- | --- | --- |
| A close-up of a leafy green plant  AI-generated content may be incorrect. |  |  |
| 1 | 2 | 3 |
| shallow | medium | deep |

Ad. 16: Only varieties without leaf blade curling: leaflet: shape

|  |  |  |
| --- | --- | --- |
| A green leaf with a triangle in the middle  AI-generated content may be incorrect. |  |  |
| 1 | 2 | 3 |
| narrow triangular | medium triangular | broad triangular |

Ad. 17: Petiole: length

See Ad. 10.

Ad. 18: Petiole: thickness

See Ad. 10.

# Literature

Vogel, G., 1996: Handbuch des speziellen Gemüsebaus. Ulmer Verlag, Stuttgart, Seiten 1009 - 1026.

# 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  |
|  1.1.1 Botanical name  | *Petroselinum crispum* (Mill.) Fuss  | [ ]  |
|  |  |  |
|  1.1.2 Common name | Parsley |  |
| 2. Applicant  |
|  Name |  |  |
|  |  |  |
|  Address |  |  |
|  |  |  |
|  Telephone No. |  |  |
|  |  |  |
|  Fax No. |  |  |
|  |  |  |
|  E-mail address |  |  |
|  |  |  |
|  Breeder (if different from  applicant) |  |  |
|  |  |  |

|  |  |  |
| --- | --- | --- |
| TECHNICAL QUESTIONNAIRE | Page {x} of {y} | Reference Number: |
|  |
|  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 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) Other (please provide details) [ ] 4.2.2 Vegetative propagation (a) Other (state method) [ ] 4.2.3 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 |  | 3 [ ] |
|  | short to medium | Grüne Perle (CL) | 4 [ ] |
|  | medium | Kudrnka (CL), Titan (CL) | 5 [ ] |
|  | medium to tall |  | 6 [ ] |
|  | tall | Natalka (FL) | 7 [ ] |
|  | tall to very tall | Monica (R) | 8 [ ] |
|  | very tall | Gigante d'Italia (FL) | 9 [ ] |
| **5.2****(6)** | **Leaf blade: curling** |  |  |
|  | absent | Gigante d'Italia (FL), Greenso (FL) | 1 [ ] |
|  | present | Grüne Perle (CL), Titan (CL) | 9 [ ] |
| **5.3****(13)** | **Leaf blade: intensity of green color** |  |  |
|  | very light |  | 1 [ ] |
|  | very light to light |  | 2 [ ] |
|  | light |  | 3 [ ] |
|  | light to medium | Bravour (CL) | 4 [ ] |
|  | medium | Lisette (CL) | 5 [ ] |
|  | medium to dark | Emma (CL), Starlett (CL) | 6 [ ] |
|  | dark | Ines (CL), Laica (FL), Menuette (CL) | 7 [ ] |
|  | dark to very dark | Lion (FL) | 8 [ ] |
|  | very dark | Greenso (FL), Titan (CL) | 9 [ ] |
| **5.4****(15)** | **Only varieties with leaf blade curling: leaf blade: depth of incision** |  |  |
|  | shallow | Grüne Perle (CL), Ines (CL), Lisette (CL) | 1 [ ] |
|  | medium |  | 2 [ ] |
|  | deep | Menuette (CL) | 3 [ ] |
| **5.5****(20)** | **Root: thickening of main root** |  |  |
|  | absent | Menuette (CL) | 1 [ ] |
|  | present | Halblange (R) | 9 [ ] |
|  |  |  |  |

|  |  |  |
| --- | --- | --- |
| TECHNICAL QUESTIONNAIRE | Page {x} of {y} | Reference Number: |
|  |  |  |
|  | Characteristics  | Example Varieties  | Note  |
| **5.6****(21)** | **Only root parsley varieties: Root: length** |  |  |
|  | very short | Halblange (R) | 1 [ ] |
|  | very short to short |  | 2 [ ] |
|  | short |  | 3 [ ] |
|  | short to medium |  | 4 [ ] |
|  | medium | A grosse racine gros hâtif (R) | 5 [ ] |
|  | medium to long | Arat (R) | 6 [ ] |
|  | long | Arctica (R) | 7 [ ] |
|  | long to very long |  | 8 [ ] |
|  | very long |  | 9 [ ] |
| **5.7****(23)** | **Only root parsley varieties: Root: ratio length/width** |  |  |
|  | low |  | 1 [ ] |
|  | low to medium |  | 2 [ ] |
|  | medium |  | 3 [ ] |
|  | medium to high | Arctica (R) | 4 [ ] |
|  | high |  | 5 [ ] |
|  |  |  |  |

|  |  |  |
| --- | --- | --- |
| 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* | *Leaf blade: width* | *medium* | *broad* |
|  |
|  |
|  |
|  Comments |

|  |  |  |
| --- | --- | --- |
| TECHNICAL QUESTIONNAIRE | Page {x} of {y} | Reference Number: |
|  |
| #7. Additional information which may help in the examination of the variety7.1 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 |

|  |  |  |
| --- | --- | --- |
| 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 examination9.1 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”. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_9.3 Has the plant material to be examined been tested for the presence of virus or other pathogens? Yes [ ] (please provide details as specified by the Authority) No [ ] |
| 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] |