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| INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS | | | | |
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| DRAFT | | |

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|  | **BASIL**  UPOV Code: OCIMU\_BAS  *Ocimum basilicum* L. | [[1]](#footnote-1)\* |

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

prepared by (an) expert(s) from Germany

to be considered by the

Enlarged Editorial Committee at its meeting

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

Disclaimer: this document does not represent UPOV policies or guidance

Alternative Names:\*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Botanical name* | *English* | *French* | *German* | *Spanish* |
| *Ocimum basilicum* L. | Basil | Basilic | Basilikum | Albahaca |

|  |
| --- |
| 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 *Ocimum basilicum* L..

# Material Required

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

2.2 The material is to be supplied in the form of rooted young plants in case of vegetatively propagated varieties.

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

for seed propagated varieties: 6 gr or at least 4000 seeds

for vegetatively propagated varieties: 40 young plants per growing cycle.

In the case of seed, the seed should meet the minimum requirements for germination, species and analytical purity, health and moisture content, specified by the competent authority.

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.

## 3.2 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 In case of seed-propagated varieties: Each test should be designed to result in a total of at least 40 plants which should be divided between at least 2 replicates.

3.4.2 In case of vegetatively propagated varieties: Each test should be designed to result in a total of at least 20 plants, which should be divided between 2 replicates.

## 3.5 Additional Tests

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

# Assessment of Distinctness, Uniformity and Stability

## 

## 4.1 Distinctness

### 4.1.1 General Recommendations

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

### 

### 4.1.2 Consistent Differences

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

### 4.1.3 Clear Differences

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

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

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

### 4.1.5 Method of Observation

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

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

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

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

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

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

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

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

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

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

## 4.2 Uniformity

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

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

## 4.3 Stability

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

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

# Grouping of Varieties and Organization of the Growing Trial

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

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

5.3 The following have been agreed as useful grouping characteristics:

(a) Plant: growth habit (characteristic 1)

(b) Leaf blade: anthocyanin coloration of upper side (characteristic 7)

(c) Flower: color of corolla (characteristic 19)

(d) Only seed-propagated varieties: Beginning of flowering (characteristic 21)

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

# Introduction to the Table of Characteristics

## 

## 6.1 Categories of Characteristics

### 6.1.1 Standard Test Guidelines Characteristics

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

### 6.1.2 Asterisked Characteristics

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

## 6.2 States of Expression and Corresponding Notes

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

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

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

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

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

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

## 6.3 Types of Expression

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

## 6.4 Example Varieties

Where appropriate, example varieties are provided to clarify the states of expression of each characteristic.

## 6.5 Legend

(\*) Asterisked characteristic – see Chapter 6.1.2

QL Qualitative characteristic – see Chapter 6.3

QN Quantitative characteristic – see Chapter 6.3

PQ Pseudo-qualitative characteristic – see Chapter 6.3

MG, MS, VG, VS – see Chapter 4.1.5

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

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

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

|  |  | English | français | deutsch | español | Example Varieties Exemples Beispielssorten Variedades ejemplo | Note/ Nota |
| --- | --- | --- | --- | --- | --- | --- | --- |
| (\*) (+) | VG | **Plant: growth habit** | **Plante: port** | **Pflanze: Wuchsform** | **Planta: hábito de crecimiento** |  |  |
| PQ |  | very upright | très dressé | sehr aufrecht | muy erguida | Grand vert | 1 |
|  |  | upright | dressé | aufrecht | erguida |  | 2 |
|  |  | broad upright | dressé large | breit aufrecht | erguida ancha | Fin vert nain compact | 3 |
| (+) | VG | **Plant: height** | **Plante: hauteur** | **Pflanze: Höhe** | **Planta: altura** |  |  |
| QN |  | short | basse | niedrig | baja | Fin vert nain compact | 3 |
|  |  | medium | moyenne | mittel | mediana | Marian | 5 |
|  |  | tall | haute | hoch | alta | Bonazza, Grand vert | 7 |
| (+) | VG | **Stem: anthocyanin coloration** | **Tige: pigmentation anthocyanique** | **Trieb: Anthocyan-färbung** | **Tallo: pigmentación antociánica** |  |  |
| QN |  | absent or very weak | nulle ou très faible | fehlend oder sehr gering | ausente o muy débil | Grand vert | 1 |
|  |  | weak | faible | gering | débil | Magic White | 3 |
|  |  | medium | moyenne | mittel | media | Pesto Perpetuo | 5 |
|  |  | strong | forte | stark | fuerte | Ararat | 7 |
|  |  | very strong | très forte | sehr stark | muy fuerte | Osmin, Rosie | 9 |
| (\*) (+) | VG | **Leaf blade: shape** | **Limbe: forme** | **Blattspreite: Form** | **Limbo: forma** |  |  |
| PQ | (a) | broad ovate | ovale large | breit eiförmig | oval ancho | Géant Mammouth, Italian large leaf | 1 |
|  |  | medium ovate | ovale moyenne | mittel eiförmig | oval medio | Baroness, Marian | 2 |
|  |  | medium elliptic | elliptique moyenne | mittel elliptisch | elíptico medio | Ararat, Keskenylevelü, Magic White, Piccolino, Rudy | 3 |
|  |  | narrow elliptic | elliptique étroite | schmal elliptisch | elíptico estrecho | Fin vert nain compact | 4 |
|  | VG/MS | **Leaf blade: length** | **Limbe: longueur** | **Blattspreite: Länge** | **Limbo: longitud** |  |  |
| QN | (a) | very short | très court | sehr kurz | muy corto | Fin vert nain compact | 1 |
|  |  | short | court | kurz | corto | Pesto Perpetuo | 3 |
|  |  | medium | moyen | mittel | mediano | Baroness, Bonazza, Edwina , Osmin | 5 |
|  |  | long | long | lang | largo | Basinova, Eowyn, Mammouth | 7 |
|  | VG/MS | **Leaf blade: width** | **Limbe: largeur** | **Blattspreite: Breite** | **Limbo: anchura** |  |  |
| QN | (a) | very narrow | très étroit | sehr schmal | muy estrecho | Fin vert nain compact | 1 |
|  |  | narrow | étroit | schmal | estrecho | Keskenylevelü, Pesto Perpetuo, Piccolino | 3 |
|  |  | medium | moyen | mittel | mediano | Baroness, Bonazza | 5 |
|  |  | broad | large | breit | ancho | Basinova | 7 |
| (\*) | VG | **Leaf blade: anthocyanin coloration of upper side** | **Limbe: pigmentation anthocyanique de la face supérieure** | **Blattspreite: Anthocyanfärbung der Oberseite** | **Limbo: pigmentación antociánica del haz** |  |  |
| QN | (a) | absent or very weak | nulle ou très faible | fehlend oder sehr gering | ausente o muy débil | Bonazza, Edwina, Grand vert | 1 |
|  |  | weak | faible | gering | débil |  | 3 |
|  |  | medium | moyenne | mittel | media | Ararat | 5 |
|  |  | strong | forte | stark | fuerte | Osmin | 7 |
|  |  | very strong | très forte | sehr stark | muy fuerte | Purple Ruffles | 9 |
| (+) | VG | **Leaf blade: distribution of anthocyanin** | **Limbe: distribution de la pigmentation anthocyanique** | **Blattspreite: Verteilung der Anthocyanfärbung** | **Limbo: distribución de la pigmentación antociánica** |  |  |
| PQ | (a) | mainly on veins | principalement sur les nervures | hauptsächlich an den Adern | principalmente en los nervios | Feronia | 1 |
|  |  | on basal part | sur la partie basale | am basalen Teil | en la parte basal | Wild Magic | 2 |
|  |  | on basal and upper part | sur la partie basale et la partie supérieure | am basalen und oberen Teil | en las partes basal y superior | Lhasa | 3 |
|  |  | throughout | partout | überall | en la totalidad | Osmin, Purple Ruffles, Rosie | 4 |
| (\*) (+) | VG | **Leaf blade: intensity of green color** | **Limbe: intensité de la couleur verte** | **Blattspreite: Intensität der Grünfärbung** | **Limbo: intensidad del color verde** |  |  |
| QN | (a) | light | vert clair | hell | claro |  | 1 |
|  |  | medium | vert moyen | mittel | medio | Baroness | 3 |
|  |  | dark | vert foncé | dunkel | oscuro | Bajazzo, Gustosa | 5 |
|  | VG | **Leaf blade: glossiness** | **Limbe: brillance** | **Blattspreite: Glanz** | **Limbo: brillo** |  |  |
| QN | (a) | weak | faible | gering | débil | Magic White | 3 |
|  |  | medium | moyenne | mittel | medio | Ararat, Bonazza, Osmin | 5 |
|  |  | strong | forte | stark | fuerte | Edwina, Rudy | 7 |
| (\*) | VG | **Leaf blade: blistering** | **Limbe: cloqûre** | **Blattspreite: Blasigkeit** | **Limbo: abullonado** |  |  |
| QN | (a) | absent or very weak | nulle ou très faible | fehlend oder sehr gering | ausente o muy débil | Piccolino, Siam Queen | 1 |
|  |  | weak | faible | gering | débil | Osmin | 3 |
|  |  | medium | moyene | mittel | medio | Baroness, Grand vert | 5 |
|  |  | strong | forte | stark | fuerte | Basinova, Gustosa, Purple Ruffles | 7 |
| (+) | VG | **Leaf blade: profile in cross section** | **Limbe: profil en section transversale** | **Blattspreite: Profil im Querschnitt** | **Limbo: perfil en sección transversal** |  |  |
| PQ | (a) | convex | convexe | konvex | convexo | Basinova, Edwina, Grand vert | 1 |
|  |  | flat | plat | flach | plano | Osmin, Piccolino | 2 |
|  |  | concave | concave | konkav | cóncavo |  | 3 |
|  |  | v-shaped | en forme de V | v-förmig | en forma de V | Marian | 4 |
| (\*) (+) | VG | **Leaf blade: serration of margin** | **Limbe: dentelure du bord** | **Blattspreite: Randeinschnitte** | **Limbo: serrado del borde** |  |  |
| QN | (a) | absent or very weak | absente ou très faible | fehlend oder sehr gering | ausente o muy débil | Piccolino | 1 |
|  |  | weak | faible | gering | débil | Basinova, Bonazza | 3 |
|  |  | medium | moyenne | mittel | medio | Ararat, Osmin, Rosie | 5 |
|  |  | strong | forte | stark | fuerte | Serata | 7 |
|  |  | very strong | très forte | sehr stark | muy fuerte | Purple Ruffles | 9 |
|  | VG | **Leaf blade: undulation of margin** | **Limbe: ondulation du bord** | **Blattspreite: Randwellung** | **Limbo: ondulación del margen** |  |  |
| QN | (a) | absent or very weak | absente ou très faible | fehlend oder sehr gering | ausente o muy débil | Basinova, Edwina, Grand vert, Marian, Piccolino | 1 |
|  |  | weak | faible | gering | débil |  | 3 |
|  |  | medium | moyenne | mittel | media | Serata | 5 |
|  |  | strong | forte | stark | fuerte | Purple Ruffles | 7 |
|  | VG/MS | **Petiole: length** | **Pétiole: longueur** | **Blattstiel: Länge** | **Pecíolo: longitud** |  |  |
| QN |  | short | court | kurz | corto | Piccolino | 1 |
|  |  | medium | moyen | mittel | mediano | Bavires | 2 |
|  |  | long | long | lang | largo | Mammolo | 3 |
| (+) | VG/MS | **Flowering stem: length** | **Tige florale: longueur** | **Blütentrieb: Länge** | **Tallo floral: longitud** |  |  |
| QN | (b) | short | courte | kurz | corto | Piccolino | 3 |
|  |  | medium | moyenne | mittel | mediano | Osmin, Rudy | 5 |
|  |  | long | longue | lang | largo | Bavires, Bonazza, Edwina | 7 |
| (+) | VG/MS | **Flowering stem: length of internodes** | **Tige florale: longueur des entre-nœuds** | **Blütentrieb: Länge der Internodien** | **Tallo floral: longitud de los entrenudos** |  |  |
| QN | (b) | short | courte | kurz | cortos | Piccolino | 3 |
|  |  | medium | moyenne | mittel | medianos | Bavires, Bonazza, Grand vert, Gustosa, Osmin, Rosie | 5 |
|  |  | long | longue | lang | largos |  | 7 |
|  | VG | **Flowering stem: hairiness of bracts** | **Tige florale: pilosité des bractées** | **Blütentrieb: Behaarung der Deckblätter** | **Tallo floral: vellosidad de las brácteas** |  |  |
| QN | (b) | weak | faible | gering | débil | Grand vert | 1 |
|  |  | medium | moyenne | mittel | media | Thailandais à petites feuilles | 2 |
|  |  | strong | forte | stark | fuerte | Osmin | 3 |
|  | VG | **Flower: color of corolla** | **Fleur: couleur de la corolle** | **Blüte: Farbe der Krone** | **Flor: color de la corola** |  |  |
| PQ |  | white | blanc | weiß | blanco | Bavires, Edwina, Grand vert, Marian, Pesto Perpetuo | 1 |
|  |  | pink | rose | rosa | rosa | Red Arrow | 2 |
|  |  | light violet | violet clair | hellviolett | violeta claro | Ararat, Rosie | 3 |
|  |  | dark violet | violet foncé | dunkelviolett | violeta oscuro | Crimson, Osmin | 4 |
|  | VG | **Flower: color of style** | **Fleur: couleur du style** | **Blüte: Farbe des Griffels** | **Flor: color del estilo** |  |  |
| PQ |  | white | blanc | weiß | blanco | Edwina, Marian, Piccolino | 1 |
|  |  | light violet | violet clair | hellviolett | violeta claro | Magic White, Opal | 2 |
|  |  | dark violet | violet foncé | dunkelviolett | violeta oscuro | Ararat, Rosie | 3 |
| (\*) (+) | MG | **Only seed-propagated varieties: Beginning of flowering** | **Variétés reproduites par voie sexuée seulement: Époque de début de la floraison** | **Nur bei samenvermehrten Sorten: Blühbeginn** | **Solo variedades de reproducción sexuada: Comienzo de la floración** |  |  |
| QN |  | very early | très précoce | sehr früh | muy temprano |  | 1 |
|  |  | early | précoce | früh | temprano | Keskenylevelü, Piccolino | 3 |
|  |  | medium | intermédiaire | mittel | intermedio | Grand vert, Mammolo, Marian | 5 |
|  |  | late | tardive | spät | tardío |  | 7 |
|  |  | very late | très tardive | sehr spät | muy tardío | Purple Ruffles | 9 |

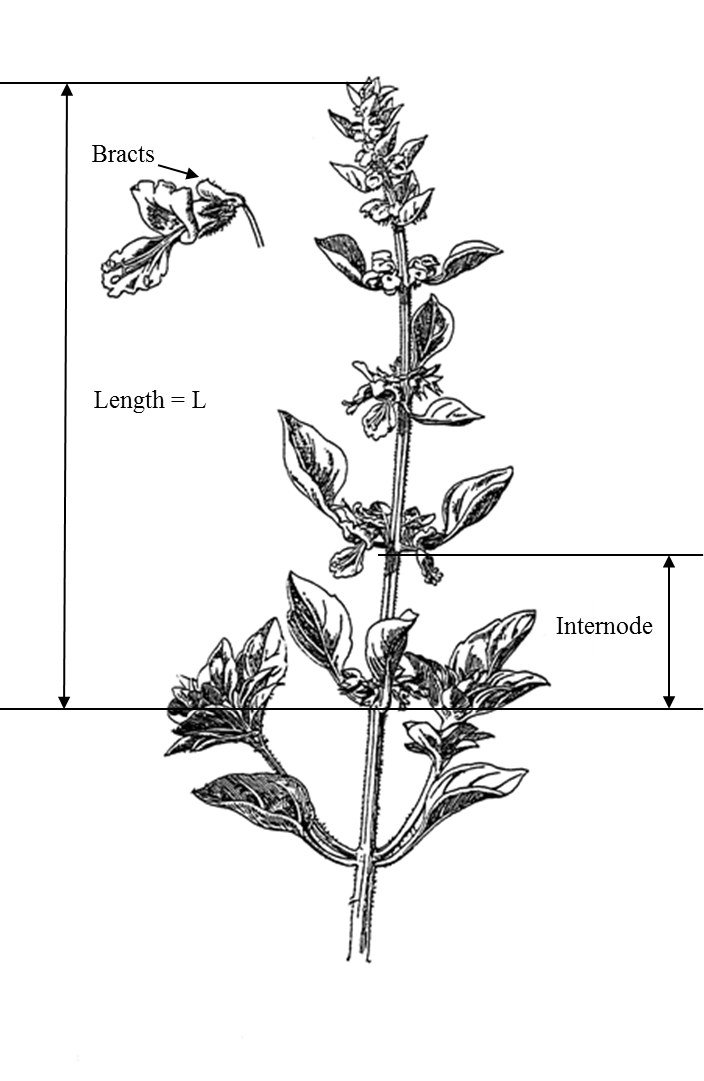
# Explanations on the Table of Characteristics

## 8.1 Explanations covering several characteristics

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

(a) Observations on leaf blades should be made on fully developed outer leaves from the middle part of the plant.

(b)



Length

Internode

Bracts

## 8.2 Explanations for individual characteristics

Ad. 1: Plant: growth habit

Observations should be done on fully developed plants before elongation of the flowering stems.

|  |  |
| --- | --- |
|  |  |
| 1 | 3 |
| very upright | broad upright |

Ad. 2: Plant: height

The plant height should be measured on fully developed plants including the flowering stem.

Ad. 3: Stem: anthocyanin coloration

The anthocyanin coloration should be observed on the main stem of fully developed plants before elongation of the flowering stems.

Ad. 4: Leaf blade: shape

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

Ad. 8: Leaf blade: distribution of anthocyanin

|  |  |  |  |
| --- | --- | --- | --- |
| Alternative text | | | |
| 1 | 2 | 3 | 4 |
| mainly on veins | on basal part | on basal and upper part | throughout |

Ad. 9: Leaf blade: intensity of green color

To be observed only if the leaf blade is not totally covered with anthocyanin.

Ad. 12: Leaf blade: profile in cross section

|  |  |  |  |
| --- | --- | --- | --- |
| Basil19 | Basil19 |  | Basil19 |
| 1 | 2 | 3 | 4 |
| convex | flat | concave | v-shaped |

Ad. 13: Leaf blade: serration of margin

|  |  |  |
| --- | --- | --- |
| Basil21 | Basil21 | Basil21 |
| 3 | 5 | 7 |
| weak | medium | strong |

Ad. 16: Flowering stem: length

The length has to be observed on the main flowering stem.

Ad. 17: Flowering stem: length of internodes

The length of the internodes is observed as an average of all internodes on the main flowering stem.

Ad. 21: Only seed-propagated varieties: Beginning of flowering

The observation should be done when 10% of the plants flower.

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Weymar, 1961: Buch der Lippenblütler und Rauhblattgewächse, Verlag Neumann Berlin und Radebeul, DE

# Technical Questionnaire

| TECHNICAL QUESTIONNAIRE | | | | Page {x} of {y} | | Reference Number: | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | |  | |  | | | | | |
|  | | | |  | | Application date: | | | | | |
|  | | | |  | | (not to be filled in by the applicant) | | | | | |
| TECHNICAL QUESTIONNAIRE  to be completed in connection with an application for plant breeders’ rights | | | | | | | | | | | |
|  | | |  | | | | | | |  | |
| 1. Subject of the Technical Questionnaire | | | | | | | | | | | |
|  | | |  | | | | | | |  | |
| 1.1 Botanical name | | | *Ocimum basilicum* L. | | | | | | |  | |
|  | | |  | | | | | | |  | |
| 1.2 Common name | | | Basil | | | | | | |  | |
|  | | |  | | | | | |  | | |
|  | | |  | | | | | | |  | |
| 2. Applicant | | | | | | | | | | | |
|  | | |  | | | | | | |  | |
| Name | | |  | | | | | | |  | |
|  | | |  | | | | | | |  | |
| Address | | |  | | | | | | |  | |
|  | | |  | | | | | | |  | |
| Telephone No. | | |  | | | | | | |  | |
|  | | |  | | | | | | |  | |
| Fax No. | | |  | | | | | | |  | |
|  | | |  | | | | | | |  | |
| E-mail address | | |  | | | | | | |  | |
|  | | |  | | | | | | |  | |
| Breeder (if different from | | |  | | | | | | |  | |
| applicant) | | |  | | | | | | |  | |
|  | | |  | | | | | | |  | |
|  | | |  | | | | | | |  | |
| 3. Proposed denomination and breeder’s reference | | | | | | | | | | | |
|  | | |  | | | | | | |  | |
| Proposed denomination | | |  | | | | | | |  | |
| (if available) | | |  | | | | | | |  | |
|  | | |  | | | | | | |  | |
| Breeder’s reference | | |  | | | | | | |  | |
|  | | |  | | | | | | |  | |
|  | | |  | | | | | | |  | |
| [[2]](#footnote-2)#4. Information on the breeding scheme and propagation of the variety  4.1 Breeding scheme | | | | | | | | | | | |
| Variety resulting from:  4.1.1 Crossing  (a) controlled cross [ ]  (please state parent varieties)  (…………………..…………………………) x (……………..…………..………………..…)  female parent male parent  (b) partially known cross [ ]  (please state known parent variety(ies))  (…………………..……………………....…) x (……………..………………..…………..…)  female parent male parent  (c) unknown cross [ ] | | | | | | | | | | | |
| 4.1.2 Mutation [ ]  (please state parent variety)     |  | | --- | |  | | | | | | | | | | | | |
| 4.1.3 Discovery and development [ ]  (please state where and when discovered and how developed)   |  | | --- | |  | | | | | | | | | | | | |
| 4.1.4 Other [ ]  (please provide details)   |  | | --- | |  | | | | | | | | | | | | |
| 4.2 Method of propagating the variety | | | | | | | | | | | |
| 4.2.1 Seed-propagated varieties  (a) Cross-pollination  (b) Other [ ]  (please provide details)   |  | | --- | |  |   4.2.2 Vegetatively propagated varieties  (a) Cuttings  (b) Other [ ]  (please provide details)   |  | | --- | |  |   4.2.3 Other [ ]  (please provide details)   |  | | --- | |  | | | | | | | | | | | | |
| In the case of hybrid varieties the production scheme for the hybrid should be provided on a separate sheet. This should provide details of all the parent lines required for propagating the hybrid e.g.  *Single Hybrid*  (…………………..…………………………) x (……………..…………..………………..…)  female parent male parent  *Three-Way Hybrid*  (…………………..…………………………) x (……………..…………..………………..…)  female line male line    (…………………..…………………………) x (……………..…………..………………..…)  single hybrid used as female parent male parent  and should identify in particular:  (a) any male sterile lines  (b) maintenance system of male sterile lines. | | | | | | | | | | | |
| 5. Characteristics of the variety to be indicated (the number in brackets refers to the corresponding characteristic in Test Guidelines; please mark the note which best corresponds). | | | | | | | | | | | |
|  | Characteristics | | | | | | Example Varieties | | | | Note |
| **5.1  (1)** | **Plant: growth habit** | | | | | |  | | | |  |
|  | very upright | | | | | | Grand vert | | | | 1[ ] |
|  | upright | | | | | |  | | | | 2[ ] |
|  | broad upright | | | | | | Fin vert nain compact | | | | 3[ ] |
| **5.2  (4)** | **Leaf blade: shape** | | | | | |  | | | |  |
|  | broad ovate | | | | | | Géant Mammouth, Italian large leaf | | | | 1[ ] |
|  | medium ovate | | | | | | Baroness, Marian | | | | 2[ ] |
|  | medium elliptic | | | | | | Ararat, Keskenylevelü, Magic White, Piccolino, Rudy | | | | 3[ ] |
|  | narrow elliptic | | | | | | Fin vert nain compact | | | | 4[ ] |
| **5.3  (7)** | **Leaf blade: anthocyanin coloration of upper side** | | | | | |  | | | |  |
|  | absent or very weak | | | | | | Bonazza, Edwina, Grand vert | | | | 1[ ] |
|  | very weak | | | | | |  | | | | 2[ ] |
|  | weak | | | | | |  | | | | 3[ ] |
|  | weak to medium | | | | | |  | | | | 4[ ] |
|  | medium | | | | | | Ararat | | | | 5[ ] |
|  | medium to strong | | | | | |  | | | | 6[ ] |
|  | strong | | | | | | Osmin | | | | 7[ ] |
|  | strong to very strong | | | | | |  | | | | 8[ ] |
|  | very strong | | | | | | Purple Ruffles | | | | 9[ ] |
| **5.4  (19)** | **Flower: color of corolla** | | | | | |  | | | |  |
|  | white | | | | | | Bavires, Edwina, Grand vert, Marian, Pesto Perpetuo | | | | 1[ ] |
|  | pink | | | | | | Red Arrow | | | | 2[ ] |
|  | light violet | | | | | | Ararat, Rosie | | | | 3[ ] |
|  | dark violet | | | | | | Crimson, Osmin | | | | 4[ ] |
|  | Characteristics | | | | | | Example Varieties | | | | Note |
| **5.5  (21)** | **Only seed-propagated varieties: Beginning of flowering** | | | | | |  | | | |  |
|  | very early | | | | | |  | | | | 1[ ] |
|  | very early to early | | | | | |  | | | | 2[ ] |
|  | early | | | | | | Keskenylevelü, Piccolino | | | | 3[ ] |
|  | early to medium | | | | | |  | | | | 4[ ] |
|  | medium | | | | | | Grand vert, Mammolo, Marian | | | | 5[ ] |
|  | medium to late | | | | | |  | | | | 6[ ] |
|  | late | | | | | |  | | | | 7[ ] |
|  | late to very late | | | | | |  | | | | 8[ ] |
|  | very late | | | | | | Purple Ruffles | | | | 9[ ] |
| 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: length* | | | *long* | | | *medium* | | | |
|  | |  | | |  | | |  | | | |
|  | |  | | |  | | |  | | | |
|  | |  | | |  | | |  | | | |
| Comments: | | | | | | | | | | | |
| [[3]](#footnote-3)#7. Additional information which may help in the examination of the variety  7.1 In addition to the information provided in sections 5 and 6, are there any additional characteristics which may help to distinguish the variety?  Yes [ ] No [ ]  (If yes, please provide details)  7.2 Are there any special conditions for growing the variety or conducting the examination?  Yes [ ] No [ ]  (If yes, please provide details)  7.3 Other information | | | | | | | | | | | |
| 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”.    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]

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