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## INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

DRAFT

HOSTA

UPOV Code: HOSTA

*Hosta* Tratt.

## GUIDELINES

## FOR THE CONDUCT OF TESTS

## FOR DISTINCTNESS, UNIFORMITY AND STABILITY

*prepared by an expert from the Netherlands*

*to be considered by the  
Technical Working Party for Ornamental Plants and Forest Trees  
at its forty-second session, to be held in Angers, France, from September 14 to 18, 2009*

## Alternative Names:\*

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Hosta</i> Tratt.	Funkia, Hosta, Plantain Lily	Funkia, Hémérocalle du Japon	Funkie	Hosta

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.

\* 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.]

<u>TABLE OF CONTENTS</u>	<u>PAGE</u>
1. SUBJECT OF THESE TEST GUIDELINES.....	3
2. MATERIAL REQUIRED .....	3
3. METHOD OF EXAMINATION.....	3
3.1 Number of Growing Cycles .....	3
3.2 Testing Place .....	3
3.3 Conditions for Conducting the Examination.....	3
3.4 Test Design .....	4
3.5 Number of Plants / Parts of Plants to be Examined.....	4
3.6 Additional Tests .....	4
4. ASSESSMENT OF DISTINCTNESS, UNIFORMITY AND STABILITY .....	4
4.1 Distinctness .....	4
4.2 Uniformity.....	5
4.3 Stability .....	5
5. GROUPING OF VARIETIES AND ORGANIZATION OF THE GROWING TRIAL.....	5
6. INTRODUCTION TO THE TABLE OF CHARACTERISTICS .....	6
6.1 Categories of Characteristics.....	6
6.2 States of Expression and Corresponding Notes.....	6
6.3 Types of Expression.....	6
6.4 Example Varieties .....	6
6.5 Legend.....	6
7. TABLE OF CHARACTERISTICS/TABLEAU DES CARACTÈRES/MERKMALSTABELLE/TABLA DE CARACTERES.....	7
8. EXPLANATIONS ON THE TABLE OF CHARACTERISTICS .....	22
8.1 Explanations covering several characteristics .....	22
8.2 Explanations for individual characteristics .....	22
9. LITERATURE .....	27
10. TECHNICAL QUESTIONNAIRE .....	28

## 1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Hosta* Tratt. of the family *Hostaceae*.

## 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 two-year-old plants ready to flower and able to express all their characteristics in the first year of examination.

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

25 plants

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

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

## 3. Method of Examination

### 3.1 *Number of Growing Cycles*

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

### 3.2 *Testing Place*

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

### 3.3 *Conditions for Conducting the Examination*

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

3.3.2 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.

### 3.4 *Test Design*

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

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

### 3.5 *Number of Plants / Parts of Plants to be Examined*

Unless otherwise indicated, 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.

### 3.6 *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.

## 4.2 *Uniformity*

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

4.2.2 For the assessment of uniformity of vegetatively propagated varieties, a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 25 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 tested, either by growing a further generation, or by testing a new **seed or** plant stock to ensure that it exhibits the same characteristics as those shown by the previous 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) Leaf blade: shape (characteristic 13)
- (b) Leaf blade: number of colors (characteristic 16)

5.4 Guidance for the use of grouping characteristics, in the process of examining distinctness, is provided through the General Introduction.

## 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*

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.

### 6.3 *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

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

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

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

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplos	Note/ Nota
<b>1.</b> (* (+)	<b>Plant: shoot: color of first scaly leaves</b>					
<b>PQ (a)</b>	green					1
	purple					2
	brown					3
<b>2.</b> (*	<b>Plant: height (inflorescence excluded)</b>					
<b>QN (b)</b>	short					3
	medium					5
	tall					7
<b>3.</b>	<b>Plant: diameter</b>					
<b>QN (b)</b>	very small				H. 'Pandora's Box', H. sieboldii 'Álba'	1
	small					3
	medium					5
	large					7
	very large				H. "Big Boy"	9
<b>4.</b> (*	<b>Petiole: length</b>					
<b>QN (b)</b>	very short				H. longipes f. sparsa	1
	short					3
	medium					5
	long					7
	very long				H. 'Big Boy' H. 'Flower Power', H. 'Green Acres'	9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplos	Note/ Nota
<b>5.</b>	<b>Petiole: shape in cross-section</b>					
(+)						
<b>PQ</b>	<b>(b)</b> flat				H. sieboldii 'Alba', H. 'Peter Pan'	1
	V-shape				H. kiyosumiensis	2
	U-shape				H. 'June', H. 'Red Oktober'	3
<b>6.</b>	<b>Petiole: color</b>					
<b>PQ</b>	<b>(b)</b> yellow					1
	yellow green					2
	light green					3
	medium green					4
	dark green					5
	blue green					6
	blue					7
	blue grey					8
<b>7.</b>	<b>Petiole: anthocyanin coloration</b>					
<b>QL</b>	<b>(b)</b> absent					1
	present					9
<b>8.</b>	<b>Petiole: distribution of anthocyanin coloration (see char. 7)</b>					
<b>QL</b>	<b>(b)</b> flush					1
	spotted					2



	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplos	Note/ Nota
<b>9.</b>	<b>Leaf blade: length</b>					
(*)						
<b>QN</b>	<b>(b)</b> very short				H. tardiflora	1
	short					3
	medium					5
	long					7
	very long				H. 'Big Boy'	9
<b>10.</b>	<b>Leaf blade: width</b>					
(*)						
<b>QN</b>	<b>(b)</b> very narrow				H. tardiflora	1
	narrow					3
	medium					5
	broad					7
	very broad				H. 'Big Boy', h. 'Sum and Substance'	9
<b>11.</b>	<b>Leaf blade: ratio</b>					
(*)	<b>length/width</b>					
<b>QN</b>	<b>(b)</b> moderately compressed					3
	medium					5
	moderately elongated					7
<b>12.</b>	<b>Leaf blade: position</b>					
	<b>of broadest part</b>					
<b>QN</b>	<b>(b)</b> in middle					1
	slightly towards base					3
	moderately towards base					5
	strongly towards base					7

English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplos	Note/ Nota
<b>13.</b>	<b>Leaf blade: shape</b>				
(*)					
(+)					
<b>PQ (b)</b>	very narrow oblong (linear)				1
	very narrow ovate (lanceolate)			H. 'Stiletto'	2
	narrow ovate			H. 'Kifukurin' (pulchella)	3
	medium ovate			H. 'Sagea'	4
	broad ovate			H. 'Sum and Substance'	5
	round			H. 'Albiqua Drinking Gourd'	6
	narrow elliptic			H. 'Saishu Jima'	7
	medium elliptic			H. 'Pineapple poll'	8
	broad elliptic				9
<b>14.</b>	<b>Leaf blade: shape of base</b>				
(*)					
(+)					
<b>PQ (b)</b>	attenuate			H. 'Saishu Jima', H. 'Sea Octopus'	1
	cuneate			H. 'Hoosier Harmony'	2
	truncate			H. nakainna	3
	cordate			H. 'Minnie Klopping', H. 'Pacific Blue Edger'	4

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplos	Note/ Nota
<b>15.</b>	<b>Leaf blade: shape of apex (excluding tip)</b>					
(+)						
<b>PQ</b>	(b) acute				H. 'otome-no-ka'	1
	approximately right angle				H. 'Oriana'	2
	rounded				H. 'Great Expectations', H. 'Tokudama Aureopulosa'	3
<b>16.</b>	<b>Leaf blade: number of colors</b>					
(*)						
(+)						
<b>QL</b>	(b) one					1
	two					2
	three					3
	more than three				H. 'June'	4
<b>17.</b>	<b>Leaf blade: color 1</b>					
(*)						
<b>QL</b>	(b) RHS Colour Chart					
	(c) (indicate reference number)					
<b>18.</b>	<b>Leaf blade: color 2</b>					
(*)						
<b>QL</b>	(b) RHS Colour Chart					
	(c) (indicate reference number)					
<b>19.</b>	<b>Leaf blade: color 3</b>					
(*)						
<b>QL</b>	(b) RHS Colour Chart					
	(c) (indicate reference number)					

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplos	Note/ Nota
<b>20.</b>	<b>Leaf blade: area of color 1 to total area</b>					
<b>QN</b>	<b>(b)</b> small					3
	medium					5
	large					7
<b>21.</b>	<b>Leaf blade: area of color 2 to total area</b>					
<b>QN</b>	<b>(b)</b> small					3
	medium					5
	large					7
<b>22.</b>	<b>Leaf blade: area of color 3 to total area</b>					
<b>QN</b>	<b>(b)</b> small					3
	medium					5
	large					7
<b>23.</b>	<b>Leaf blade: distribution of color 1</b>					
<b>QL</b>	<b>(b)</b> at base					1
	at centre					2
	at top					3
	at margin					4
	scattered					5
<b>24.</b>	<b>Leaf blade: distribution of color 2</b>					
<b>QL</b>	<b>(b)</b> at base					1
	at centre					2
	at top					3
	at margin					4
	scattered					5

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplos	Note/ Nota
<b>25.</b>	<b>Leaf blade: distribution of color 3</b>					
<b>QL</b>	<b>(b)</b> at base					1
	at centre					2
	at top					3
	at margin					4
	scattered					5
<b>26.</b>	<b>Leaf blade: shape of color 1</b>					
<b>(+)</b>						
<b>QL</b>	<b>(b)</b> equal					1
	flamed				H. 'June', H. 'Little Sun Spot'	2
	striped				H. 'On stage', H. sieboldiana 'Thunderbolt', H. 'Spilt Milk'	3
	spotted				H. 'Kiwi Forest'	4
	in sectors				H. 'Pin Stripe Sister'	5
	marbled				H. sieboldiana 'Northern Mist', H. 'Striptease'	6
	marginated					7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplos	Note/ Nota
<b>27.</b>	<b>Leaf blade: shape of color 2</b>					
(+)						
<b>QL</b>	<b>(b)</b> flamed				H. 'June', H. 'Little Sun Spot'	1
	striped				H. 'On stage', H. 'Spilt Milk', H. sieboldiana 'Thunderbolt'	2
	spotted				H. 'Kiwi Forest'	3
	in sectors				H. 'Pin Stripe Sister'	4
	marbled				H. sieboldiana 'Northern Mist', H. 'Striptease'	5
	marginated					6
<b>28.</b>	<b>Leaf blade: shape of color 3</b>					
(+)						
<b>QL</b>	<b>(b)</b> flamed				H. 'June', H. 'Little Sun Spot'	1
	striped				H. 'On stage', H. 'Spilt Milk', H. sieboldiana 'Thunderbolt'	2
	spotted				H. 'Kiwi Forest'	3
	in sectors				H. 'Pin Stripe Sister'	4
	marbled				H. sieboldiana 'Northern Mist', H. 'Striptease'	5
	marginated					6

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplos	Note/ Nota
<b>29.</b>	<b>Leaf blade: cross section</b>					
<b>PQ</b>	<b>(b)</b> flat					1
	shallow concave					2
	deeply concave				H. 'Love Pat'	3
	convex				H. 'big Daddy'?	4
<b>30.</b>	<b>Leaf blade: number of clearly visible parallel veins</b>					
<b>(+)</b>						
<b>QN</b>	<b>(b)</b> few				H. "Sum and Substance"	3
	medium					5
	many				H. "Finlandia"	7
<b>31.</b>	<b>Leaf blade: degree of bulging</b>					
<b>(+)</b>						
<b>QN</b>	<b>(b)</b> absent or very weak				H. 'Peter Pan'	1
	weak					3
	medium					5
	strong					7
<b>32.</b>	<b>Leaf blade: degree of blistering</b>					
<b>(+)</b>						
<b>QN</b>	<b>(b)</b> absent or very weak					1
	medium				H. 'Sea Dream'	2
	strong				H. 'Midas Touch'	3
<b>33.</b>	<b>Leaf blade: undulation of margin</b>					
<b>(+)</b>						
<b>QN</b>	<b>(b)</b> absent or weak				H. 'Silvery Slugproof'	1
	medium					2
	strong				H. 'Sparky'	3

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplos	Note/ Nota
<b>34.</b>	<b>Leaf blade: rotation of longitudinal axis</b>					
<b>QL</b>	(b) absent					1
	present				H. 'Green Power'	9
<b>35.</b>	<b>Inflorescence: length</b>					
<b>QN</b>	(e) short					3
	medium					5
	long					7
<b>36.</b>	<b>Inflorescence: number of flowers</b>					
<b>QN</b>	(e) few					3
	medium					5
	many					7
<b>37.</b>	<b>Inflorescence: attitude of flowers</b>					
<b>QL</b>	(d) erect					1
	horizontal					2
	drooping					3
<b>38.</b>	<b>MG Peduncle: color</b>					
<b>PQ</b>	(d) RHS Colour Chart (indicate reference number)					
<b>39.</b>	<b>Bract</b>					
<b>QL</b>	(d) absent					1
	present					9
<b>40.</b>	<b>Bract: length (if present)</b>					
<b>QN</b>	(d) short					3
	medium					5
	long					7



	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplos	Note/ Nota
<b>41.</b>	<b>Bract: width (if present)</b>					
<b>QN</b>	(d) narrow					3
	medium					5
	broad					7
<b>42.</b>	<b>Bract: cross-section (if present)</b>					
<b>QN</b>	(d) concave					1
	flat					2
	convex					3
<b>43.</b>	<b>Bract: color (if present)</b>					
<b>PQ</b>	(d) RHS Colour Chart (indicate reference number)					
<b>44.</b>	<b>Pedicle: length</b>					
<b>QN</b>	(d) short					3
	medium					5
	long					7
<b>45.</b>	<b>Pedicle: color</b>					
<b>PQ</b>	(d) RHS Colour Chart (indicate reference number)					
<b>46.</b>	<b>Flower: type</b>					
(+)						
	(d) single					1
	semi-double					2
	double					3

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplos	Note/ Nota
<b>47.</b>	<b>Perianth: length</b>					
	(+) <b>QN (d)</b> short					3
	medium					5
	long					7
<b>48.</b>	<b>Perianth: width</b>					
	<b>QN (d)</b> narrow					3
	medium					5
	broad					7
<b>49.</b>	<b>Perianth: shape in side-view</b>					
	(+) <b>PQ (d)</b> tubular					1
	flared					2
	funnel					3
	campanulate					4
<b>50.</b>	<b>Perianth: tube: length</b>					
	<b>QN (d)</b> short					3
	medium					5
	long					7
<b>51.</b>	<b>Perianth: tube: color of outer side</b>					
	<b>PQ (d)</b> RHS Colour Chart (indicate reference number)					
<b>52.</b>	<b>Perianth: length of outer corolla lobes</b>					
	<b>QN (d)</b> short					3
	medium					5
	long					7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplos	Note/ Nota
<b>53.</b>	<b>Perianth: shape of outer corolla lobes</b>					
<b>PQ (d)</b>	very narrow ovate (lanceolate)					1
	narrow ovate					2
	medium ovate					3
	broad ovate					4
	round					5
	narrow elliptic					6
	medium elliptic					7
	broad elliptic					8
<b>54.</b>	<b>Perianth: outer corolla lobes: shape of apex</b>					
<b>PQ (d)</b>	acute					1
	obtuse					2
	rounded					3
<b>55.</b> (*)	<b>Perianth: outer corolla lobes: color</b>					
<b>PQ (d)</b>	RHS Colour Chart (indicate reference number)					
<b>56.</b>	<b>Perianth: length of inner corolla lobes</b>					
<b>QN (d)</b>	short					3
	medium					5
	long					7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplos	Note/ Nota
<b>57.</b>	<b>Perianth: inner corolla lobes: shape</b>					
<b>PQ</b>	<b>(d)</b> very narrow ovate (lanceolate)					1
	narrow ovate					2
	medium ovate					3
	broad ovate					4
	round					5
	narrow elliptic					6
	medium elliptic					7
	broad elliptic					8
<b>58.</b>	<b>Perianth: inner corolla lobes: color</b>					
<b>PQ</b>	<b>(d)</b> RHS Colour Chart (indicate reference number)					
<b>59.</b>	<b>Perianth: inner corolla lobes: shape of apex</b>					
<b>PQ</b>	<b>(d)</b> acute					1
	obtuse					2
	rounded					3
<b>60.</b>	<b>Filament: length</b>					
<b>QN</b>	<b>(d)</b> short					3
	medium					5
	long					7
<b>61.</b>	<b>Filament: color</b>					
<b>PQ</b>	<b>(d)</b> white or near white					1
	light green					2
	medium green					3

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplos	Note/ Nota
<b>62.</b>	<b>Anther: color</b>					
<b>PQ</b>	(d) yellow					1
	yellow with purple					2
	purple					3
	brown purple					4
<b>63.</b>	<b>Style: length</b>					
<b>QN</b>	(d) short					3
	medium					5
	long					7
<b>64.</b>	<b>Style: color</b>					
<b>PQ</b>	(d) white or near white					1
	light green					2
	medium green					3
<b>65.</b>	<b>Style: color of stigma</b>					
<b>PQ</b>	(d) white or near white					1
	light green					2
	green					3
	light yellow					4
	light purple					5
	light violet blue					6
<b>66.</b>	<b>Pollen: color</b>					
<b>PQ</b>	(d) medium yellow					1
	dark yellow					2
	yellow orange					3
	orange					4

## 8. 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) Plant shoot: color of the first scaly leaves: Characteristic should be observed at the moment the first shoots emerge and before opening.
- (b) Plant, petiole and leaf characteristics should be observed before flowering.
- (c) The order of colors should follow the RHS Colour Chart: color 1 is the color with the lowest RHS Colour Chart number; color 2 is the second lowest RHS Colour Chart number; color 3 is the third lowest..... etc.
- (d) Characteristics of the inflorescence should be observed when first flowers are opening.
- (e) Length of peduncle should be observed when all flowers are open.

Characteristics on the bract should be observed on the bract of the first flower (when present).

### 8.2 *Explanations for individual characteristics*

#### Ad. 1: Plant: shoot: color of first scaly leaves

Scaly leaves: the first plant parts emerging from the soil.



Ad. 5: Petiole: shape in cross-section

To be provided

Ad. 13: Leaf blade: shape



very narrow oblong (linear)  
1



narrow ovate  
2



medium ovate  
4



broad ovate  
5



round  
6



elliptic

Ad. 14: Leaf blade: shape of base



attenuate  
1



cuneate  
2



truncate  
3



cordate  
4

Ad. 15: Leaf blade: shape of apex (excluding tip)



acute  
1



approximately right angle  
2



rounded  
3



Ad. 16: Leaf blade: number of colors



one  
1



three  
3

Ad. 26: Leaf blade: shape of color 1

To be provided

Ad. 27: Leaf blade: shape of color 2

Ad. 28: Leaf blade: shape of color 3



flamed  
1



striped  
2



spotted  
3



in sectors  
4



marbled  
5



marginated  
6



Ad. 30: Leaf blade: number of clearly visible parallel veins



few  
3



many  
7

Ad. 31: Leaf blade: degree of bulging



absent to very weak  
1



strong to very strong  
8

Ad. 32: Leaf blade: degree of blistering



absent or very weak  
1



strong  
3

Ad. 33: Leaf blade: undulation of margin

To be provided

Ad. 46: Flower: type

To be provided

Ad. 47: Perianth: length

To be provided

Ad. 49: Perianth: shape in side-view

To be provided

9. Literature

Grenfell, D. and Shadrack, M., 2004: The color encyclopedia of Hosta's, Timber Press, Inc., Cambridge, UK, ISBN 0-88192-618-3

10. Technical Questionnaire

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
		Application date: (not to be filled in by the applicant)
1. Subject of the Technical Questionnaire		
1.1 Botanical name	<input type="text" value="Hosta Tratt."/>	
1.2 Common name	<input type="text" value="Hosta"/>	
2. Applicant		
Name	<input type="text"/>	
Address	<input type="text"/>	
Telephone No.	<input type="text"/>	
Fax No.	<input type="text"/>	
E-mail address	<input type="text"/>	
Breeder (if different from applicant)	<input type="text"/>	
3. Proposed denomination and breeder's reference		
Proposed denomination (if available)	<input type="text"/>	
Breeder's reference	<input type="text"/>	

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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#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)
- (b) partially known cross  [ ]  
(please state known parent variety(ies))
- (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)

--

# Authorities may allow certain of this information to be provided in a confidential section of the Technical Questionnaire.

TECHNICAL QUESTIONNAIRE

Page {x} of {y}

Reference Number:

## 4.2 Method of propagating the variety

## 4.2.1 Vegetative propagation

- (a) cuttings [ ]
- (b) *in vitro* propagation [ ]
- (c) other (state method) [ ]

4.2.2 Seed [ ]

4.2.3 Other [ ]  
(please provide details)

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	
<b>5.1 Plant: height (inflorescence excluded)</b>			
<b>(2)</b>			
short		3[ ]	
medium		5[ ]	
tall		7[ ]	
<b>5.4 Leaf blade: shape</b>			
<b>(13)</b>			
very narrow oblong (linear)		1[ ]	
very narrow ovate (lanceolate)	H. 'Stiletto'	2[ ]	
narrow ovate	H. 'Kifukurin' (pulchella)	3[ ]	
medium ovate	H. 'Sagea'	4[ ]	
broad ovate	H. 'Sum and Substance'	5[ ]	
round	H. 'Albiqua Drinking Gourd'	6[ ]	
narrow elliptic	H. 'Saishu Jima'	7[ ]	
medium elliptic	H. 'Pineapple poll'	8[ ]	
broad elliptic			
<b>5.2 Leaf blade: variegation</b>			
<b>(14)</b>			
absent		1[ ]	
present		9[ ]	

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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**5.3 Leaf blade: pattern of variegation****(15)**

flamed	1[ ]
striped	2[ ]
spotted	3[ ]
sectors	4[ ]
marbled	5[ ]
streaked	6[ ]



TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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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 <b>similar</b> variety(ies)	Describe the expression of the characteristic(s) for <b>your</b> candidate variety
<i>Example</i>	<i>Flower: color</i>	<i>orange</i>	<i>orange red</i>
Comments:			

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
<p>#7. Additional information which may help in the examination of the variety</p> <p>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?</p> <p>Yes [ ] No [ ]</p> <p>(If yes, please provide details)</p> <p>7.2 Are there any special conditions for growing the variety or conducting the examination?</p> <p>Yes [ ] No [ ]</p> <p>(If yes, please provide details)</p> <p>7.3 Other information</p> <p>A representative color photograph of the variety should accompany the Technical Questionnaire</p>		
<p>8. Authorization for release</p> <p>(a) Does the variety require prior authorization for release under legislation concerning the protection of the environment, human and animal health?</p> <p>Yes [ ] No [ ]</p> <p>(b) Has such authorization been obtained?</p> <p>Yes [ ] No [ ]</p> <p>If the answer to (b) is yes, please attach a copy of the authorization.</p>		

# Authorities may allow certain of this information to be provided in a confidential section of the Technical Questionnaire.

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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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]