

**UPOV**

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**INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS**  
 GENEVA

**DRAFT**

**HEBE**

UPOV Code: HEBEE

*Hebe* Comm. ex Juss.

**GUIDELINES**

**FOR THE CONDUCT OF TESTS**

**FOR DISTINCTNESS, UNIFORMITY AND STABILITY**

*prepared by an expert from New Zealand*

*to be considered by*

*the Technical Working Party for Ornamental Plants and Forest Trees  
 at its forty-third session, to be held in Cuernavaca, Morelos State, Mexico,  
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Alternative Names:\*

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
Hebe Comm. ex Juss.	Hebe			

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), for the latest information.]

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1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Hebe* Comm. ex Juss.

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 young plants capable of flowering and expressing relevant characteristics of the variety in the first growing cycle.

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

8 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 *Type of plot for observation*

The recommended method of observing the characteristic is indicated by the following key in the second column of the Table of Characteristics:

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

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

### 3.3.3 Observation of color by eye

Because daylight varies, color determinations made against a color chart should be made either in a suitable cabinet providing artificial daylight or in the middle of the day in a room without direct sunlight. The spectral distribution of the illuminant for artificial daylight should conform with the CIE Standard of Preferred Daylight D 6500 and should fall within the tolerances set out in the British Standard 950, Part I. These determinations should be made with the plant part placed against a white background. The color chart and version used should be specified in the variety description.

### 3.4 *Test Design*

3.4.1 Each test should be designed to result in a total of at least 8 plants

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

### 3.5 *Additional Tests*

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

## 4. Assessment of Distinctness, Uniformity and Stability

### 4.1 *Distinctness*

#### 4.1.1 General Recommendations

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

#### 4.1.2 Consistent Differences

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

#### 4.1.3 Clear Differences

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

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

Unless otherwise indicated, all observations should be made on 8 plants or parts taken from each of 8 plants and any other observations made on all plants in the test.

#### 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

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 8 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 seeds 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) Plant: habit (characteristic 1)
- (b) Leaf blade: width (characteristic 15)
- (c) Leaf blade: main color of upper side (characteristic 19)
- (d) Leaf blade: secondary color on upper side (characteristic 20)
- (e) Inflorescence: shape (characteristic 28)
- (f) Corolla lobe: color of inner side (characteristic 34) with the following groups:
  - white
  - pink
  - pink red
  - purple
  - violet
  - blue
- (g) Time of beginning of first flowering (characteristic 38)

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*

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

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

State	Note
small	3
medium	5
large	7

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

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

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

### 6.3 *Types of Expression*

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

### 6.4 *Example Varieties*

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

### 6.5 *Legend*

(\*) Asterisked characteristic – see Chapter 6.1.2

QL Qualitative characteristic – see Chapter 6.3

QN Quantitative characteristic – see Chapter 6.3

PQ Pseudo-qualitative characteristic – see Chapter 6.3

MG, MS, VG, VS – see Chapter 4.1.5

(a)-{d} See Explanations on the Table of Characteristics in Chapter 8.1

(+) See Explanations on the Table of Characteristics in Chapter 8.



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

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota	
<b>1.</b>	<b>VG</b>	<b>Plant: habit</b>					
(*)							
(+)							
<b>PQ</b>	<b>(a)</b>	upright			Turkish Delight	1	
		semi upright			Beverley Hills	2	
		spreading			Orphan Annie	3	
		horizontal			First Light	4	
<b>2.</b>	<b>VG/ MG</b>	<b>Plant: height</b>					
(*)							
(+)							
<b>QN</b>	<b>(a)</b>	short			Beverley Hills	3	
		medium			Wiri Desire	5	
		tall				7	
<b>3.</b>	<b>VG</b>	<b>Plant: density</b>					
<b>QN</b>	<b>(a)</b>	sparse				3	
		medium			Champseiont	5	
		dense			Beverley Hills	7	
<b>4.</b>	<b>VG</b>	<b>Young shoot : intensity of anthocyanin coloration</b>					
(*)							
<b>QN</b>	<b>(b)</b>	absent or very weak			Champseiont	1	
		weak			Rosie	3	
		medium				5	
		strong			Wiri Desire	7	
		very strong			Orphan Annie	9	
<b>5.</b>	<b>VG</b>	<b>Young shoot: pubescence</b>					
<b>QL</b>	<b>(b)</b>	absent			Champseiont	1	
		present			Orphan Annie	9	

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>6.</b>	<b>VG</b>	<b>Young shoot: density of pubescence</b>				
<b>QN</b>	<b>(b)</b>	very weak			First Light	1
		weak			Rosie	2
		medium			Orphan Annie	3
		strong				4
<b>7.</b>	<b>VG/ (* MG</b>	<b>Stem: length of internodes</b>				
<b>QN</b>	<b>(c)</b>	very short			Champseiont	1
		short			Beverley Hills	3
		medium			Wiri Desire	5
		long			Moonlight	7
<b>8.</b>	<b>VG</b>	<b>Stem: anthocyanin colouration of internodes</b>				
<b>QN</b>	<b>(c)</b>	absent or very weak				1
		weak			Beverley Hills	3
		medium				5
		strong			Rosie	7
<b>9.</b>	<b>VG (* (+)</b>	<b>Leaf bud: presence of sinus</b>				
<b>QL</b>		absent			Silver Queen	1
		present			Beverley Hills	9
<b>10.</b>	<b>VG (+)</b>	<b>Leaf bud: width of sinus</b>				
<b>QN</b>		narrow			Sunset Boulevard	1
		medium			Ohakea	2
		broad			Moonlight	3

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>11. VG</b>	<b>Petiole: presence</b>					
(*)						
<b>QL</b>	(d)	absent			Beverley Hills	1
		present			Ohakea	9
<b>12. VG</b>	<b>Petiole: length</b>					
<b>QN</b>	(d)	short			Champseiont	1
		medium			Wiri Desire	2
		long				3
<b>13. VG</b>	<b>Leaf: attitude</b>					
<b>QN</b>	(d)	adpressed				1
		erect				2
		semi erect				3
		horizontal				4
		downwards				5
<b>14. VG/ (*) MG</b>	<b>Leaf blade: length</b>					
<b>QN</b>	(d)	very short			Champseiont	1
		short			Beverley Hills	3
		medium			Orphan Annie	5
		long			Moonlight	7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota	
<b>15.</b>	<b>VG/</b>	<b>Leaf blade: width</b>					
(*)	<b>MG</b>						
<b>QN</b>	<b>(d)</b>	very narrow			Champseiont	1	
		narrow			Sunset Boulevard	3	
		medium			Sunstreak	5	
		broad			Wiri Desire	7	
<b>16.</b>	<b>VG/</b>	<b>Leaf blade: ratio</b>					
(+)	<b>MG</b>	<b>length/width</b>					
<b>QN</b>	<b>(d)</b>	elongated				1	
		medium				2	
		compressed				3	
<b>17.</b>	<b>VG</b>	<b>Leaf blade: shape</b>					
(*)							
(+)							
<b>PQ</b>	<b>(d)</b>	lanceolate			Orphan Annie	1	
		ovate				2	
		elliptic			First Light	3	
		oblong			Beverley Hills	4	
		oblanceolate			Moonlight	5	
		obovate				6	
<b>18.</b>	<b>VG</b>	<b>Leaf blade:</b>					
		<b>incisions on margin</b>					
<b>QL</b>	<b>(d)</b>	absent				1	
		present				9	

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota	
<b>19.</b>	<b>VG</b>	<b>Leaf blade: main color of upper side</b>					
(*)							
(+)							
<b>PQ</b>	<b>(d)</b>	white				1	
		cream				2	
		yellow				3	
		yellow green			Orphan Annie	4	
		light green				5	
		medium green				6	
		dark green				7	
		yellow brown				8	
		reddish brown			Turkish Delight	9	
<b>20.</b>	<b>VG</b>	<b>Leaf blade: secondary color of upper side</b>					
(*)							
(+)							
<b>PQ</b>	<b>(d)</b>	none				1	
		white				2	
		cream			Sunstreak	3	
		yellow			Orphan Annie	4	
		yellow green			Moonlight	5	
		light green				6	
		medium green				7	
		dark green				8	
		yellow brown				9	
		reddish brown				10	

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>21.</b>	<b>VG</b>	<b>Leaf blade : pattern of secondary colour</b>				
(+)						
<b>PQ</b>	<b>(d)</b>	marginal only				1
		around midrib only				2
		marginal and around midrib				3
		flecked				4
		blotched				5
<b>22.</b>	<b>VG</b>	<b>Leaf blade: color of margin (if different from 19 and 20)</b>				
<b>PQ</b>	<b>(d)</b>	pinkish				1
		reddish			Pink Elephant	2
<b>23.</b>	<b>VG</b>	<b>Leaf blade: glossiness on upper side</b>				
<b>QN</b>	<b>(d)</b>	absent or weak			Turkish Delight	1
		medium				2
		strong			Sunset Boulevard	3
<b>24.</b>	<b>VG</b>	<b>Leaf blade: presence of glaucosity on upper side</b>				
(*) (+)						
<b>QL</b>	<b>(d)</b>	absent				1
		present			First Light	9
<b>25.</b>	<b>VG</b>	<b>Leaf blade: intensity of glaucosity on upper side</b>				
<b>QN</b>	<b>(d)</b>	weak				1
		medium				2
		strong				3

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota	
<b>26.</b>	<b>VG</b>	<b>Inflorescence: arrangement</b>					
(*)							
(+)							
<b>PQ</b>	terminal				Champseiont	1	
	lateral				Beverley Hills	2	
	terminal and lateral					3	
<b>27.</b>	<b>VG</b>	<b>Inflorescence: position in relation to foliage</b>					
<b>QN</b>	below					1	
	level				Beverley Hills	2	
	above				Orphan Annie	3	
<b>28.</b>	<b>VG</b>	<b>Inflorescence: shape</b>					
(*)							
(+)							
<b>PQ</b>	(e) triangular				Moonlight	1	
	oblong				Eveline, Wiri Vogue	2	
	elliptic				Icing Sugar, Wiri Joy	3	
	obovate					4	
<b>29.</b>	<b>VG/ MG</b>	<b>Inflorescence: length (excluding peduncle)</b>					
(*)							
(+)							
<b>QN</b>	(e) short					3	
	medium				Orphan Annie	5	
	long				Wiri Desire	7	
<b>30.</b>	<b>VG</b>	<b>Inflorescence: density of flowers</b>					
<b>QN</b>	(e) sparse					3	
	medium				Ohakea	5	
	dense				Beverley Hills	7	

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota	
<b>31.</b>	<b>VG</b>	<b>Inflorescence: length of bract in relation to calyx</b>					
(+)							
<b>QN</b>	(e)	shorter			Champseiont	1	
		equal			Rosie	2	
		longer			Orphan Annie	3	
<b>32.</b>	<b>VG</b>	<b>Calyx lobe: shape</b>					
(+)							
<b>PQ</b>	(e)	narrow ovate				1	
	(f)	broad ovate				2	
		narrow triangular				3	
		broad triangular				4	
<b>33.</b>	<b>VG/ (*) MG (+)</b>	<b>Corolla: diameter</b>					
<b>QN</b>	(e)	small			Wiri Vogue	3	
	(f)	medium			Orphan Annie	5	
		large			Silver Queen	7	
<b>34.</b>	<b>MG (*)</b>	<b>Corolla lobe: color of inner side</b>					
<b>PQ</b>	(e)	RHS Color Chart:					
	(f)	(indicate reference number)					
<b>35.</b>	<b>MG</b>	<b>Corolla lobe: color of outer side</b>					
<b>PQ</b>	(e)	RHS Color Chart:					
	(f)	(indicate reference number)					



	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>36.</b>	<b>VG/M</b>	<b>Corolla tube:</b>				
(+)	<b>G</b>	<b>length in relation to calyx</b>				
<b>QN</b>	(e)	shorter			Beverley Hills	1
	(f)	equal			Rosie	2
		longer			Wiri Vogue	3
<b>37.</b>	<b>MG</b>	<b>Corolla tube: color of outer side</b>				
<b>PQ</b>	(e)	RHS Color Chart:				
	(f)	(indicate reference number)				
<b>38.</b>	<b>MG</b>	<b>Time of beginning of first flowering</b>				
(*)						
(+)						
<b>QN</b>		early			Beverley Hills	3
		medium			Moonlight	5
		late			Wiri Desire	7
<b>39.</b>	<b>MG</b>	<b>Type of flowering</b>				
(+)						
<b>QN</b>		once only			Rosie	1
		twice only			Sunset Boulevard	2
		intermittent			First Light	3

8. Explanations on the Table of Characteristics

8.1 *Explanations covering several characteristics*

Unless otherwise indicated, all characteristics should be examined at the time of full flowering.

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

- (a) The assessment of plant characters should be carried out later in the growing season, towards the end of active growth.
- (b) All observations on young shoot characters should be made in the first flush of growth in the season.
- (c) All observations on stem internodes should be made on the middle third of a well developed shoot in active growth.
- (d) All observations on the leaf and petiole should be made on a leaf from the middle third of a flowering shoot
- (e) All observations on the inflorescence and flower should be made when the flowers which have opened first, at the base of an inflorescence, are beginning to fade.
- (f) All observations on the calyx and corolla should be made from flowers in the middle third of the inflorescence.

8.2 *Explanations for individual characteristics*

Ad. 1: Plant: habit

Photos or diagram to be added

Ad. 2: Plant: height

All observations are made when plants are flowering.

Ad. 9: Leaf bud: presence of sinus






Ad. 10: Leaf bud: width of sinus

The sinus is located in the leaf bud, a gap between the bases of two leaves of a pair when in bud. It can be seen with an unaided eye for some varieties and is recommended to be observed with a magnifying glass. The presence or absence of a petiole or the shape of the

leaf blade can indicate the presence and width of the sinus. Narrower leaves and those with petioles are more likely to have a sinus. The sinus width is observed at the broadest point. Diagram to be added

Ad. 16: Leaf blade: ratio length/width

Ad. 17: Leaf blade: shape

		Broadest part width		
		Below the middle	At middle	Above middle
elongated				
	1 lanceolate			5 oblanceolate
length/width				
			4 oblong	
compressed				
	2 ovate		3 elliptic	6 obovate

Ad. 19: Leaf blade: main color of upper side

The main color is determined as the colour with the largest surface area present on the upper side of a leaf. For varieties with glaucosity, the waxy layer is removed.

Ad. 20: Leaf blade: secondary color of upper side

The secondary colour is determined as the color with the second largest surface area, usually observed as a defined pattern on the upper side of a leaf. For varieties with glaucosity, the waxy layer is removed

Ad. 21: Leaf blade: pattern of secondary color on upper side

Photos, diagrams to be added

Ad. 24: Leaf blade: glaucosity on upper side

The glaucosity is the bloom or waxy layer covering the leaf surface and generally gives a leaf a bluish or milky colouration. The layer can be removed.

Ad. 26: Inflorescence: arrangement

Photos, diagram to be added

Ad. 29: Inflorescence: shape

Photos, diagrams to be added

Ad. 29: Inflorescence: length

Diagram to be added

Ad. 31: Inflorescence: length of bract in relation to calyx

Ad. 33: Corolla: diameter

Ad. 36: Corolla tube: length in relation to calyx

Diagram of inflorescence and floral structures

Ad. 32: Calyx lobe: shape

Diagram to be added

Ad. 38: Time of beginning of first flower

The beginning of flowering is determined when 10% of all flower buds on the trial plants have opened during the first or most prolific flowering of the growing season.

Ad. 39: Type of flowering

Flowering can occur in one or more periods during the growing season.

Only once: the variety has only one defined flowering period: in spring, in summer or in autumn

Twice: the variety has two defined flowering periods: in spring and summer, in summer and autumn or in spring and autumn

Intermittent: the variety has no clearly defined flowering period and will produce flower of varying amount, continuously through the growing season or throughout the year. For varieties who flower intermittently, at least one flowering period will be more prolific than the others.

9. Literature

Hutchins G. 1997 Hebes Here and There, Hutchins and Davies, Reading, United Kingdom

Metcalf L.J. 1975 The Cultivation of New Zealand trees and shrubs, AH & AW Reed Ltd. Auckland, New Zealand

Metcalf L.J. 2001 International Register of Hebe Cultivars, Royal New Zealand Institute of Horticulture

Metcalf L.J. 2006 Hebe: a guide to species, hybrids and allied genera, Timber Press, Oregon, USA

Poole A.L. and N.M. Adams 1986 Trees and shrubs of New Zealand, Government Printing, Wellington, p218-237

10. Technical Questionnaire

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
		Application date: (not to be filled in by the applicant)
<b>TECHNICAL QUESTIONNAIRE</b> to be completed in connection with an application for plant breeders' rights		
1. Subject of the Technical Questionnaire		
1.1 Genus		
1.1.1 Botanical name	<input type="text" value="Hebe Comm. ex Juss."/>	
1.1.2 Common name	<input type="text" value="Hebe"/>	
1.2 Species (please complete)	<input type="text"/>	
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)

(.....)	x	(.....)
female parent		male parent

(b) partially known cross [ ]  
(please state known parent variety(ies))

(.....)	x	(.....)
female parent	x	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)

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# 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 Other

(please provide details)

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:	
<p>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).</p>			
Characteristics	Example Varieties	Note	
<b>5.1 Plant: habit</b> <b>(2)</b>			
upright	Turkish Delight	1[ ]	
semi upright	Beverley Hills	2[ ]	
spreading	Orphan Annie	3[ ]	
horizontal	First Light	4[ ]	
<b>5.2 Leaf blade: width</b> <b>(15)</b>			
very narrow	Champseiont	1[ ]	
very narrow to narrow		2[ ]	
narrow	Sunset Boulevard	3[ ]	
narrow to medium		4[ ]	
medium	Sunstreak	5[ ]	
medium to broad		6[ ]	
broad	Wiri Desire	7[ ]	
broad to very broad		8[ ]	
very broad		9[ ]	

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:	
Characteristics	Example Varieties	Note	
<b>5.3 Leaf blade: main color of upper side</b>			
<b>(18)</b>			
white			1[ ]
cream			2[ ]
yellow			3[ ]
yellow green	Orphan Annie		4[ ]
light green			5[ ]
medium green			6[ ]
dark green			7[ ]
yellow brown			8[ ]
reddish brown	Turkish Delight		9[ ]
<b>5.4 Leaf blade: secondary color of upper side</b>			
<b>(20)</b>			
none			1[ ]
white			2[ ]
cream	Sunstreak		3[ ]
yellow	Orphan Annie		4[ ]
yellow green	Moonlight		5[ ]
light green			6[ ]
medium green			7[ ]
dark green			8[ ]
yellow brown			9[ ]
reddish brown			10[ ]

TECHNICAL QUESTIONNAIRE		Page {x} of {y}	Reference Number:
Characteristics		Example Varieties	Note
<b>5.5</b>	<b>Inflorescence: shape in profile</b>		
<b>(28)</b>			
	triangular	Moonlight	1[ ]
	oblong	Eveline, Wiri Vogue	2[ ]
	elliptic	Icing Sugar, Wiri Joy	3[ ]
	obovate		4[ ]
<b>5.6</b>	<b>Corolla lobe: color of inner side</b>		
<b>(34)</b>			
	RHS Colour Chart: (indicate reference number)		
<b>5.6A</b>	<b>Corolla lobe: color of inner side with the following groups:</b>		
<b>(34A)</b>			
	white		1[ ]
	pink		2[ ]
	pink red		3[ ]
	purple		4[ ]
	violet		5[ ]
	blue		6[ ]
<b>5.7</b>	<b>Time of beginning of first flowering</b>		
<b>(38)</b>			
	very early		1[ ]
	very early to early		2[ ]
	early	Beverley Hills	3[ ]
	early to medium		4[ ]
	medium	Moonlight	5[ ]
	medium to late		6[ ]
	late	Wiri Desire	7[ ]
	late to very late		8[ ]
	very late		9[ ]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:	
<p>6. Similar varieties and differences from these varieties</p> <p><i>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.</i></p>			
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
<i>Example</i>	<i>Plant: habit</i>	<i>Semi upright</i>	<i>upright</i>
<p>Comments:</p>			

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 Main use of the variety</p> <p>(a) pot plant [ ]</p> <p>(b) garden plant [ ]</p> <p>(c) other [ ]</p> <p>(please provide details)</p> <p>.....</p> <p>7.4 A representative color <b>image</b> 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:												
<p>9. Information on plant material to be examined or submitted for examination.</p> <p>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.</p> <p>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:</p> <table data-bbox="284 801 1407 1057"><tr><td>(a) Microorganisms (e.g. virus, bacteria, phytoplasma)</td><td>Yes [ ]</td><td>No [ ]</td></tr><tr><td>(b) Chemical treatment (e.g. growth retardant, pesticide)</td><td>Yes [ ]</td><td>No [ ]</td></tr><tr><td>(c) Tissue culture</td><td>Yes [ ]</td><td>No [ ]</td></tr><tr><td>(d) Other factors</td><td>Yes [ ]</td><td>No [ ]</td></tr></table> <p>Please provide details for where you have indicated “yes”.</p> <p>.....</p>			(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 [ ]
(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 [ ]												
<p>10. I hereby declare that, to the best of my knowledge, the information provided in this form is correct:</p> <p>Applicant's name <input data-bbox="539 1352 1426 1411" type="text"/></p> <p>Signature <input data-bbox="424 1429 983 1487" type="text"/> Date <input data-bbox="1136 1429 1426 1487" type="text"/></p>														

[End of document]