

UPOV

TG/TEA(proj.3)

ORIGINAL: English

DATE: 2006-07-20

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

GENEVA

DRAFT

TEA \*

UPOV code: CMLIA\_SIN

*Camellia sinensis* (L.) O. Kuntze

## GUIDELINES

## FOR THE CONDUCT OF TESTS

## FOR DISTINCTNESS, UNIFORMITY AND STABILITY

*prepared by an expert from China**to be considered by the**Technical Working Party for Ornamental Plants and Forest Trees  
at its thirty-ninth session, to be held in Fortaleza, Cear  State, Brazil, from  
August 28 to September 1, 2006*

Alternative Names: \*

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Camellia sinensis</i> (L.) O. Kuntze	Tea	Th�ier	Tee, Teestrauch	T�

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.]

TABLE OF CONTENTSPAGE

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.....	4
4.3	Stability .....	5
5.	GROUPING OF VARIETIES AND ORGANIZATION OF THE GROWING TRIAL.....	5
6.	INTRODUCTION TO THE TABLE OF CHARACTERISTICS .....	5
6.1	Categories of Characteristics.....	5
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 .....	14
8.1	Explanations covering several characteristics.....	14
8.2	Explanations for individual characteristics .....	15
9.	LITERATURE.....	23
10.	TECHNICAL QUESTIONNAIRE.....	24

## 1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Camellia sinensis* (L.) O. Kuntze and its closely related species in *Camellia* (L.) Sect. *Thea* (L.) Dyer.

## 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 one-year-old, rooted cuttings.

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

20 rooted cuttings.

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. Observations should be made on plants which are at least two years after being planted.

3.3.2 The recommended method of observing the characteristic is indicated by the following key in the second column of the Table of Characteristics in Chapter 7:

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

### 3.4 *Test Design*

3.4.1 Each test should be designed to result in a total of at least 10 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 should be made on 10 plants or parts taken from each of 10 plants.

### 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 a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 10 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 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 It is recommended that the competent authorities use the following characteristics for grouping varieties:

- (a) Plant: stem type (characteristic 2)
- (b) Plant: growth habit (characteristic 3)
- (c) Leaf blade: length (characteristic 13)
- (d) Flower: diameter (characteristic 27)

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

MG: single measurement of a group of plants or parts of plants – see Chapter 3.3.2

MS: measurement of a number of individual plants or parts of plants – see Chapter 3.3.2

VG: visual assessment by a single observation of a group of plants or parts of plants – Chapter 3.3.2

VS: visual assessment by observation of individual plants or parts of plants – see Chapter 3.3.2

(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 ejemplo	Note/ Nota
<b>1. VG</b>	<b>Plant: vigor</b>					
(+)						
(*)						
<b>QN</b>	weak					3
	medium				Longjing 43	5
	strong				Yunkang 10	7
<b>2. VG</b>	<b>Plant: stem type</b>					
(*)						
(+)						
<b>QN</b>	shrub				Longjing 43	1
	semi-arbor				Qiamei 419	3
	arbor				Yunkang 10	5
<b>3. VG</b>	<b>Plant: growth habit</b>					
(+)						
(*)						
<b>QN</b>	erect				Biyun	1
	semi-erect				Hanlv	3
	spreading				Yinghong 1	5
<b>4. VG</b>	<b>Plant: density of branches</b>					
<b>QN</b>	sparse				Yunkang 10	3
	medium				Biyun	5
	dense				Tengcha	7
<b>5. VG</b>	<b>Branch: zigzagging</b>					
(*)						
(+)						
<b>QL</b>	absent					1
	present					9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>6. (*)</b>	<b>VG/MS</b>	<b>Young shoot: time of beginning of 'one and a bud' stage</b>				
<b>QN</b>	<b>(a)</b>	early			Longjing 43	3
	<b>(b)</b>	medium			Biyun	5
		late			Qianmei 419	7
<b>7. (+)</b>	<b>VG</b>	<b>Young shoot: color of the second leaf at 'two and a bud' stage</b>				
<b>PQ</b>	<b>(a)</b>	whitish				1
	<b>(b)</b>	yellow green				2
		light green				3
		medium green				4
		purple green				5
<b>8. (*)(+)</b>	<b>VG</b>	<b>Young shoot: bud pubescence</b>				
<b>QL</b>	<b>(a)</b>	absent				1
	<b>(b)</b>	present				9
<b>9.</b>	<b>VG</b>	<b>Young shoot: density of bud pubescence</b>				
<b>QN</b>	<b>(a)</b>	weak			Longjing 43	3
	<b>(b)</b>	medium			Biyun	5
		strong			Yunkang 10	7
<b>10. (*)(+)</b>	<b>VG</b>	<b>Young shoot: anthocyanin coloration at base of the petiole</b>				
<b>QL</b>	<b>(a)</b>	absent				1
	<b>(b)</b>	present				9



	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>11. VG/ MS (* (*)</b>	<b>Young shoot: length of 'three and a bud'</b>					
<b>QN</b>	<b>(a)</b>	short			Xicha 11	3
	<b>(b)</b>	medium			Longjing 43	5
		long			Qianmei 419	7
<b>12. VG (* (+)</b>	<b>Leaf: attitude</b>					
<b>PQ</b>	<b>(c)</b>	upwards				1
		outwards				3
		downwards				5
<b>13. VG/ MS (* (*)</b>	<b>Leaf blade: length</b>					
<b>QN</b>	<b>(c)</b>	short			Biyun	3
		medium			Qianmei 419	5
		long			Yinghong 1	7
<b>14. VG/ MS (* (*)</b>	<b>Leaf blade: width</b>					
<b>QN</b>	<b>(c)</b>	narrow			Tengcha	3
		medium			Qianmei 419	5
		broad			Yunkang 10	7
<b>15. VG (* (+)</b>	<b>Leaf blade: shape</b>					
<b>QN</b>	<b>(c)</b>	very narrow elliptic				1
		narrow elliptic				2
		medium elliptic				3
		broad elliptic				4

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>16. VG</b>	<b>Leaf blade: color</b>					
(+)						
<b>QN</b>	<b>(c)</b>	very light green				1
		light green				2
		medium green				3
		dark green				4
<b>17. VG</b>	<b>Leaf blade: cross section</b>					
(+)						
<b>QN</b>	<b>(c)</b>	convex				1
		flat				2
		concave				3
<b>18. VG</b>	<b>Leaf blade: texture of upper surface</b>					
<b>QN</b>	<b>(c)</b>	smooth or weakly rugose			Hanlv	1
		moderately rugose			Tengcha	2
		strongly rugose			Qianmei 419	3
<b>19. VG</b>	<b>Leaf blade: length of acuminate tip</b>					
(+)						
<b>QN</b>	<b>(c)</b>	absent or short				1
		medium				2
		long				3
<b>20. VG</b>	<b>Leaf blade: undulation of margin</b>					
(+)						
<b>QN</b>	<b>(c)</b>	absent or weak				1
		medium				2
		strong				3

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>21.</b>	<b>VG</b>	<b>Leaf blade: serration of margin</b>				
(+)						
<b>QN</b>	<b>(c)</b>	weak				3
		intermediate				5
		strong				7
<b>22.</b>	<b>VG</b>	<b>Leaf blade: base shape</b>				
(+)						
<b>PQ</b>	<b>(c)</b>	attenuate				1
		acute				2
		rounded				3
<b>23.</b>	<b>MG</b>	<b>Flower: time of full flowering</b>				
(+)						
<b>QN</b>		early			Longjing 43	3
		medium			Yinghong 1	5
		late			Qianmei 419	7
<b>24.</b>	<b>VG/ MS</b>	<b>Flower: length of pedicel</b>				
<b>QN</b>	<b>(d)</b>	short				3
	<b>(e)</b>	medium			Biyun	5
		long			Yangshulin 783	7
<b>25.</b>	<b>VG</b>	<b>Flower: pubescence on sepal on outer side</b>				
(*)						
<b>QL</b>	<b>(d)</b>	absent			Longjing 43	1
	<b>(e)</b>	present			Qianmei 419	9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>26. (*)</b>	<b>VG</b>	<b>Flower: anthocyanin coloration on sepal on outer side (TWO/39)</b>	<i>Flower: color of sepal (TWA/35)</i>			
<b>QL</b>	<b>(d)</b>	absent	<i>green(1)</i>		Longjing 43	1
	<b>(e)</b>	present	<i>purple(2)</i>		Biyun	9
<b>27. (*)</b>	<b>VG/MS</b>	<b>Flower: diameter</b>				
<b>QN</b>	<b>(d)</b>	small			Yangshulin 783	3
	<b>(e)</b>	medium			Xicha 11	5
		large			Yunkang 10	7
<b>28.</b>	<b>VG</b>	<b>Flower: color of inner petals</b>				
<b>PQ</b>	<b>(d)</b>	white				1
	<b>(e)</b>	greenish				2
		pink				3
<b>29. (*)(+)</b>	<b>VG</b>	<b>Flower: ovary pubescence</b>				
<b>QL</b>	<b>(d)</b>	absent				1
	<b>(e)</b>	present				9
<b>30.</b>	<b>VG</b>	<b>Flower: density of ovary pubescence</b>				
<b>QN</b>	<b>(d)</b>	weak				3
	<b>(e)</b>	medium			Longjing 43	5
		strong			Qianmei 419	7
<b>31.</b>	<b>VG</b>	<b>Flower: length of style</b>				
<b>QN</b>	<b>(d)</b>	short			Yangshulin 783	3
	<b>(e)</b>	medium			Biyun	5
		long			Xicha 11	7

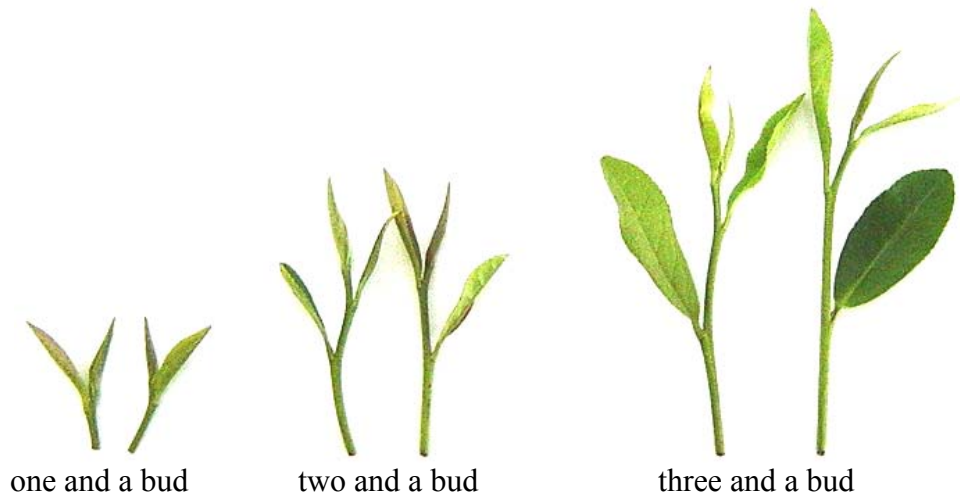
	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>32.</b>	<b>VG</b>	<b>Flower: position of style splitting</b>				
(*)						
(+)						
<b>QN</b>	<b>(d)</b>	low			Yangshulin 783	3
	<b>(e)</b>	medium			<i>Example varieties will be provided in the autumn of 2006</i>	5
		high				7
<b>33.</b>	<b>VG</b>	<b>Flower: position of stigma relative to stamens</b>				
(*)						
(+)						
<b>QN</b>	<b>(d)</b>	below			Yunkang 10	1
	<b>(e)</b>	same level			Qianmei 419	3
		above			Xicha 11	5
<b>34.</b>	<b>MG</b>	<b>Fermentation ability</b>				
(*)						
(+)						
<b>QN</b>		weak			Longjing 43	3
		medium			Qianmei 419	5
		strong			Yunkang 10	7
<b>35.</b>	<b>MG</b>	<b>Caffeine content</b>				
(+)						
<b>QN</b>		absent or very low				1
		low				2
		medium				3
		high				4
		very high				5

8. Explanations on the Table of Characteristics

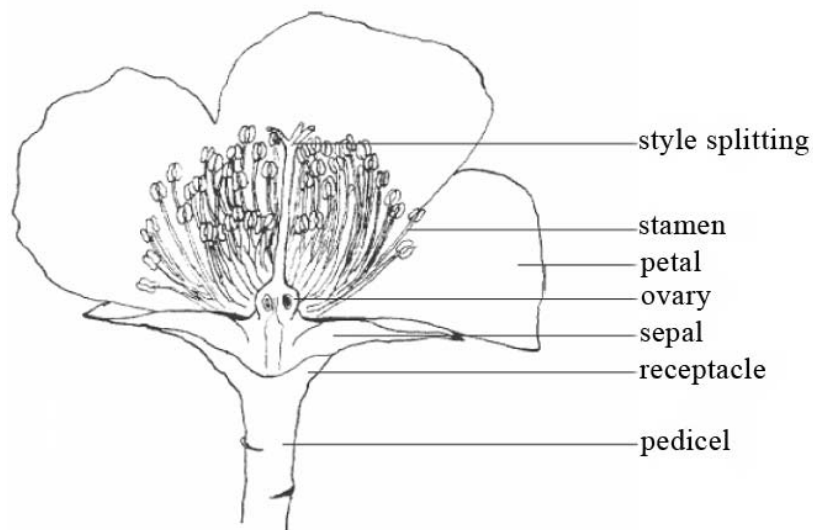
8.1 *Explanations covering several characteristics*

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

- (a) Observations on the young shoot should be made in the first flush of the year.
- (b) Young shoot: diagram



- (c) Observations on the leaf blade should be made in summer or autumn on fully developed leaves from the middle of a well-developed previous season shoot.
- (d) All observations on the flower should be made on fully developed flowers at the blooming stage.
- (e) Flower: diagram

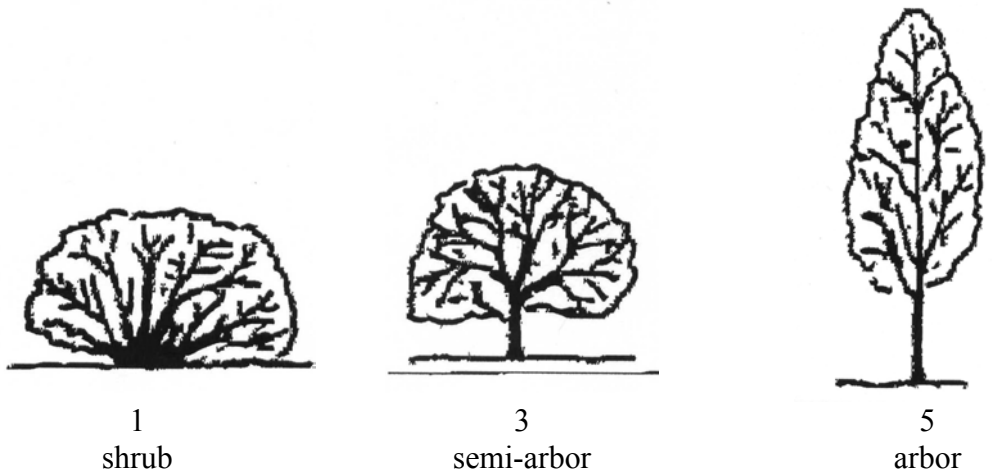


8.2 *Explanations for individual characteristics*

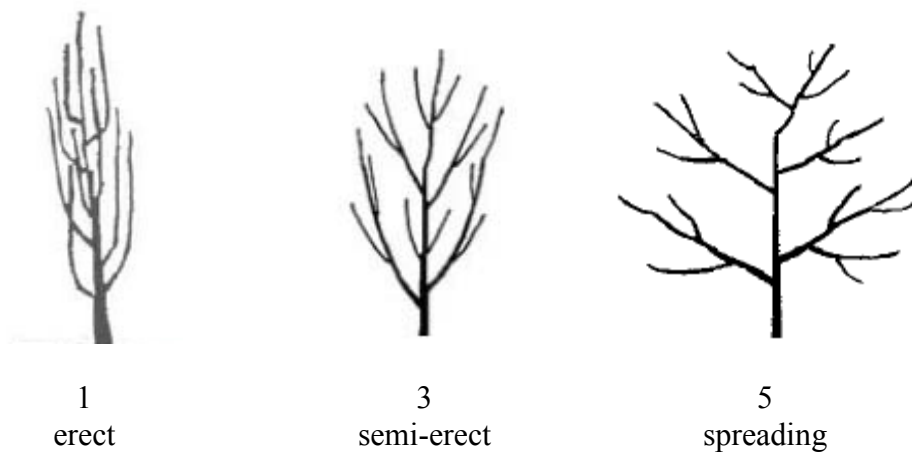
Ad. 1: Plant: vigor

The vigor of the plant should be considered as the overall abundance of vegetative growth.

Ad. 2: Plant: stem type



Ad. 3: Plant: growth habit



Ad. 5: Branch: zigzagging



1  
absent



9  
present

Ad. 7: Young shoot: color of the second leaf at 'two and a bud' stage



1  
whitish

2  
yellow  
green

3  
light  
green

4  
medium  
green

5  
purple  
green



Ad. 8: Young shoot: bud pubescence



1  
absent



9  
present

Ad. 10: Young shoot: anthocyanin coloration in the base of petiole

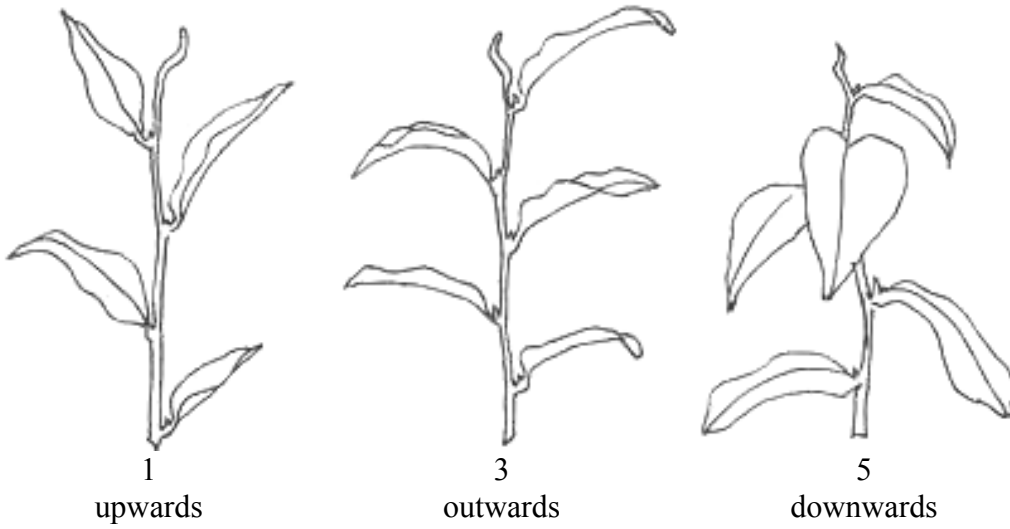


1  
absent

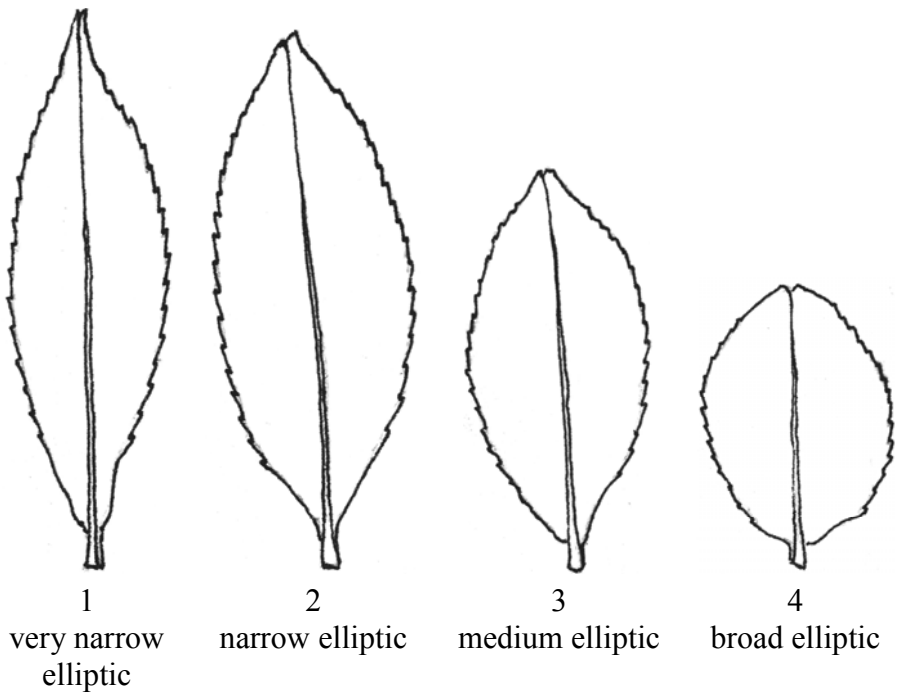


9  
present

Ad. 12: Leaf: attitude

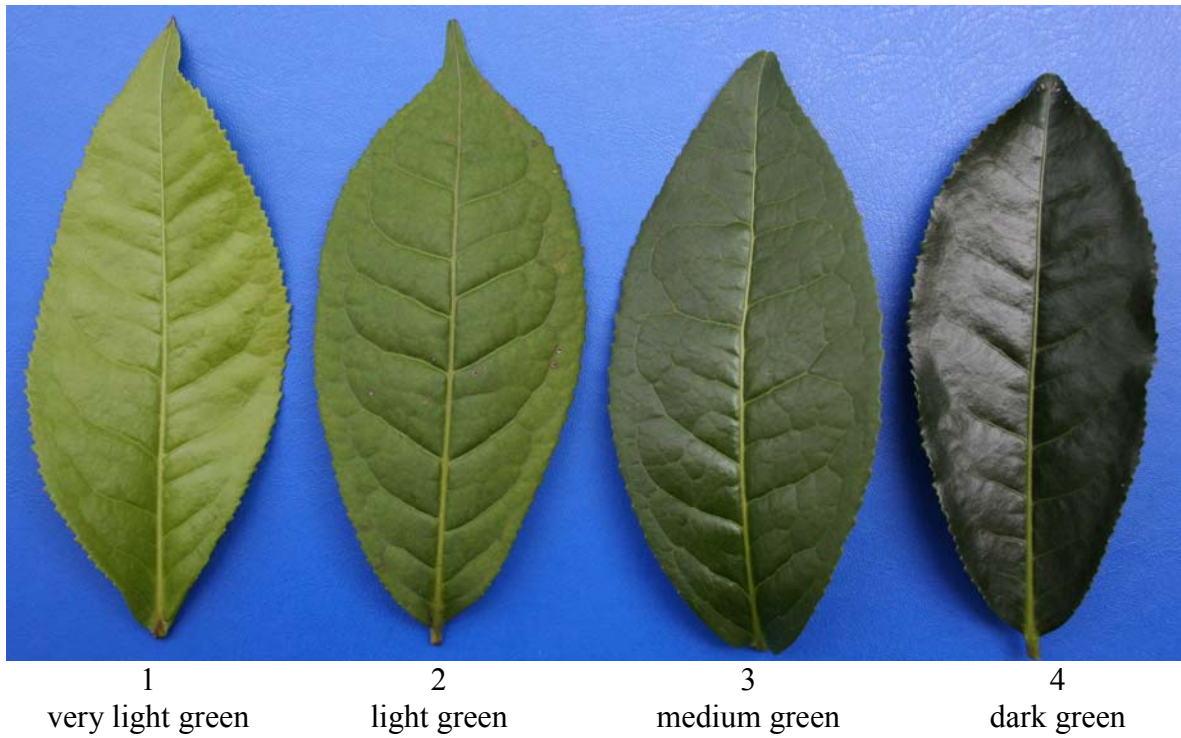


Ad. 15: Leaf blade: shape



state 1	very narrow elliptic	length/width ratio	>3.0
state 2	narrow elliptic		2.6-3.0
state 3	medium elliptic		2.0-2.5
state 4	broad elliptic		<2.0

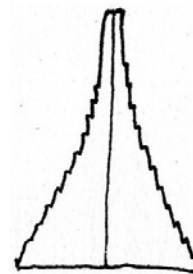
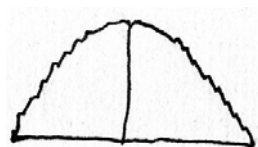
Ad. 16: Leaf blade: color



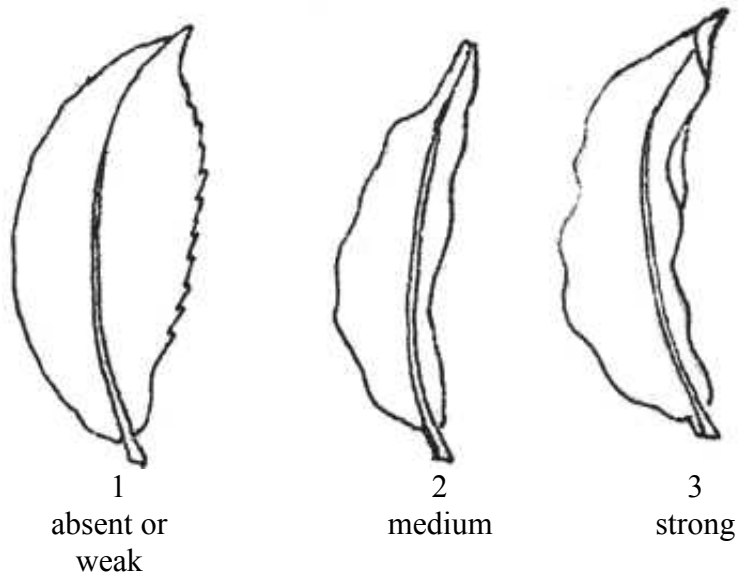
Ad. 17: Leaf blade: cross section



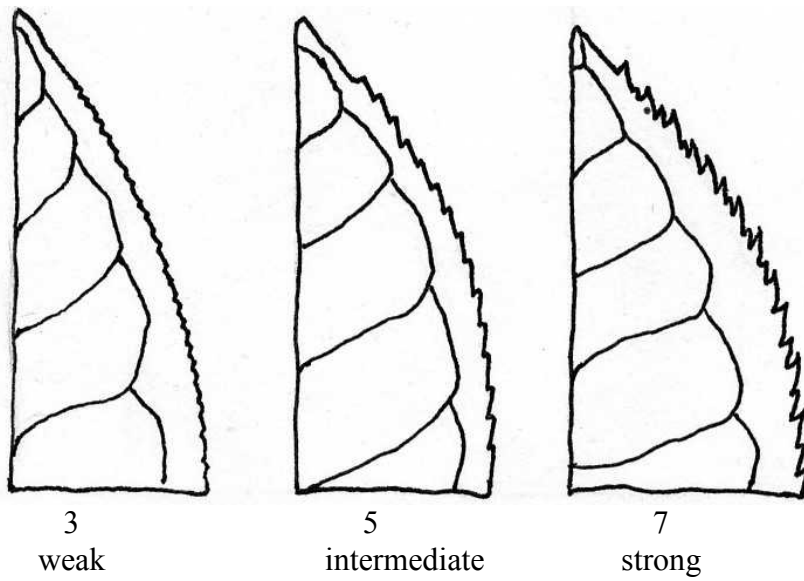
Ad. 19: Leaf blade: length of acuminate tip



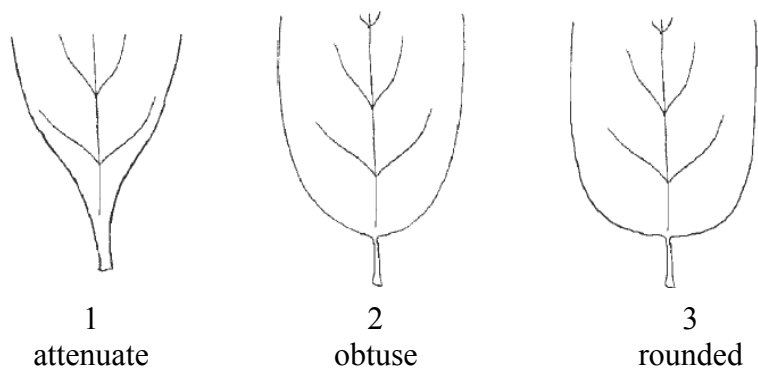
Ad. 20: Leaf blade: undulation of margin



Ad. 21: Leaf blade: serration of margin



Ad. 22: Leaf blade: base shape



Ad. 23: Flower: time of full flowering

The full flowering time is the time of about 50 percent flowers in blooming.

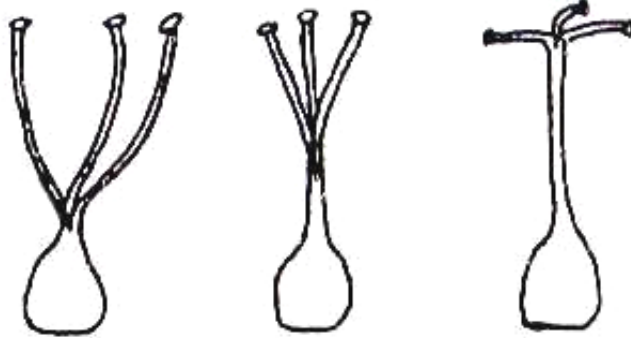
Ad. 29: Flower: ovary pubescence



1  
absent

9  
present

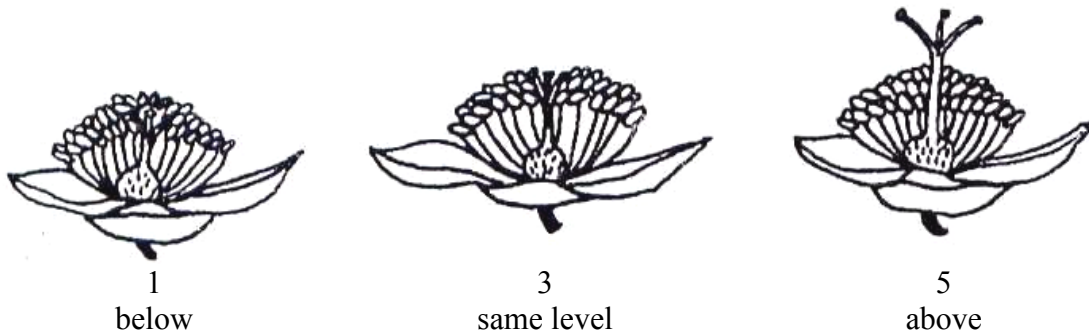
Ad. 32: Flower: position of style splitting



3  
low

5  
medium

7  
high

Ad. 33: Flower: position of stigma relative to stamensAd. 34: Fermentation ability

Determined by chloroform test. Inserting the ‘two and a bud’ young shoots onto a plate in an airtight container containing 1.5-2.0 cm depth chloroform, and then record the time of the shoots turning brown.

Ad. 35: Caffeine content

The measurement of caffeine content should be made using the “two and a bud” samples harvested from the first flush of the year. After harvesting, the shoots should be dried immediately by 120-125 C hot air and storage at room temperature till they are analyzed. Method ISO 10727:1995 ‘Tea and instant tea in solid form -- Determination of caffeine content -- Method using high-performance liquid chromatography’ should be used.

absent or very low	<0.5%
low	0.6-2.0%
medium	2.1-3.5%
high	3.6-5.0%
very high	>5.0%

9. Literature

Chang, H. T., Bartholomew, B.: 1984 “Camellias”, Timber Press, Portland, Oregon, USA

Chen, L., Yang, Y. J., Yu, F. L.: 2005 “Descriptors and data standard for tea (*Camellia* spp.)”, China Agricultural Press, Beijing, China

Chen, L., Yu, F. L., Tong, Q. Q.: 2000 “Discussions on phylogenetic classification and evolution of section *Thea*”, Journal of Tea Science, 20(2): 89-94

IPGRI: 1997 “Descriptors for tea (*Camellia sinensis*)”. International Plant Genetic Resources Institute, Rome, Italy

Ming, T. L.: 1992 “A revision of *Camellia* Sect. *Thea*”, Acta Botanica Yunanica, 14(2):115-132

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	<input type="text" value="Camellia (L.)"/>	
1.1.1 Botanical name (species)	<input type="text"/>	
1.1.2 Common name	<input type="text" value="Tea"/>	
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:
<p>#4. Information on the breeding scheme and propagation of the variety</p> <p>4.1 Breeding scheme</p> <p>Variety resulting from:</p> <p>4.1.1 Crossing</p> <p>(a) controlled cross <input type="checkbox"/> [ ] (please state parent varieties)</p> <p>(b) partially known cross <input type="checkbox"/> [ ] (please state known parent variety(ies))</p> <p>(c) unknown cross <input type="checkbox"/> [ ]</p> <p>4.1.2 Mutation <input type="checkbox"/> [ ] (please state parent variety)</p> <p>4.1.3 Discovery and development <input type="checkbox"/> [ ] (please state where and when discovered and how developed)</p> <p>4.1.4 Other <input type="checkbox"/> [ ] (please provide details)</p> <div data-bbox="443 1249 1177 1346" style="border: 1px solid black; height: 40px; width: 460px; margin: 10px auto;"></div>		
<p>4.2 Method of propagating the variety</p> <p>(a) cuttings <input type="checkbox"/> [ ]</p> <p>(b) <i>in vitro</i> propagation <input type="checkbox"/> [ ]</p> <p>(c) other (state method) <input type="checkbox"/> [ ]</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>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 type</b> (2)			
shrub	Longjing 43	1 [ ]	
semi-arbor	Qiamei 419	3 [ ]	
arbor	Yunkang 10	5 [ ]	
<b>5.2 Plant: growth habit</b> (3)			
erect	Biyun	1 [ ]	
semi-erect	Hanlv	3 [ ]	
spreading	Yinghong 1	5 [ ]	
<b>5.3 Leaf blade: length</b> (13)			
short	Biyun	3 [ ]	
medium	Qianmei 419	5 [ ]	
long	Yinghong 1	7 [ ]	
<b>5.4 Flower: diameter</b> (27)			
small	Yangshulin 783	3 [ ]	
medium	Xicha 11	5 [ ]	
large	Yunkang 10	7 [ ]	

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:	
Characteristics		Example Varieties	
<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 <b>similar</b> variety(ies)	Describe the expression of the characteristic(s) for <b>your</b> candidate variety
<i>Example</i>	Leaf: attitude	<i>upwards</i>	<i>downwards</i>
Comments:			



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

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]