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UPOV

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

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TEA

UPOV code: CMLIA_SIN

Camellia sinensis (L.) 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 Agricultural Crops at its thirty-fourth session, to be held in Christchurch, New Zealand, from October 31 to November 4, 2005

Alternative Names:*

Botanical name	*English*	*French*	*German*	*Spanish*
Camellia sinensis (L.) Kuntze *Thea sinensis* L.	Tea	Thé	Tee, Teestrauch	Té

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 *Camellia sinensis* (L.) Kuntze and its closely related species, excluding ornamental varieties.

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 two independent growing cycles.

3.2 Testing Place

The test should normally be 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 not be made on plants until at least three years after planting.

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: type (characteristic 2)
(b) Young shoot: color of the second leaf of ‘two and a bud’ from the top (characteristic 7)

(c) Leaf blade: length (characteristic 14)
(d) Leaf blade: color (characteristic 17)
(e) Flower: number of style splittings (characteristic 36)

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

(+) 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
1. (*)	**VG**	**Plant: vigor**					
QN		weak					3
		medium				Longjing 43	5
		strong				Yunkang 10	7
2. (*) (+)	**VG**	**Plant: type**					
...		arbor					1
		semi-arbor					2
		shrub					3
3. (*) (+)	**VG**	**Plant: growth habit**					
...		upright					1
		semi-upright					3
		spreading					5
4. (*)	**VG**	**Plant: density of branches**					
QN		sparse				Yunkang 10	3
		medium				Biyun	5
		dense				Tengcha	7
5. (*) (+)	**VG**	**Branch: zigzaging**					
QL		absent					1
		present					9

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

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
11. (*)	**VG MS**	**Young shoot: length of 'three and a bud'**					
QN	**(a)**	short				Longjing 43	
		medium				Biyun	
		long				Yinghong 1	
12. (+)	**VG MS**	**Internode: length at middle part of young shoot**					
QN	**(a)**	short					3
		medium				Biyun	5
		long				Yunkang 10	7
13. (*) (+)	**VG MS**	**Leaf blade: attitude**					
PQ	**(b)**	semi-erect					3
		horizontal					5
		drooping					7
14. (*)	**VG MS**	**Leaf blade: length**					
QN	**(b)**	short				Biyun	3
		medium				Qianmei 419	5
		long				Yinghong 1	7
15. (*)	**VG MS**	**Leaf blade: width**					
QN	**(b)**	narrow				Tengcha	3
		medium				Qianmei 419	5
		broad				Yunkang 10	7

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
16. **(*)** **(+)**	**VG**	**Leaf blade: shape**					
PQ	**(b)**	round					1
		ovate					2
		elliptic					3
		oblong					4
		lanceolate					5
17. **(*)** **(+)**	**VG**	**Leaf blade: color**					
PQ	**(b)**	yellow green					1
		light green					2
		medium green					3
		dark green					4
18. **(+)**		**Leaf blade: cross section**					
QN	**(b)**	convex					1
		flat					2
		concave					3
19.	**VG**	**Leaf blade: upper surface**					
QN	**(b)**	smooth				Hanlv	1
		slightly rugose				Tengcha	2
		rugose				Qianmei 419	3

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
20. **(*)** **(+)**	**VG**	**Leaf blade: shape of apex**					
PQ	**(b)**	acute					1
		attenuate					2
		blunt					3
		obtuse					4
21. **(+)**	**VG**	**Leaf blade: undulation of margin**					
QN	**(b)**	weak					1
		moderate					2
		strong					3
22. **(+)**	**VG**	**Leaf blade: serration of margin**					
QN	**(b)**	weak					3
		medium					5
		strong					7
23. **(*)** **(+)**	**VG**	**Leaf blade: shape of base**					
PQ	**(b)**	acute					1
		obtuse					2
		rounded					3
24.	**VG**	**Leaf blade: venation**					
QN	**(b)**	sparse				Biyun	3
		medium				Qianmei 419	5
		dense				Yunkang 43	7

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
25.	**MG**	**Flower: time of flowering**					
QN		early				Longjing 43	3
		medium				Yinghong 1	5
		late				Qianmei 419	7
26.	**VG MS**	**Flower: length of pedicel**					
QN	**(c)**	short					3
		medium					5
		long					7
27. (*)	**VS**	**Flower: pubescence on exterior side of calyx**					
QL	**(c)**	absent					1
		present					9
28. (*)	**VG**	**Flower: color of calyx**					
QL	**(c)**	green					1
		purple					2
29. (*)	**VG MS**	**Flower: size of corolla**					
QN	**(c)**	small				Tengcha	3
		medium				Yunkang 10	5
		large					7

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
30. (*) (+)		**Flower: number of petals**					
QN	**(c)**	few					3
		medium					5
		many					7
31.	**VG**	**Flower: size of largest petal**				Examples?	
QN	**(c)**	small					3
		medium					5
		large					7
32. (+)	**VG**	**Flower: color of inner petals**					
PQ	**(c)**	white					1
		green					2
		pink					3
33. (*) (+)	**VS**	**Flower: pubescence of ovary**					
QL	**(c)**	absent					1
		present					9
34.	**VS**	**Flower: density of pubescence of ovary**					
QN	**(c)**	sparse					3
		medium				Longjing 43	5
		dense				Yungkang 10	7

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
35.	**VG**	**Flower: length of style**					
QN	**(c)**	short					3
		medium				Yunkang 43	5
		long				Yinghong 1	7
36. (*) (+)	**MS**	**Flower: number of style splittings**					
QN	**(c)**						1
		few					3
		medium					5
		many					7
		very many					9
37. (*) (+)	**VG**	**Flower: position of style splitting**					
QN	**(c)**	low					3
		medium					5
		high					7
38. (*) (+)	**VG**	**Flower: relative position of gynoecium and androecium**					
QN	**(c)**	gynoecium below androecium					1
		same height					2
		gynoecium above androecium					3

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
39. **(+)**	**VG**	**Plant: number of fruits on 5-year-old tree**					
QN		absent or very few	*Consider to be deleted*				1
		few				Qianmei 419	3
		medium				Biyun	5
		many				Longjing 43	7
		very many					9
40. **(+)**	**VG**	**Fruit: thickness of pericarp**	*Consider to be deleted*				
QN		thin					3
		medium					5
		thick					7
41. **(*)** **(+)**	**MG**	**Fermentation ability**					
QN		weak				Longjing 43	3
		medium				Qianmei 419	5
		strong				Yunkang 10	7
42. **(+)**	**MG**	**Caffeine content**					
QN	**(d)**	low					3
		medium				Tengcha	5
		high				Yunkang 10	7

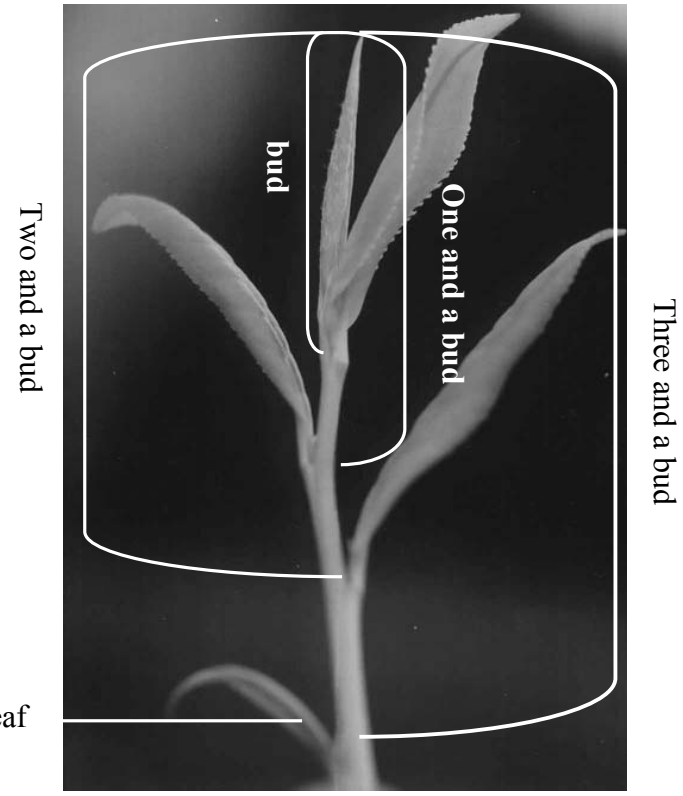
		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
43. **(+)**	**MG**	**Tea polyphenols content**					
QN	**(d)**	low				Tengcha	3
		medium				Biyun	5
		high				Qianmei 419	7

8. Explanations on the Table of Characteristics

8.1 Explanations covering several characteristics

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

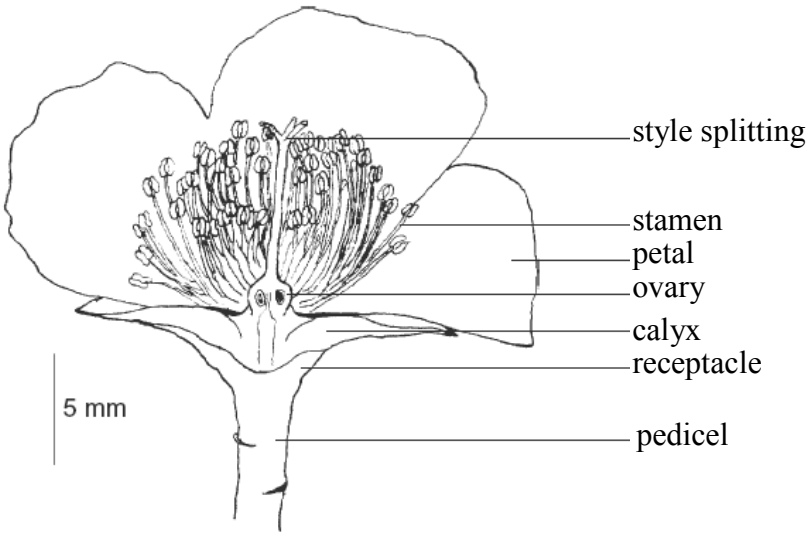
(a) Observations on the young shoot should be made in the first flush of the year.



(b) Observations on the leaf blade should be made in summer or autumn on fully developed leaves from the middle of a well-developed current season shoot.

(c) Observations on the flower should be made on fully developed flowers at the blooming stage.

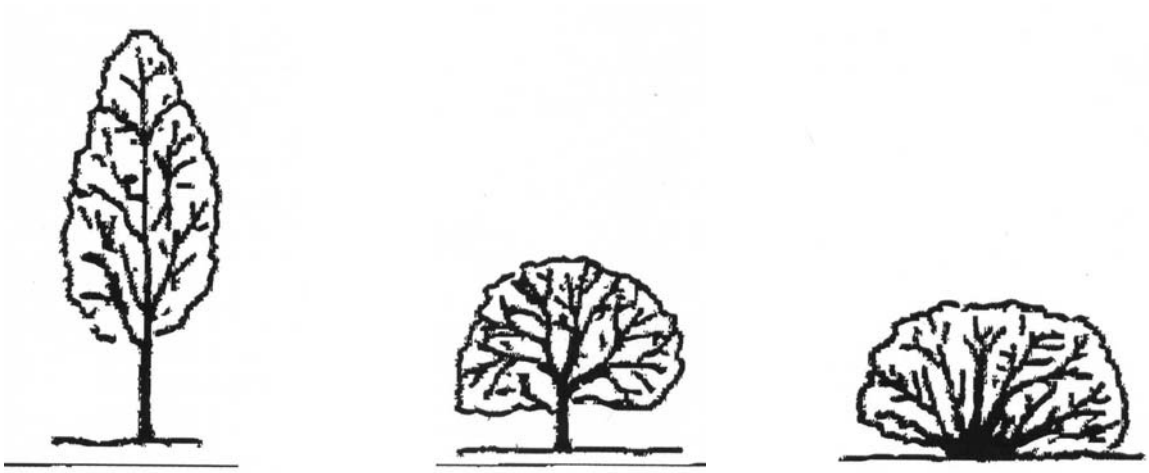
Flower diagram



(d) The measurements of caffeine content and tea polyphenols 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 using 120-125°C hot air followed by storage at room temperature until analysis.

8.2 Explanations for individual characteristics

Ad. 2: Plant: type



1
arbor

2
semi-arbor

3
shrub

Ad. 3: Plant: growth habit

1
upright

2
semi-upright

3
spreading

Ad. 5: Branch: zigzagging

1
absent

9
present

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

1	2	3	4	5
whitish	yellow green	light green	medium green	purple green

Ad. 8: Young shoot: bud pubescence

1	2
absent	present

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

1
absent

9
present

Ad. 12: Internode: length at middle part of young shoot

The internode length should be observed in a stopping growth shoot.

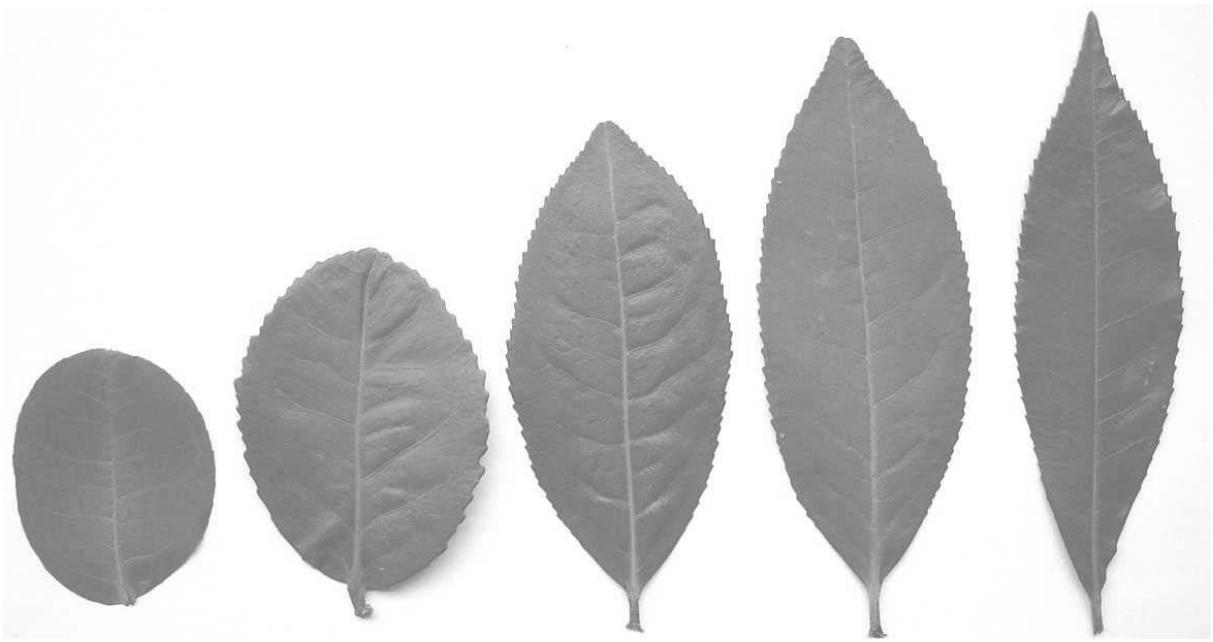
Ad. 13: Leaf blade: attitude

3
semi-erect

5
horizontal

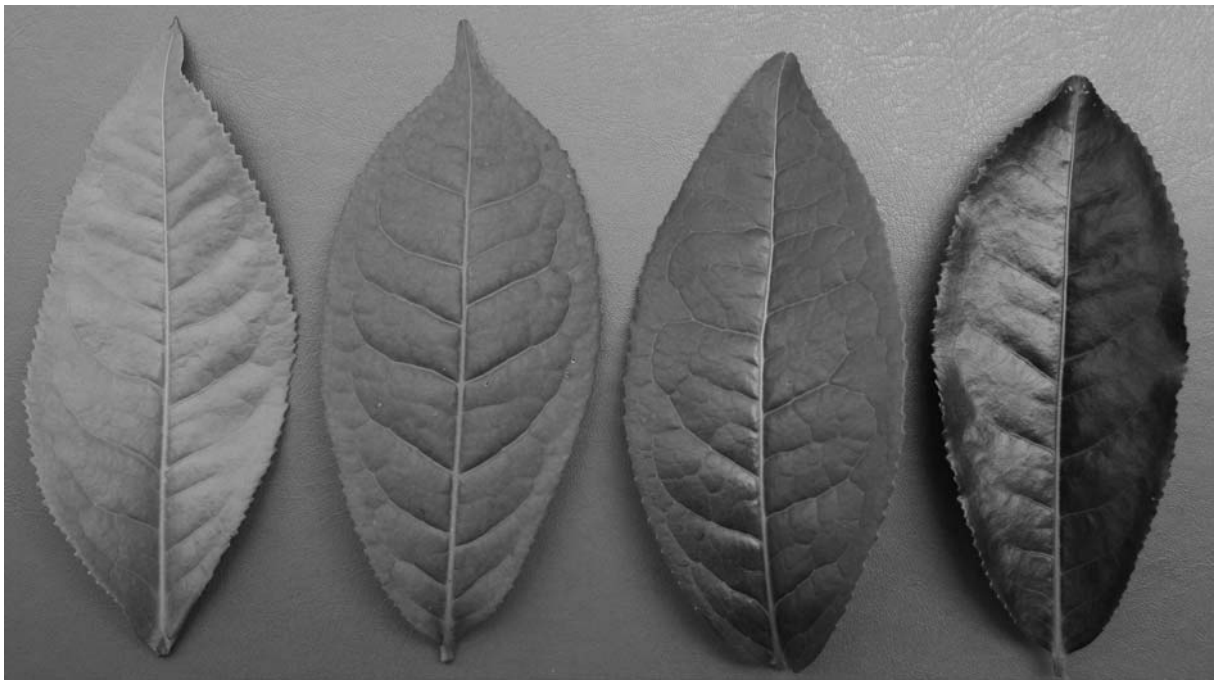
7
drooping

Ad. 16: Leaf blade: shape



1	2	3	4	5
round	ovate	elliptic	oblong	lanceolate

Ad. 17: Leaf blade: color



1	2	3	4
yellow green	light green	medium green	dark green

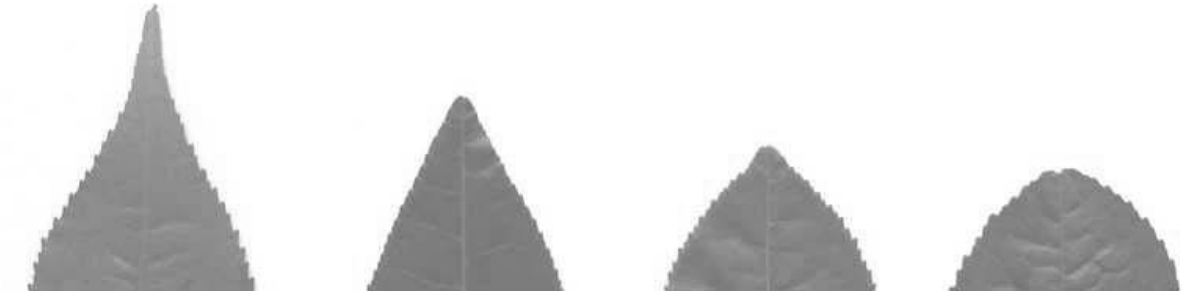
Ad. 18: Leaf blade: cross section

1
convex

2
flat

3
concave

Ad. 20: Leaf blade: shape of apex



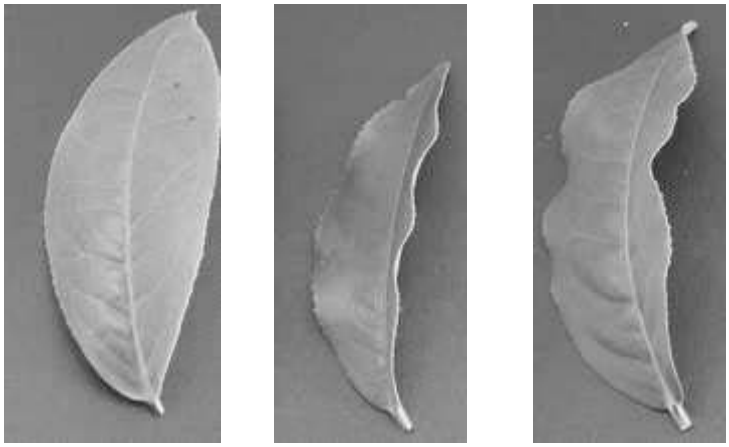
1
acute

2
attenuate

3
blunt

4
obtuse

Ad. 21: Leaf blade: undulation of margin

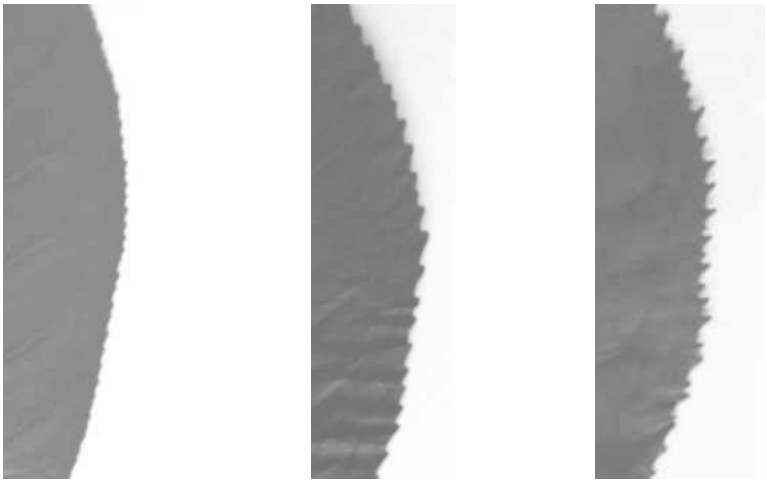


1
absent

2
weakly
expressed

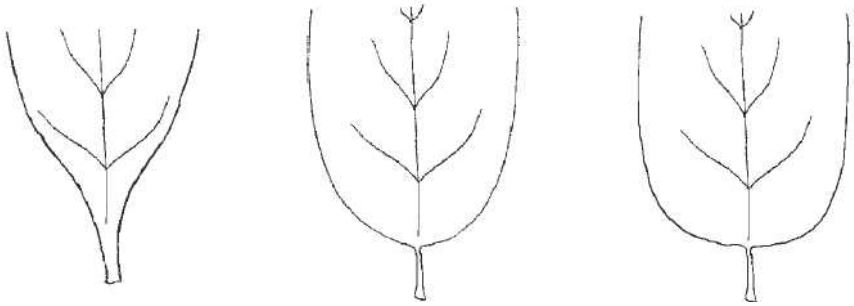
3
strongly
expressed

Ad. 22: Leaf blade: serration of margin



3 weak | 5 medium | 7 strong

Ad. 23: Leaf blade: shape of base

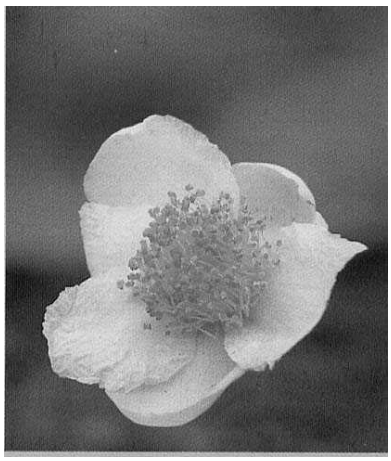


1 acute | 2 obtuse | 3 rounded

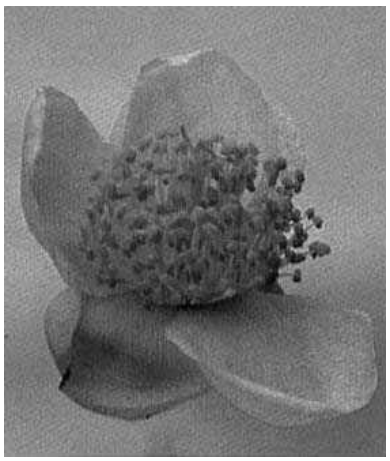
Ad. 30: Flower: number of petals

few	≤ 6
medium	7 - 8
many	≥ 9

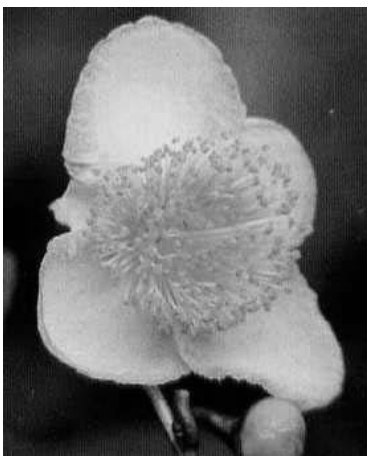
Ad. 32: Flower: color of inner petals



1
white



2
green



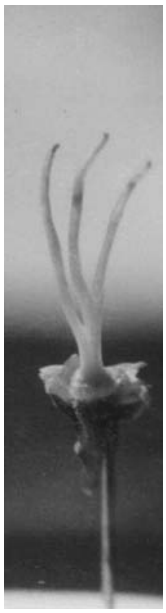
3
pink

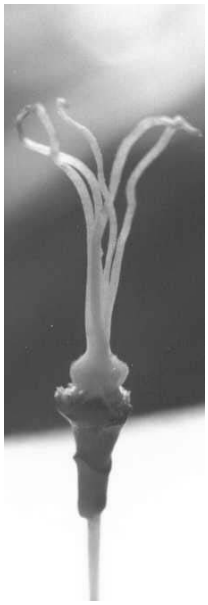
Ad. 33: Flower: pubescence of ovary

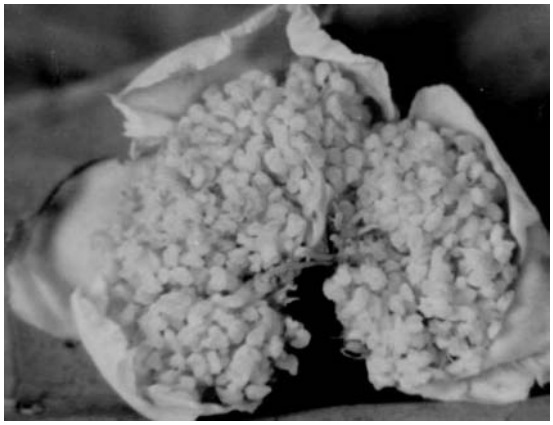
1
absent

9
present

Ad. 36: Flower: number of style splittings

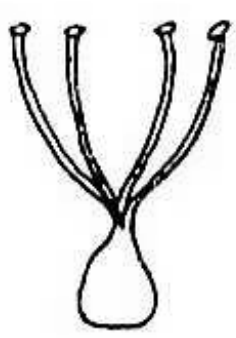


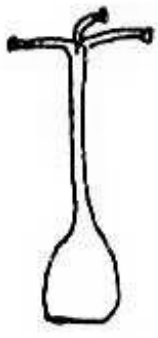




3	5	7	9
few	medium	many	very many

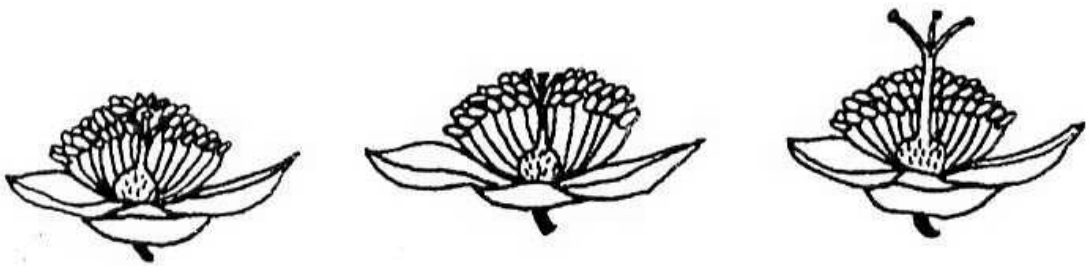
Ad. 37: Flower: position of style splitting





3	5	7
low	medium	high

Ad. 38: Flower: relative position of gynoecium and androecium



3	5	7
gynoecium below androecium	same height	gynoecium above androecium

Ad. 39: Plant: number of fruits on 5-year-old tree

The number of fruit is to be observed in the fifth year after planting.

Ad. 40: Fruit: thickness of pericarp

3	5	7
thin	medium	thick

The observations of pericarp thickness should be made 10 days after harvesting at room temperature.

Ad. 41: Fermentation ability

Place 'two and a bud' young shoots on a plate in an airtight container containing 1.5-2.0 cm depth of chloroform, and record the time for the shoots to turn brown.

Ad. 42: Caffeine content

The Method ISO 10727: 1995 'Tea and instant tea in solid form -- Determination of caffeine content -- Method using high-performance liquid chromatography' should be used.

Ad. 43: Tea polyphenols content

The Method ISO 14502-1:2005 'Determination of substances characteristic of green and black tea -- Part 1: Content of total polyphenols in tea -- Colorimetric method using Folin-Ciocalteu reagent' should be used.

9. Literature

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

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

Willson, K.C.: 1999 Coffee, Cocoa and Tea. New York: CABI Publishing, pp167-177

10. Technical Questionnaire

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
		Application date: (not to be filled in by the applicant)

TECHNICAL QUESTIONNAIRE
to be completed in connection with an application for plant breeders' rights

1. Subject of the Technical Questionnaire

1.1 Botanical name	*Camellia sinensis* (L.) Kuntze
1.2 Common name	Tea

2. Applicant

Name	
Address	
Telephone No.	
Fax No.	
E-mail address	
Breeder (if different from applicant)	

3. Proposed denomination and breeder's reference

Proposed denomination (if available)	
Breeder's reference	

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

[#]4. Information on the breeding scheme and propagation of the variety

4.1 Breeding scheme

Variety resulting from:

4.1.1 Crossing

(a) controlled cross [ ]
(please state parent 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)

4.2 Method of propagating the variety

(a) cuttings [ ]

(b) *in vitro* propagation [ ]

(c) other (state method) [ ]

[#] 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:

5. Characteristics of the variety to be indicated (the number in brackets refers to the corresponding characteristic in Test Guidelines; please mark the note which best corresponds).

	Characteristics	Example Varieties	Note
5.1 (2)	**Plant type**		
	arbor		1 [ ]
	semi-arbor		2 [ ]
	shrub		3 [ ]
5.2 (7)	**Young shoot: color of the second leaf of 'two and a bud' from the top**		
	whitish		1 [ ]
	yellow green		2 [ ]
	light green		3 [ ]
	medium green		4 [ ]
	purple green		5 [ ]
5.3 (14)	**Leaf blade: length**		
	short	Biyun	3 [ ]
	medium	Qianmei 419	5 [ ]
	long	Yinghong 1	7 [ ]
5.4 (17)	**Leaf blade: color**		
	yellow green		1 [ ]
	light green		2 [ ]
	medium green		3 [ ]
	dark green		4 [ ]

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

	Characteristics	Example Varieties
5.5 (36)	**Flower: number of style splittings**	
	few	3 [ ]
	medium	5 [ ]
	many	7 [ ]
	very many	9 [ ]

6. Similar varieties and differences from these varieties

Please use the following table and box for comments to provide information on how your candidate variety differs from the variety (or varieties) which, to the best of your knotgledge, is (or are) most similar. This information may help the examination authority to conduct its examination of distinctness in a more efficient way.

Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	Describe the expression of the characteristic(s) for the **similar** variety(ies)	Describe the expression of the characteristic(s) for **your** candidate variety
Example	*Leaf blade: apex shape*	*acute*	*obtuse*

Comments:	

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

[#]7. Additional information which may help in the examination of the variety

7.1 In addition to the information provided in sections 5 and 6, are there any additional characteristics which may help to distinguish the variety?

Yes [ ] No [ ]

(If yes, please provide details)

7.2 Are there any special conditions for growing the variety or conducting the examination?

Yes [ ] No [ ]

(If yes, please provide details)

7.3 Other information

8. Authorization for release

(a) Does the variety require prior authorization for release under legislation concerning the protection of the environment, human and animal health?

Yes [ ] No [ ]

(b) Has such authorization been obtained?

Yes [ ] No [ ]

If the answer to (b) is yes, please attach a copy of the authorization.

[#] 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:

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]