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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

Geneva

DRAFT

Chestnut

UPOV Code: CASTA_CRE; CASTA_MOL; CASTA_SAT

Castanea crenata Sieold & Zucc.;
Castanea mollissima Blume;
Castanea sativa Mill.

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by (an) expert(s) from Japan

to be considered by the

Technical Working Party for Fruit Crops
at its forty-sixth session
to be held in Mpumalanga, South Africa
from 2015-08-24
to 2015-08-28

Alternative Names:*

Botanical name	*English*	*French*	*German*	*Spanish*
Castanea crenata Sieold & Zucc.	Japanese chestnut	Châtaignier du Japon	Japanische Kastanie	Castaño del Japón
Castanea mollissima Blume	Chinese Chestnut	Châtaignier de Chine	Chinesische Kastanie	Castaño chino
Castanea sativa Mill., Castanea vesca Gaertn., Castanea vulgaris, Fagus castanea L.	Chestnut	Chataignier	Kastanie	

* 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.]

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.

TABLE OF CONTENTS PAGE

1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of Castanea crenata Sieold & Zucc., Castanea mollissima Blume, Castanea sativa Mill..

These Test Guidelines apply to all varieties of Castanea sativa Mill., Castanea crenata Siebold & Zucc., Castanea mollissima Blume and hybrids among these species.

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 dormant shoots for grafting or two-year-old trees grafted on a rootstock selected by the testing authority.

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

- 10 dormant shoots
or
- 6 two-year-old- trees.

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

3.1.1 The minimum duration of tests should normally be two independent growing cycles.

3.1.2 The growing cycle is considered to be the duration of a single growing season, beginning with bud burst, flowering and fruit harvest and concluding when the following dormant period ends with the swelling of new season buds.

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.

3.4 Test Design

3.4.1 Each test should be designed to result in a total of at least 5 trees.

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, for the purposes of distinctness, all observations on single plants should be made on 5 plants or parts taken from each of 5 plants and any other observations made on all plants in the test. In the case of observations of parts taken from single plants, the number of parts to be taken from each of the plants should be 2.

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.

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, a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 5 plants, no off-types are 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.

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) Nut: shape (characteristic 32)
(b) Nut: color of skin (characteristic 38)
(c) Nut: size (characteristic 39)
(d) Time of fruit maturity for harvesting (characteristic 46)

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

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)-(g) 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. QN VG (+) (b) **Tree: vigor**	**Arbre : vigueur**	**Baum: Wuchsstärke**	**Árbol: vigor**		
weak	faible	schwach	débil	Hong Mao Zao(C), Toyotamawase(B)	3
medium	moyenne	mittel	medio	Ibuki(B), Ishizuchi(B), Zhong Chi Li(C)	5
strong	forte	stark	fuerte	Da Hong Pao(C), Ganne(B), Tsukuba(B)	7
2. (*) QN VG (+) (b) **Tree: growth habit**	**Arbre : port**	**Baum: Wuchsform**	**Árbol: porte**		
upright	dressé	aufrecht	erguido		1
semi-upright	demi-dressé	halbaufrecht	semierguido		2
spreading	divergent	breitwüchsig	extendido		3
3. (*) QN MG VG (c) **Current seson's shoot: thickness**					
thin					3
medium					5
thick					7
4. (*) QN MS VG (c) **Current season's shoot: length of internodes**					
short					3
medium					5
long					7
5. (*) QN MS VG (c) **Curren:season's shoot: phyllotaxis**					
one half					1
two fifths					2

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
6. (*) QL VG (c) **Current season's shoot: anthocyanin coloration of distal part**					
absent					1
present					9
7. (*) PQ VG (c) **Current season's shoot: color of upper side**					
yellow brown					1
brown					2
red brown					3
8. (*) QN VG (+) (c) **Current seson's shoot: density of lebticels**					
sparse					3
medium					5
dense					7
9. (*) QN MS VG (e) **Male flower: length of filament**					
very short					1
short					2
medium					3
long					4
very long					5

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
10. (*) QN VG (e) **Unisexual catkin: length**					
shot					3
medium					5
long					7
11. (*) QL MS VG (c) **Young leaf: bronze coloration (distal part of lateral)**					
absent					1
present					9
12. (*) QN MS VG (+) (d) **Leaf: size**					
small					3
medium					5
large					7
13. (*) QN VG (+) (d) **Leaf: profile in cross section**					
straight					1
slightly concave					2
strongly concave					3
14. (*) QN VG (d) **Leaf: symmetry**					
symmetric					1
slightly asymmetric					2
strongly asymmetric					3

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
15. (*) QN MS VG (+) (d) **Leaf: length/width ratio**					
low					3
medium					5
high					7
16. (*) QN VG (+) (d) **Leaf: attitude compared to shoot**					
upwards					1
horizontal					2
downwards					3
17. (*) QN VG (d) **Leaf blade: intensity of green color of upper side**					
light					1
medium					3
dark					5
18. (*) QL VG (d) **Leaf: color of lower side**					
whitish					1
light green					2
19. (*) PQ VG (+) (d) **Leaf: shape**					
lanceolate					1
narrow elliptic					2
broad elliptic					3

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
20. (*) PQ VG (+) (d) **Leaf: shape of apex**					
narrow acuminate					1
broad acuminate					2
acute					3
21. (*) PQ VG (+) (d) **Leaf: shape of base**					
acute					1
obtuse					2
cordate					3
22. (*) QL VG (+) (d) **Leaf: incisions of margin**					
mucronate					1
dentate					2
23. (*) QN VG (d) **Leaf: symmetry of base**					
symmetric or slightly asymmetric					1
moderately asymmetric					2
strongly asymmetric					3
24. (*) PQ VG (c) **Leaf: color of petiole**					
yellow					1
green					2

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
25. (*) QN MS VG (+) (d) **Leaf: ratio length of leaf blade/length of petiole**					
low					3
medium					5
high					7
26. (*) PQ VG (+) (f) **Bur: shape in combination of front view and lateral view**					
globose					1
obloid					2
cylindric					3
27. (*) QN VG (f) **Bur: density of spines**					
sparse					1
medium					3
dense					5
28. (*) QL VG (+) (g) **Fruit: embryony**					
mono-embryonic					1
poly-embryonic					2
29. (*) QN VG (+) (g) **Poly-embryonic varieties only: Fruit: coherence of embryos**					
week					3
medium					5
strong					7

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
30. (*) QL MS VG (+) (c) **Fruit: penetration of seed coat into embryo**					
absent					1
present					9
31. (*) QN VG (+) (g) **Fruit: degree of penetration of seed coat into embryo**					
weak					3
medium					5
strong					7
32. (*) PQ VG (+) (g) **Nut: shape**					
medium ovate					1
ovate					2
circular					3
broad oblate					4
medium oblate					5
33. (*) QN VG (+) (g) **Nut: extent of pubescence on upper part**					
small					1
medium					3
large					5

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
34. (*) QN MS VG (+) (g) **Nut: size of hilum**					
small					1
medium					3
large					5
35. (*) PQ VG (+) (g) **Nut: shape of border line of hilum and pericarp**					
straight					1
curved					2
wavy					3
36. (*) QN VG (g) **Nut: conspicuousness of hilum**					
inconspicuous					1
moderately conspicuous					2
37. (*) QN VG (g) **Nut: glossiness(immediately after opening of involucre)**					
absent or weak					1
medium					2
38. (*) PQ VG (g) **Nut: color of skin**					
light brown					1
medium brown					2
dark brown					3
reddish brown					4
blackish brown					5

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
39. (*) QN MS VG (g) **Nut: size**					
small					3
medium					5
large					7
40. (*) QN VG (+) (g) **Seed coat: adherence to kernel (fresh fruit)**					
weak					1
medium					3
strong					5
41. (*) PQ VG (g) **Kernel: color of flesh**					
white					1
whitish yellow					2
yellow					3
42. (*) QL VG (g) **Mono-embryonic varieties only: Kernel: inner cavity**					
absent					1
present					9
43. (*) QN MG VG (+) **Time of leaf bud burst**	**Époque du débourrement foliaire**	**Zeitpunkt des Öffnens der Blattknospe**	**Época de brotación de la yema foliar**		
very early	très précoce	sehr früh	muy temprana		1
early	précoce	früh	temprana		3
medium	moyenne	mittel	media		5
late	tardive	spät	tardía		7
very late					9

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
44. (*) QN MG VG (+) **Time of male flowering**	**Époque de floraison mâle**	**Zeitpunkt der männlichen Blüte**	**Época de floración masculina**		
very early	très précoce	sehr früh	muy temprana		1
early	précoce	früh	temprana		3
medium	moyenne	mittel	media		5
late	tardive	spät	tardía		7
very late	très tardive	sehr spät	muy tardía		9
45. (*) QN MG VG (+) **Time of female flowering**	**Époque de floraison femelle**	**Zeitpunkt der weiblichen Blüte**	**Época de floración femenina**		
very early					1
early					3
medium					5
late					7
very late					9
46. (*) QN MG VG (+) **Time of fruit maturity for harvesting**	**Époque de maturité de cueillette des fruits**	**Zeitpunkt der Erntereife der Frucht**	**Época de madurez del fruto para la cosecha**		
very early	très précoce	sehr früh	muy precoz		1
early	précoce	früh	precoz		3
medium	moyenne	mittel	media		5
late	tardive	spät	tardía		7
very late	très tardive	sehr spät	muy tardía		9

8. Explanations on the Table of Characteristics

8.1 Explanations covering several characteristics

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

(b) Plant:Obsercations on the plant should be made in the dormant season.

(c) Current seson's shoot: Observations on the current season's shoot should be made on middle thrid shoots in the dormant seson.

(d) Leaf:Observations on the leaf should be made on fully developed leaves. Leaves should be taken from the middle third of bearing shoots.

(e) Flower: Observations on the flower should be made at full flowering time.

(f) Bur: Observations on the bur should be made just before dehiscence.

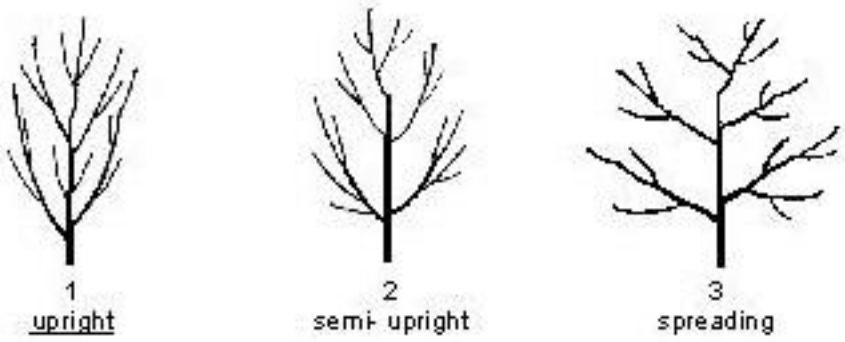
(g) Fruit: Observations on the fruit should be made on mature fruits for consumption which are at outside in a bur in case of three fruits in it.

8.2 Explanations for individual characteristics

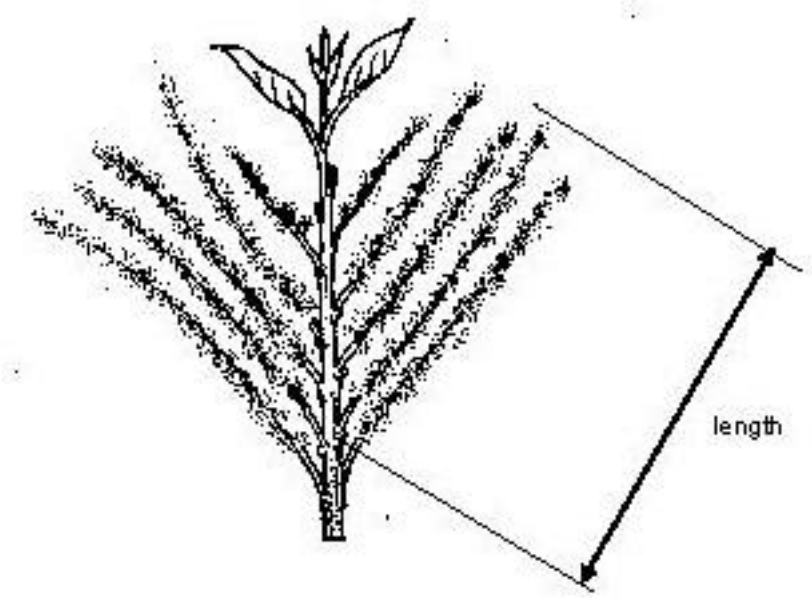
Ad. 1: Tree: vigor

The vigor of the tree should be considered as the overrall aburdarce of vegerative growth.

Ad. 2: Tree: growth habit



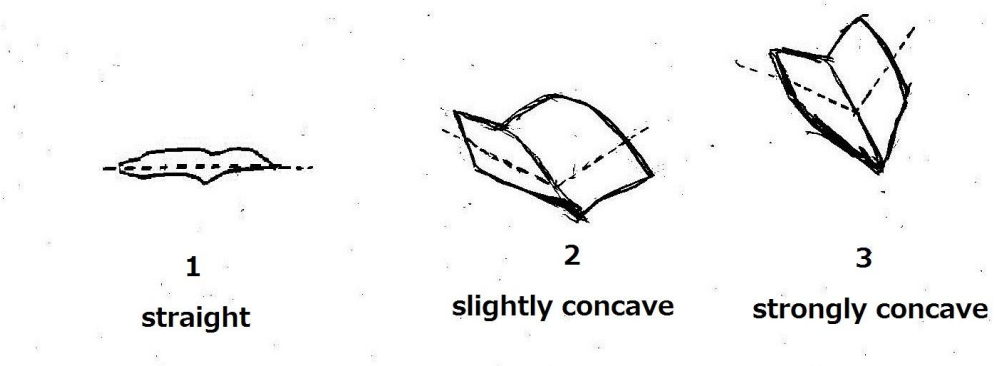
Ad. 8: Current seson's shoot: density of lebticels



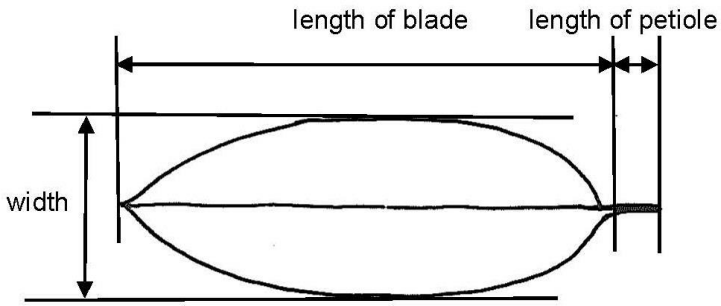
Ad. 12: Leaf: size

The size should observed on the area of leaf blade.

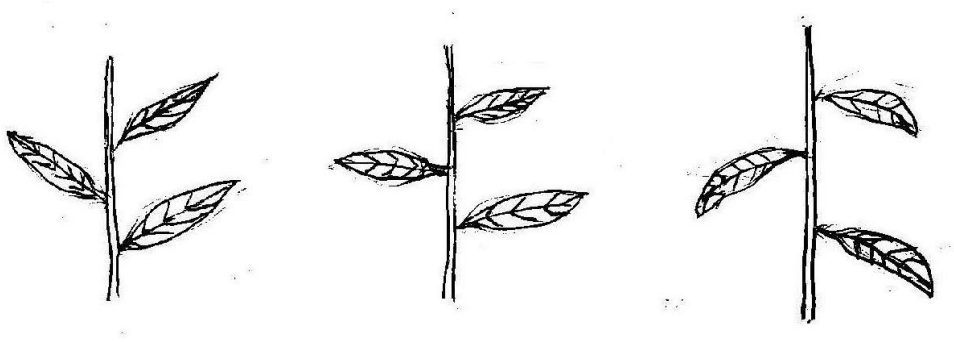
Ad. 13: Leaf: profile in cross section



Ad. 15: Leaf: length/width ratio



Ad. 16: Leaf: attitude compared to shoot

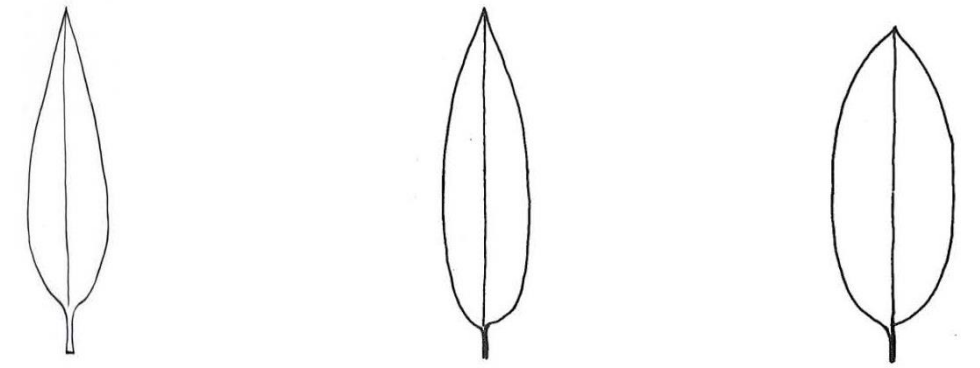


1
erect

2
horizontal

3
drooping

Ad. 19: Leaf: shape



1
lanceolate

2
narrow elliptic

3
broad elliptic

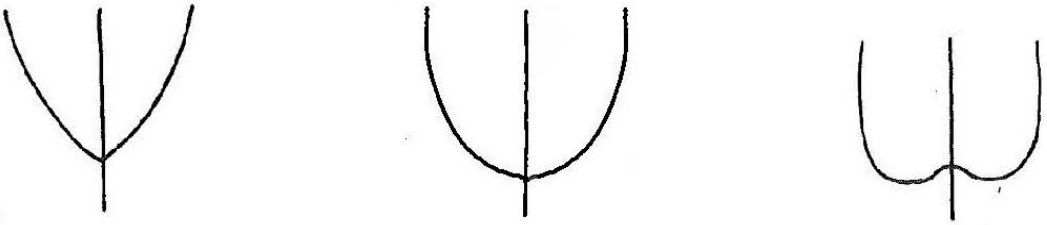
Ad. 20: Leaf: shape of apex

1
narrow acuminate

2
broad acuminate

3
acute

Ad. 21: Leaf: shape of base



1
acute

2
obtuse

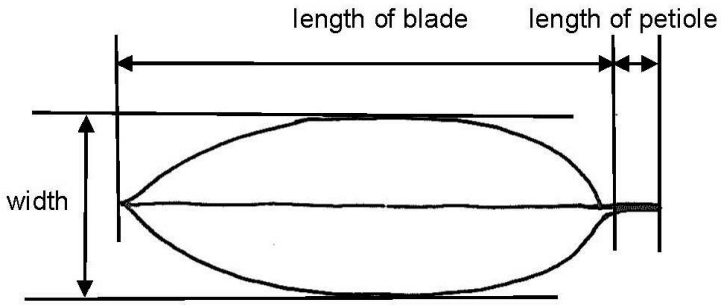
3
cordate

Ad. 22: Leaf: incisions of margin

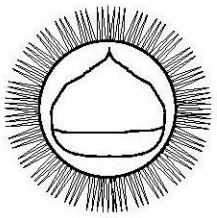
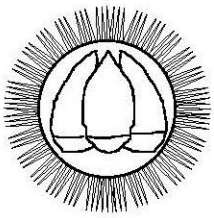
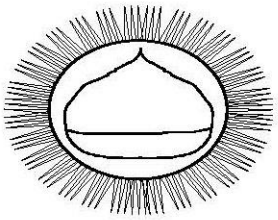
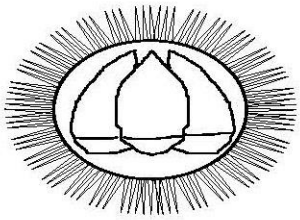
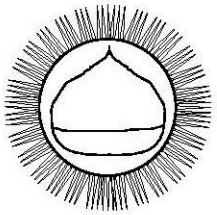
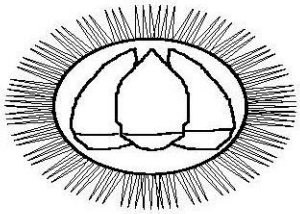
1
mucronate

2
dentate

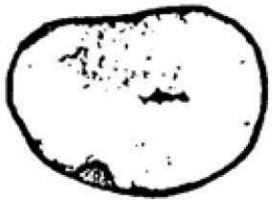
Ad. 25: Leaf: ratio length of leaf blade/length of petiole



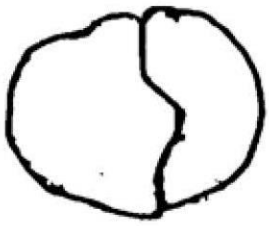
Ad. 26: Bur: shape in combination of front view and lateral view

front view	lateral view
	
1 globose	
	
2 obloid	
	
3 cylindric	

Ad. 28: Fruit: embryony

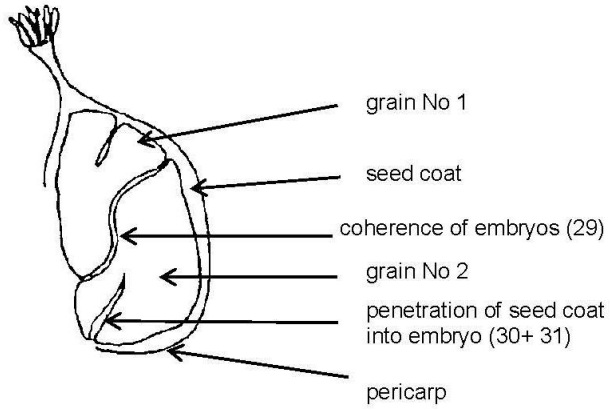


1
mono-embryonic

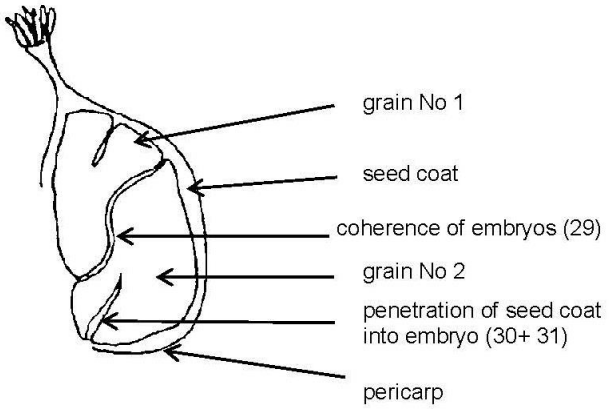


2
poly-embryonic

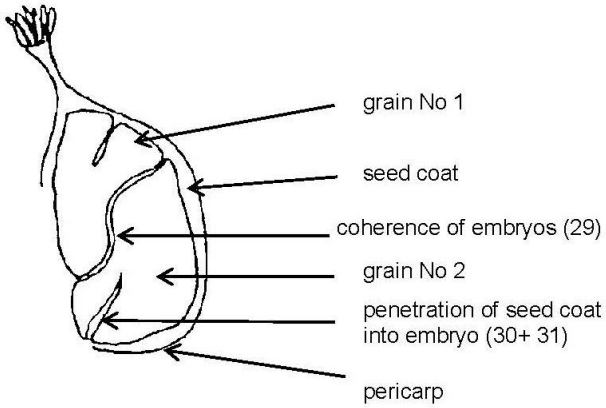
Ad. 29: Poly-embryonic varieties only: Fruit: coherence of embryos



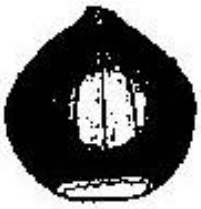
Ad. 30: Fruit: penetration of seed coat into embryo



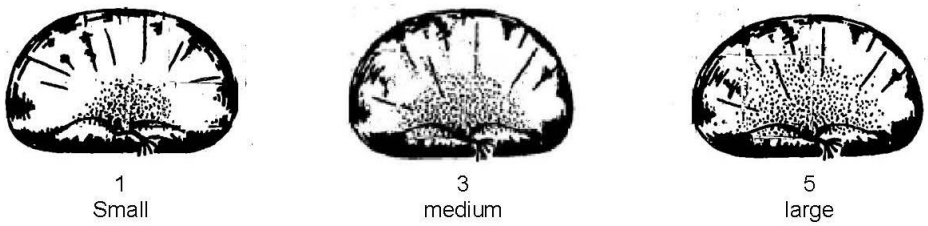
Ad. 31: Fruit: degree of penetration of seed coat into embryo



Ad. 32: Nut: shape

The position of the broadest point	The ratio width/height			
	long	medium	broad	very broad
middle→		 3 circular	 5 medium oblate	 4 broad oblate
	 1 Medium ovate			
←base	 2 broad ovate			

Ad. 33: Nut: extent of pubescence on upper part

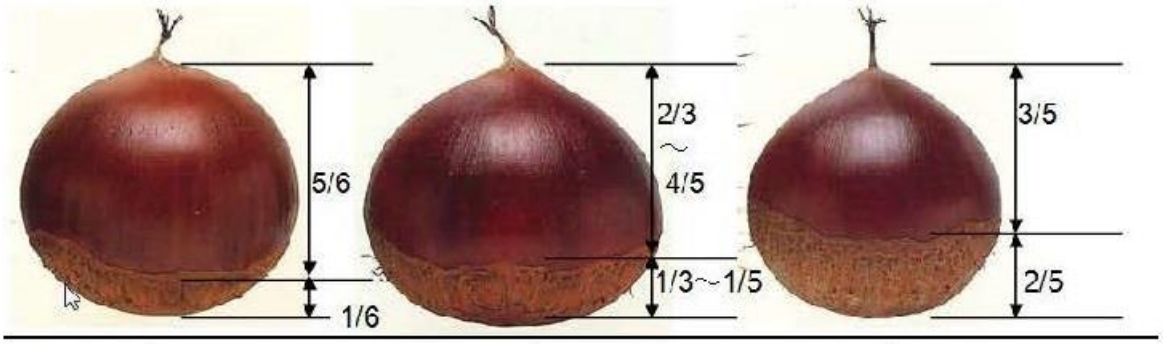


1
Small

3
medium

5
large

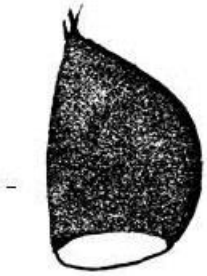
Ad. 34: Nut: size of hilum



1
small

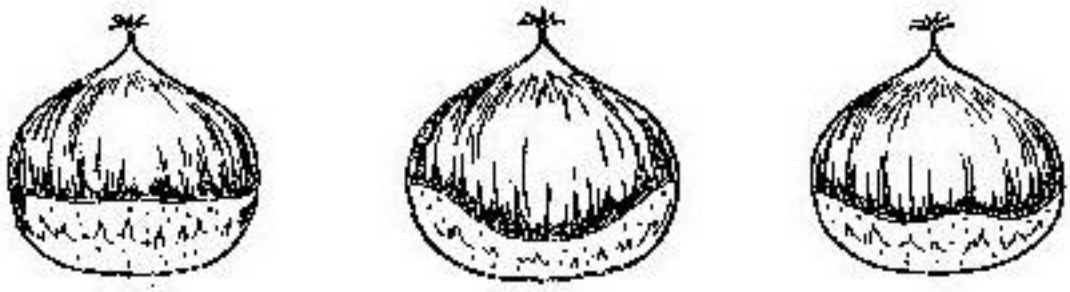
3
medium

5
large



← observation from this side

Ad. 35: Nut: shape of border line of hilum and pericarp



1
straight

2
curved

3
wavy

Ad. 40: Seed coat: adherence to kernel (fresh fruit)

The adherence to kernel should be determined by observation of easiness of peeling seed coat by hand after just harvested fruits are steamed for 50 minutes or roasted for 10 to 15 minutes at 200-230c.

Ad. 43: Time of leaf bud burst

The time of leaf bud burst is considered as the time when 20% of buds show green color at the top of bud.

Ad. 44: Time of male flowering

The time of male and female flowering is considered as the middle day when 20% of the flower are fully open and the day when 80% of the flower are fully open.

Ad. 45: Time of female flowering

The time of male and female flowering is considered as the middle day when 20% of the fully open and the day when 80% of the flower are fully open.

Ad. 46: Time of fruit maturity for harvesting

The time of maturity for consumption is considered as the middle day between the day when 20% of fruit is harvested and the day when 100% of fruits is harvested.

9. Literature

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

1.1.1	Botanical Name	Castanea crenata Sieold & Zucc.	[ ]
1.1.2	Common Name	Japanese chestnut	
1.2.1	Botanical Name	Castanea mollissima Blume	[ ]
1.2.2	Common Name	Chinese Chestnut	
1.3.1	Botanical Name	Castanea sativa Mill.	[ ]
1.3.2	Common Name	Chestnut	

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)

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

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

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

(c) unknown cross [ ]

4.1.2 Mutation [ ]
(please state parent variety)

4.1.3 Discovery and development [ ]
(please state where and when discovered and how developed)

4.1.4 Other [ ]
(please provide details)

4.2 Method of propagating the variety

4.2.1 Other [ ]

(please provide details)

.....
: :
: :
:.....:

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

6. Similar varieties and differences from these varieties

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

Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	Describe the expression of the characteristic(s) for the **similar** variety(ies)	Describe the expression of the characteristic(s) for **your** candidate variety
Example			

Comments:

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.

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”.

.....

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]