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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

Geneva

DRAFT

CHICK-PEA

UPOV Code(s):

CICER_ARI

Cicer arietinum L.**GUIDELINES****FOR THE CONDUCT OF TESTS****FOR DISTINCTNESS, UNIFORMITY AND STABILITY**

*prepared by experts from France
to be considered by the
Technical Working Party for Vegetables
at its fifty-third session, to be held in Seoul, Republic of Korea,
from 2019-05-20 to 2019-05-24*

Disclaimer: this document does not represent UPOV policies or guidance

Alternative names:*

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Cicer arietinum</i> L.	Chick-Pea	Pois chiche	Kichererbse	Garbanzo

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 *Cicer arietinum* L..

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 seeds.

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

5,000 seeds

The seed should meet the minimum requirements for germination, species and analytical purity, health and moisture content, specified by the competent authority. In cases where the seed is to be stored, the germination capacity should be as high as possible and should, be stated by the applicant.

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 two independent growing cycles should be in the form of two separate plantings.

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*

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 100 plants, which should be divided between at least 2 replicates.

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 or Parts of Plants to be Examined

Unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 20 plants or parts of plants taken from each of 20 plants and any other observations made on all plants in the test, disregarding any off-type plants.

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 Table of Characteristics (see document TGP/9 "Examining Distinctness", Section 4 "Observation of characteristics"):

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

MS: measurement of a number of individual plants or parts of plants

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

VS: visual assessment by observation of individual plants or parts of plants

Type of observation: visual (V) or measurement (M)

"Visual" observation (V) is an observation made on the basis of the expert's judgment. For the purposes of this document, "visual" observation refers to the sensory observations of the experts and, therefore, also includes smell, taste and touch. Visual observation includes observations where the expert uses reference points (e.g. diagrams, example varieties, side-by-side comparison) or non-linear charts (e.g. color charts). Measurement (M) is an objective observation against a calibrated, linear scale e.g. using a ruler, weighing scales, colorimeter, dates, counts, etc.

Type of record: for a group of plants (G) or for single, individual plants (S)

For the purposes of distinctness, observations may be recorded as a single record for a group of plants or parts of plants (G), or may be recorded as records for a number of single, individual plants or parts of plants (S). In most cases, "G" provides a single record per variety and it is not possible or necessary to apply statistical methods in a plant-by-plant analysis for the assessment of distinctness.

In cases where more than one method of observing the characteristic is indicated in the Table of Characteristics (e.g. VG/MG), guidance on selecting an appropriate method is provided in document TGP/9, Section 4.2.

4.2 *Uniformity*

- 4.2.1 It is of particular importance for users of these Test Guidelines to consult the General Introduction prior to making decisions regarding uniformity. However, the following points are provided for elaboration or emphasis in these Test Guidelines:
- 4.2.2 These Test Guidelines have been developed for the examination of seed-propagated varieties. For varieties with other types of propagation, the recommendations in the General Introduction and document TGP/13 "Guidance for new types and species" Section 4.5 "Testing Uniformity" should be followed.
- 4.2.3 For the assessment of uniformity of seed-propagated varieties, a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 100 plants, 3 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.
- 4.3.2 Where appropriate, or in cases of doubt, stability may be further examined by testing a new seed stock to ensure that it exhibits the same characteristics as those shown by the initial material supplied.

5. Grouping of Varieties and Organization of the Growing Trial

- 5.1 The selection of varieties of common knowledge to be grown in the trial with the candidate varieties and the way in which these varieties are divided into groups to facilitate the assessment of distinctness are aided by the use of grouping characteristics.
- 5.2 Grouping characteristics are those in which the documented states of expression, even where produced at different locations, can be used, either individually or in combination with other such characteristics: (a) to select varieties of common knowledge that can be excluded from the growing trial used for examination of distinctness; and (b) to organize the growing trial so that similar varieties are grouped together.
- 5.3 The following have been agreed as useful grouping characteristics:
- (a) Flower: color (characteristic 7)
 - (b) Seed: color (1 month after harvest) (characteristic 13)
 - (c) Seed: shape (characteristic 16)
 - (d) Seed: ribbing (characteristic 17)
 - (e) Time of flowering (80% of plants with at least one flower) (characteristic 18)
- 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:

<i>State</i>	<i>Note</i>
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*

English				français		deutsch		español		Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1	2	3	4	5	6	7					
Name of characteristics in English		Nom du caractère en français		Name des Merkmals auf Deutsch		Nombre del carácter en español					
states of expression		types d'expression		Ausprägungsstufen		tipos de expresión					

- 1 Characteristic number
- 2 (*) Asterisked characteristic – see Chapter 6.1.2
- 3 Type of expression
 - QL Qualitative characteristic – see Chapter 6.3
 - QN Quantitative characteristic – see Chapter 6.3
 - PQ Pseudo-qualitative characteristic – see Chapter 6.3
- 4 Method of observation (and type of plot, if applicable)
 - MG, MS, VG, VS – see Chapter 4.1.5
- 5 (+) See Explanations on the Table of Characteristics in Chapter 8.2
- 6 (a)-(b) See Explanations on the Table of Characteristics in Chapter 8.1
- 7 Not applicable

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	MS/VG				
	Plant: habit (after flowering)	Plante : port (après floraison)	Pflanze: Wuchsform (nach der Blüte)	Planta: porte (después de la floración)		
	erect	dressé	aufrecht	erecto	Castor, Jazz	1
	semi-erect	demi-dressé	halbaufrecht	semierecto	Flamenco, Lambada	3
	prostrate	étalé	liegend	postrado	Ituci	5
2. (*)	QN	VS	(a)			
	Plant: ramification	Plante : ramification	Pflanze: Verzweigung	Planta: ramificación		
	weak	faible	gering	débil	Castor, Jazz, Lambada	3
	medium	moyenne	mittel	media	Flamenco, Rondo	5
	strong	forte	stark	fuerte	Elvar	7
3. (*)	QN	MS/VG				
	Plant: height (when pods fully developed)					
	short				Castor	3
	medium				Twist	5
	tall				Elvar, Lambada	7
4. (*)	QL	VS	(a)			
	Stem: anthocyanin coloration	Tige : coloration anthocyanique	Stengel: Anthocyanfärbung	Tallo: pigmentación antocianica		
	absent	absente	fehlend	ausente	Flamenco, Twist	1
	present	présente	vorhanden	presente	Castor	9
5. (*)	QN	VG	(a)			
	Foliage: intensity of green color	Feuillage : intensité de la couleur verte	Laub: Intensität der Grünfärbung	Follaje: intensidad del color verde		
	light	claire	hell	claro	Benito	3
	medium	moyenne	mittel	medio	Flamenco	5
	dark	foncée	dunkel	oscuro	Lambada, Rondo	7
6. (*)	QN	MS/VS	(a)			
	Leaflet: size	Foliole : taille				
	very small	très petite			Castor	1
	small	petite			Melgar	3
	medium	moyenne			Twist	5
	large	grande			Lambada	7
	very large	très grande			Benito	9

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
7. (*)	QL VG					
	Flower: color	Fleur : couleur	Blüte: Farbe	Flor: color		
	white	blanche	weiß	blanco	Twist	1
	purplish pink	rose pourpre	purpurrosa	rosa violáceo	Castor	2
8. (*)	QN MS/VS	(b)				
	Pod: peduncle length	Gousse : longueur du pédoncule	Hülse: Länge des Stiels	Vaina: longitud del pedúnculo		
	short	court	kurz	corta	Castor	3
	medium	moyen	mittel	media	Twist	5
	long	long	lang	larga	Flamenco, Jazz	7
9. (*)	QN VS	(b)				
	Pod: size	Gousse : taille	Hülse: Größe	Vaina: tamaño		
	very small	très petite	sehr klein	muy pequeño	Castor	1
	small	petite	klein	pequeño	Kalia	3
	medium	moyenne	mittel	medio	Rondo	5
	large	grande	groß	grande	Jazz	7
	very large	très grande	sehr groß	muy grande	Benito, Italica	9
10.	QN VG	(b)				
	Pod: intensity of green color	Gousse : intensité de la couleur verte	Hülse: Intensität der Grünfärbung	Vaina: intensidad del color verde		
	light	claire	hell	claro	Benito	3
	medium	moyenne	mittel	medio	Flamenco, Twist	5
	dark	foncée	dunkel	oscuro	Tizon	7
11.	QN MS/VS	(b)				
	Pod: length of beak	Gousse : longueur du bec	Hülse: Länge des Schnabels	Vaina: longitud del pico		
	short	court	kurz	corta	Bori, Calia	3
	medium	moyen	mittel	media	Castor	5
	long	long	lang	larga	Flamenco, Jazz	7
12. (*)	QN MS	(+)				
	Pod: number of seeds	Gousse : nombre de graines	Hülse: Anzahl Samen	Vaina: número de semillas		
	predominantly one	essentiellement une	vorwiegend einer	predominantemente una	Twist	1
	one and two	une et deux	einer und zwei	una y dos	Elvar, Flamenco	2
	predominantly two	essentiellement deux	vorwiegend zwei	predominantemente dos	Ituci, Tizon	3

	English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
13. (*)	PQ	VG					
	Seed: color (1 month after harvest)						
	white					Bianka, Blanco lechoso	1
	yellow						2
	beige					Twist	3
	yellowish brown					Garabito	4
	brown					Castor	5
	reddish brown					Olga	6
	green					CDC Jade	7
	black					Elmo, Otello, Tizon	8
14.	QN	VG					
	Seed: intensity of color (as for 13)		Graine : intensité de la couleur (comme pour 13)	Samen: Intensität der Farbe (wie unter 13)	Semilla: intensidad del color (como en 13)		
	light		claire	hell	claro		3
	medium		moyenne	mittel	medio		5
	dark		foncée	dunkel	oscuro		7
15. (*)	QN	MG	(+)				
	Seed: weight		Graine : poids	Samen: Gewicht	Semilla: peso		
	very low					Castor	1
	low		petit	gering	bajo	Amit, Amparo	3
	medium		moyen	mittel	medio	Bianka	5
	high		élevé	hoch	alto	Blanco lechoso	7
	very high		très élevé	sehr hoch	muy alto	Italica, Ituci	9
16. (*)	PQ	VG	(+)				
	Seed: shape		Graine : forme	Samen: Form	Semilla: forma		
	round		ronde	rund	redonda	Elvar	1
	round to angular		ronde à angulaire	rund bis kantig	entre redonda y angular	Flamenco	2
	angular		angulaire	kantig	angular	Castor	3
17. (*)	QN	VG					
	Seed: ribbing		Graine : sinuosités	Samen: Rippung	Semilla: acostillado		
	absent or very weak		absentes ou très faibles	fehlend oder sehr gering	ausente o muy débil	Pedrosillano	1
	weak		faibles	gering	débil	Garabito	3
	medium		moyennes	mittel	medio	Flamenco, Jazz, Twist	5
	strong		fortes	stark	fuerte	Benito, Bianka	7
	very strong		très fortes	sehr stark	muy fuerte	Castor, Italica	9

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
18. (*)	QN	MG				
	Time of flowering (80% of plants with at least one flower)	Époque de la floraison (80% des plantes avec au moins une fleur)	Zeitpunkt der Blüte (80 % der Pflanzen mit mindestens einer Blüte)	Época de floración (80% de las plantas con al menos una flor)		
	very early	très précoce	sehr früh	muy precoz	Benito, Bianka	1
	early	précoce	früh	precoz	Italica, Ituci	3
	medium	moyenne	mittel	intermedia	Twist	5
	late	tardive	spät	tardía	Tizon	7
	very late	très tardive	sehr spät	muy tardía	Castor	9
19. (*)	QN	VG				
	Time of dry seed maturity	Époque maturité du grain sec	Zeitpunkt der Trockenreife	Época de madurez del grano seco		
	very early	très précoce	sehr früh	muy precoz	Castor	1
	early	précoce	früh	precoz	Italica	3
	medium	moyenne	mittel	intermedia	Jazz, Tizon	5
	late	tardive	spät	tardía	Lambada, Twist	7
	very late				Benito	9
20.	QN	VS	(+)			
	Resistance to <i>Aschochyta rabiei</i>					
	susceptible				Benito	1
	intermediate resistant				Amit, CDC Consul	9

8. Explanations on the Table of Characteristics

8.1 *Explanations covering several characteristics*

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

- (a) Foliage: observations on the foliage should be made at the time of flowering.
- (b) Pod: all observations on the pod should be made at the green stage of seeds fully developed in size.

8.2 *Explanations for individual characteristics*

Ad. 12: Pod: number of seeds

predominantly one: percentage of pods with at least 2 seeds \leq 10%
one and two: 10 % < percentage of pods with at least 2 seeds \leq 60%
predominantly two: 60 % < percentage of pods have at least 2 seeds

Ad. 15: Seed: weight

The seed weight should be measured on two samples of 100 seeds.

Ad. 16: Seed: shape



1

round



2

round to
angular



3

angular

Ad. 20: Resistance to *Aschochyta rabiei*

Apr.4, 2019:

Disease resistance protocol NOT YET AVAILABLE

GEVES is involved in a national R&D 3 Years project named AsCoLuP. The Draft was sent in April 2019. In case of agreement (result in July 2019), it could begin in January 2020.

If we can succeed to finalize the UPOV Chick pea guideline before the result of the AsCoLuP project, this character will be deleted.

FR will propose then a partial revision to introduce the character: Resistance to *Aschochyta rabiei*, with a finalized protocol.

9. Literature

ICRISAT, ICARDA and IBPGR, 1985: "Chick-pea descriptors", IBPGR Secretariat, Rome, IT, 15 pp.

Maesen, L.J.G. van der, 1972: "Cicer L., a monograph of the genus with special reference to the chick-pea (*C. arietinum* L.), its ecology and cultivation", Meded. Landbouwhogeschool, Wageningen, NL, 72, pp. 1-136

Saxena, M.C. and Singh, K.B., 1987: "The Chick-pea", C.A.B. International (ICARDA), SY, 409 pp.

Smartt, J., 1990: "Grain Legumes" (especially Chapter 6: "Pulses of the classical world, pp. 176-244), Cambridge University Press, Cambridge, GB

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	<input type="text" value="Cicer arietinum L."/>
1.2	Common name	<input type="text" value="Chick-Pea"/>
2. Applicant		
	Name	<input type="text"/>
	Address	<input type="text"/>
	Telephone No.	<input type="text"/>
	Fax No.	<input type="text"/>
	E-mail address	<input type="text"/>
	Breeder (if different from applicant)	<input type="text"/>
3. Proposed denomination and breeder's reference		
	Proposed denomination (if available)	<input type="text"/>
	Breeder's reference	<input type="text"/>

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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#4. Information on the breeding scheme and propagation of the variety

4.1 Breeding scheme

Variety resulting from:

4.1.1 Crossing

(a) controlled cross

(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)

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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4.2	Method of propagating the variety	
4.2.1	Seed-propagated varieties	
(a)	Self-pollination	[]
(b)	Inbred line	[]
(c)	Other (please provide details)	[]
4.2.2	Other (Please provide details)	[]
	<input type="text"/>	

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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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 Plant: habit (after flowering) (1)		
erect	Castor, Jazz	1 []
semi-erect	Flamenco, Lambada	3 []
prostrate	Ituci	5 []
5.2 Plant: ramification (2)		
weak	Castor, Jazz, Lambada	3 []
medium	Flamenco, Rondo	5 []
strong	Elvar	7 []
5.3 Plant: height (3) (when pods fully developed)		
short	Castor	3 []
medium	Twist	5 []
tall	Elvar, Lambada	7 []
5.4 Flower: color (7)		
white	Twist	1 []
purplish pink	Castor	2 []
5.5 Pod: number of seeds (12)		
predominantly one	Twist	1 []
one and two	Elvar, Flamenco	2 []
predominantly two	Ituci, Tizon	3 []

Characteristics	Example Varieties	Note
5.6 Seed: color (13) (1 month after harvest)		
white	Bianka, Blanco lechoso	1 []
yellow		2 []
beige	Twist	3 []
yellowish brown	Garabito	4 []
brown	Castor	5 []
reddish brown	Olga	6 []
green	CDC Jade	7 []
black	Elmo, Otello, Tizon	8 []
5.7 Seed: weight (15)		
very low	Castor	1 []
low	Amit, Amparo	3 []
medium	Bianka	5 []
high	Blanco lechoso	7 []
very high	Italica, Ituci	9 []
5.8 Seed: shape (16)		
round	Elvar	1 []
round to angular	Flamenco	2 []
angular	Castor	3 []
5.9 Seed: ribbing (17)		
absent or very weak	Pedrosillano	1 []
weak	Garabito	3 []
medium	Flamenco, Jazz, Twist	5 []
strong	Benito, Bianka	7 []
very strong	Castor, Italica	9 []
5.10 Time of flowering (80% of plants with at least one flower) (18)		
very early	Benito, Bianka	1 []
early	Italica, Ituci	3 []
medium	Twist	5 []
late	Tizon	7 []
very late	Castor	9 []

Characteristics	Example Varieties	Note
5.11 Time of dry seed maturity (19)		
very early	Castor	1 []
early	Italica	3 []
medium	Jazz, Tizon	5 []
late	Lambada, Twist	7 []
very late	Benito	9 []

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6. Similar varieties and differences from these varieties

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

Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	Describe the expression of the characteristic(s) for the similar variety(ies)	Describe the expression of the characteristic(s) for your candidate variety
<i>Example</i>	<i>Flower: color</i>	<i>White</i>	<i>purplish pink</i>
Comments:			

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#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

A representative color photograph of the variety displaying its main distinguishing feature(s), should accompany the Technical Questionnaire. The photograph will provide a visual illustration of the candidate variety which supplements the information provided in the Technical Questionnaire.

The key points to consider when taking a photograph of the candidate variety are:

- Indication of the date and geographic location
- Correct labeling (breeder's reference)
- Good quality printed photograph (minimum 10 cm x 15 cm) and/or sufficient resolution electronic format version (minimum 960 x 1280 pixels)

Further guidance on providing photographs with the Technical Questionnaire is available in document TGP/7 "Development of Test Guidelines", Guidance Note 35 (<http://www.upov.int/tgp/en/>).

[The link provided may be deleted by members of the Union when developing authorities' own test guidelines.]

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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.

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]