

TG/PARSNIP(proj.1)
ORIGINAL:English
DATE:2003 -05-22

INTERNATIONALUNIONFORTHEPROTECTIONOFNEWVARIETIESOFPLANTS GENEVA

DRAFT

PARSNIP

(Pastinacasativa L.)

GUIDELINES

FORTHECONDUCTOFTESTS

FORDISTINCTNESS, UNIF ORMITYANDSTABILITY

tobeconsideredbythe
TechnicalWorkingPartyforVegetablesatitsthirty -seventhsession,
tobeheldin Roelofarendsveen,Netherlands, fromJune23to27,2003

AlternativeNames: ³

LatinEnglishFrenchGermanSpanishPastinacasativa L.Parsnip---

ASSOCIATEDDOCUMENTS

These guidelines should be read in conjunction with document TG/1/3, "General Introduction to the Examination of Distinctness, Uniformity and Stability and the Development of Harmonized Descriptions of New Varieties of Plants" (herein after referred to as the "General Introduction") and its associated "TGP" documents.

 $^{^*}$ These names were correct at the time of the introduction of these Test Guidelin es 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. <u>SubjectoftheseTestGuidelines</u>

TheseTestGuidelinesapplytoallvarietiesof Pastinacasativa L.

- 2. <u>MaterialRequired</u>
- 2.1 Thecompetentauthorities decide on the quantity and quality of the plant material required for testing the variety and when and where it is to be delivered. Applicant submitting material from a State other than that in which the testing takes place must ensure that all customs formalities and phytosanitary require ments are complied with.
- 2.2 Thematerialistobesupplied in the form of seed.
- 2.3 Theminimum quantity of plantmaterial, to be supplied by the applicant, should be:

50g.
[DE50g(additionof,,numberofseeds"?)]
[UKProposetoincreaseseedweigh tto100gandadd15,000seeds]

- 2.4 Theseedshouldmeettheminimumrequirementsforgermination, species and analytical purity, health and moisture content, specified by the competent authority. [Incases where these edist obestored, the germination capacity should be as high as possible and should, be stated by the applicant.]
- 2.5 Theplantmaterialshouldnothaveundergoneanytreatmentwhichwouldaffectthe expressionofthecharacteristicsofthevariety,unlessthecompetentauthoritiesallow or requestsuchtreatment. If it has been treated, full details of the treatment must be given.
- 3. MethodofExamination
- 3.1 Duration of Tests

Theminimum duration of tests should normally be two independent growing cycles.

3.2 TestingPlace

The tests should normally be conducted at one place. If any characteristics of the variety, which are relevant for the examination of DUS, cannot be observed at that place, the variety may be tested at an additional place.

3.3 ConditionsforConductingtheExamin ation

The tests should be carried out under conditions ensuring satisfactory growth for the expression of the relevant characteristics of the variety and for the conduct of the examination.

3.3.1 Typeofobservation –visualormeasurement

Therecomme ndedmethodofobservingthecharacteristicisindicatedbythefollowing keyinthesecondcolumnoftheTableofCharacteristics:

MG: singlemeasurementofagroupofplantsorpartsofplants

MS: measurementofanumberofindividualplantsorpartsof plants

VG: visualassessmentbyasingleobservationofagroupofplantsorpartsofplants

VS: visualassessmentbyobservationofindividualplantsorpartsofplants]

3.4 TestDesign

3.4.1 Eachtestshouldbedesignedtoresultinatotalofatleas t60plants, which should be divided between two or more replicates].

[UKProposestoincreasethenumberofplantsto100]

- 3.4.2 Thedesignofthetestsshouldbesuchthatplantsorpartsofplantsmayberemovedfor measurementorcountingwithoutprej udicetotheobservationswhichmustbemadeuptothe endofthegrowingcycle.
- 3.5 Number of Plants/Parts of Plants to be Examined

Unlessotherwiseindicated, allobservations should be made on 40 plants or partstaken from each of 40 plants.]

[UKProposestoincreasethenumberofplantsto60]

3.6 AdditionalTests

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

- 4. AssessmentofDistinctness,UniformityandStability
- 4.1 Distinctness
 - 4.1.1 GeneralRecommendations

It is of particular importance for users of these Test Guidelinest oconsult 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 ConsistentDifferences

Theminimum duration of tests recommended in section 3.1 reflects, in general, the need to ensure that any differences in a characteristic are sufficiently consistent.

4.1.3 ClearDifferences

Determiningwhetheradifferen cebetweentwovarietiesiscleardependsonmany 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. Therefor e, 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 ItisofparticularimportanceforusersoftheseTes tGuidelinestoconsulttheGeneral Introductionpriortomakingdecisionsregardinguniformity.However,thefollowingpoints are provided for elaboration or emphasis in these Test Guidelines:
- [4.2.x] Theassessmentofuniformityshouldbeaccordingto therecommendations for cross-pollinated varieties in the General Introduction.]
- [4.2.x] [Theassessmentofuniformityforhybridvarietiesdependsonthetypeofhybrid and should be according to the recommendations for hybrid varieties in the General Introduction.]
- [4.2.x] [Fortheassessmentofuniformityofseed recommendationsintheGeneralIntroductionfor[self [hybrid]varietiesshouldbefollowed,asappropriate.] -propagatedvarieties,the -pollinated]/
- [4.2.x] [Forthe assessmentofuniformity,apopulationstandardof{ x}% and a acceptance probability of at least { y}% should be applied. In the case of a applants, [{ b} off-types are]/[1 off-type is] a llowed.]

4.3 Stability

- 4.3.1 Inpracti ce,itisnotusualtoperformtestsofstabilitythatproduceresultsascertainas thoseofthetestingofdistinctnessanduniformity. However, experience has demonstrated that, formany types of variety, when a variety has been shown to be uniform, it can also be considered to be stable.
- 4.3.2 Whereappropriate, or in cases of doubt, stability may be tested, either by growing a further generation, or by testing anew characteristics as those shown by the previous material supplied.
- [4.3.3] **ASW 10** [Thestabilityofahybridvarietymay,inadditiontoanexamination of thehybridvarietyitself,alsobeassessedbyexamination of theuniformityandstabilityofits parentlines.]

- 5. GroupingofVarieties andOrganizationoftheGrowingTrial
- 5.1 Theselectionofvarietiesofcommonknowledgetobegrowninthetrialwiththe candidatevarietiesandthewayinwhichthesevarietiesaredividedintogroupstofacilitate theassessmentofdistinctnessisaid edbytheuseofgroupingcharacteristics.
- 5.2 Groupingcharacteristicsarethoseinwhichthedocumentedstatesofexpression, even whereproducedatdifferentlocations, canbeused, eitherindividually orincombination with other such characteristic s:(a) to select varieties of common knowledge that can be excluded from the growing trial so that similar varieties are grouped to gether.
- 5.3 Thefollowinghavebeenagreedas usefulgroupingcharacteristics:
 - (a) Root:bulbousshapeofupperpart(characteristic19)
 - (b) Root:shape(characteristic20)
- 5.4 Guidancefortheuseofgroupingcharacteristics,intheprocessofexamining distinctness,isprovidedthroughtheGeneral Introduction.
- 6. IntroductiontotheTableofCharacteristics
- 6.1 Categories of Characteristics
 - 6.1.1 StandardTestGuidelinesCharacteristics

StandardTestGuidelinescharacteristicsarethosewhichareapprovedbyUPOVfor examinationofDUSandfrom whichmembersoftheUnioncanselectthosesuitablefortheir particular circumstances.

6.1.2 AsteriskedCharacteristics

Asteriskedcharacteristics(denotedby*)arethoseincludedintheTestGuidelines whichareimportantfortheinternationalharm onizationofvarietydescriptionsandshould alwaysbeexaminedforDUSandincludedinthevarietydescriptionbyallmembersofthe Union,exceptwhenthestateofexpressionofaprecedingcharacteristicorregional environmentalconditionsrenderthis inappropriate.

6.2 StatesofExpressionandCorrespondingNotes

Statesofexpressionaregivenforeachcharacteristictodefinethecharacteristicandto harmonizedescriptions. 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 TypesofExpression

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

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6.4 ExampleVarieties

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

- 6.5 Legend
- (*) Asteriskedcharacteristic –seeSection6.1.2
- (QL) Qualitative characteristic -see Section 6.3
- (QN) Quantitative characteristic -see Section 6.3
- (PQ) Pseudo-qualitativecharacteristic -seeSection6.3
- (a) SeeExplanationsontheTableofCharacteristicsinChapter8,Section8.1
- (+) SeeExplanationsontheTableofCharacteristicsinChapter8 ,Section8.2

7. <u>TableofCharacteristics/Tableaudescaractères/Merkmalstabelle/Tabladecaracteres</u>

	English	français	deutsch	español	ExampleVarieties/ Exemples/ Beispielssorten/ Variedadesejemplo	Note/ Nota
1.	Foliage:attitude	Feuillage:port	Laub:H altung	Follaje:porte		
	erect	dressé	aufrecht	erecto		1
	erecttosemi -erect	dresséà demi-dressé	aufrechtbis halbaufrecht	erectoasemierecto	MS2	2
	semi-erect	demi-dressé	halbaufrecht	semierecto	Countess	3
	semi-erectto horizontal	demi-dresséà horizontal	halbaufrechtbis waagerecht	semierectoa horizontal	Guernsey	4
	horizontal	horizontal	waagerecht	horizontal		5
2.	Foliage:number ofleaves	Feuillage:nombre defeuilles	Laub:Anzahl Blätter	Follaje:número dehojas		
	few	petit	gering	bajo		3
	medium	moyen	mittel	medio		5
	many	grand	groß	alto		7
UK:Shouldwer	etain?thereissomevaria	tion,butthecharacteri	snotveryuseful?			
3.	Foliage:intensity ofgreencolor	Feuillage: intensitédela couleurverte	Laub:intensität der grünfärbung	Follaje:intensidad delcolorverde		
	light	claire	hell	claro	Avonresister	3
	medium	moyenne	mittel	medio	Alba,Guernsey	5
	dark	foncée	dunkel	oscuro	P14	7
4.	Foliage:glossiness	Feuillage: brillance	Laub:Glanz	Follaje:brillo		
	weak	faible	gering	débil	Avonresister	3
	medium	moyenne	mittel	medio	Polar	5
	strong	forte	stark	fuerte	ImperialCrown	7

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		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedadesejemplo	Note/ Nota
5.		Foliage:widthof basalleavesat crown					
(+)		narrow				Alba	3
		medium				NewWhiteSkin	5
		broad				TenderandTrue	7
DE:And	explanatio	onwouldbehelpful .	UK:Drawingiscopiea	lfromcarrotguideline	e.changeordertofollo	w6?	
6.		Foliage:blistering	Feuillage:cloqûre	Laub:Blasigkeit	Follaje: abullonado		
		weak	faible	gering	débil	ImperialCrown	3
		medium	moyenne	mittel	medio	Avonresister	5
		strong	forte	stark	fuerte	Paragon	7
7.		Leaf:length	Feuille:longueur	Blatt:Länge	Hoja:longitud		
(+)	(a)	short	courte	kurz	corta	Andover	3
		medium	moyenne	mittel	media	NewWhiteSkin	5
		long	longue	lang	larga	Tenor	7
CZ:Iinc	cludingore	excludingpetiol.UK:'le	eaf'wouldincludethep	etioleand'lamina'wo	uldexcludethepetiole		
8.		Leaf:width					
(+)	(a)	narrow				Arrow	3
		medium				NewWhiteSkin	5
		broad				TenderandTrue	7
9.		Leaf:distance fromw idestpoint totip					
(+)	(a)	short				Alba	3
		medium				Avonresister	5
		long				TenderandTrue	7

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		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedadesejemplo	Note Nota
10.		Leaf:division					
	(a)	weak				Andover	3
		medium				Polar	5
		strong				Yatesnip	7
11.		Leaflet: subdivision					
	(a)	weak				Alba	3
		medium				NewWhiteSkin	5
		strong				Paragon	7
PL:toch	nange"mu	ch"for"strong".U	UKaccepts				
						ful.Remarkto"leafdivision: fweak,mediumandstrong.	
UV.Cl.	~~ ~ ~ 		annatush anasuh divisia		anima and	rizaan ddan situafth aninn aa in	

 $\label{lem:characterismotthesame} UK: Characterisnot the same as in carrot where subdivision is equivalent to 'feather iness' \\ -the size and density of the pinnae. in parsnip the leaflets subdivide and newleaflets are formed. The remay be abetter way to define this character.$

12.		Leaflet:dentation					
	(a)	weak	lâche	locker	laxa	Avonresister	3
		medium	moyenne	mittel	media	Alba	5
		strong	dense	dicht	densa	Countess	7

DE: The translation of the German wording (I suppose of the other languages as well) does not correspond to, leaflet: dentation ``, it should read,, leaflet: density of leaf incisions ``.

UK:keep'dentation'.thedepthnotthedensityisbeingassessed

UK:ke	UK:keep deniation inedepinnotinedensityisveingassessed									
13.		Leaflet:size		_						
(+)	(a)	small	Countess	3						
		medium	Panache	5						
		large	WhiteKing	7						

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	English	français	deutsch	español	ExampleVarieties/ Exemples/ Beispielssorten/ Variedadesejemplo	Note/ Nota
14.	Petiole:intensity of anthocyanin	Pétiole:	Blattstiel:	Pecíolo:		
	weak	faible	gering	débil	TenderandTrue	3
	medium	moyenne	mittel	media	WhiteGem	5
	strong	forte	stark	fuerte	MS2	7
15.	Petiole:length	Pétiole :longueur	Blattstiel:Länge	Pecíolo:longitud		
(+)	short	court	kurz	corto	MS5	3
	medium	moyen	mittel	medio	NewWhiteSkin	5
	long	long	lang	largo	Countess, Tenor	7
16.	Root:length					
(+)	short	court	kurz	corto	Alba	3
	medium	moyen	mittel	medio	WhiteGem	5
	long	long	lang	largo	Paragon,Tenderand True	7
17.	Root:width					
(+)	narrow				P14	3
	medium				TenderandTrue	5
	broad				WhiteKing	7
18.	Root:distance fromwidestpoint tocrown					
(+)	short	court	kurz	corto	Andover	3
	medium	moyen	mittel	medio	Paragon, Tenderand True	5
	long	long	lang	largo	Avonresister, White King	7

DE: An explanation would be helpful.

CZ: Whatdoyoumean? The stages "short, medium long" are not accordance with "wide stpoint", we propose to change wording and to add the drawing

PL: to delete. I amnot sure but this characteristic is sue from characteristic 17&19.

 $UK: Length from wide stpoint to crown? is a good discriminati \\ ng character and want to keep$

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	English	français	deutsch	español	ExampleVarieties/ Exemples/ Beispielssorten/ Variedadesejemplo	Note Nota
19.	Root:shape					
(+)	narrowobtrian	gular			Arrow	3
	obtriangular				Guernsey	5
	broadobtriang	ular			Avonresister, Tenderand True	7
PLtoadddr	awing					
20.	Root:bulbous shapeofupper part					
(+)	absent				Arrow	1
	present				Avonresister	9
	O.PL: Weproposetoadd thavesomecrowndepre Root: depthof crowndepress	ssion.maybevariation			JK:Wearenotawareofvarieties	
(+)	shallow				Polar	3
	medium				NewWhiteSkin	5
	deep				Avonresister, White King	7
22.	Root:widthof crowndepress					
(+)	narrow				Alba	3
	medium				Andover	5
	broad				TenderandT rue,Tenor	7
	Do otsomtoms	l				
23.	Root:externa					
23.					NewWhiteSkin	1
23.	color				NewWhiteSkin	1 2

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	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedadesejemplo	Note/ Nota
24.	Root:surface texture					
	smooth					3
	medium					5
	rough					7
25.	Root:corewidth					
(+)	narrow				Alba	3
	medium				NewWhiteSkin	5
	broad				WhiteKing	7
26.	Root:intern al color					
	white				NewWhiteSkin	1
	whitishcream					2
	cream					3

DE: Shoulditread(comparing to char. 23: external color) internal color instead of flesh color?

CZ:Isitqualitativeorquantitativechar.Ifitisquantitative(asiti propose:white1,whitish -cream2,cream3

sstated)thenote2willbe"white"to"whitetocream".We

UK:agreetoacceptboththeseproposals

PL:Weproposetodeleteandaddtwonewcharacteristics:"root:corecolor1 white2 -whitetocream3 -cream".

-white2 -whitetocream3 -cream"."root:cortexcolor1

 $\label{lem:uk:doesnotagreetoreplace} UK: does not agree to replace 26 with two new characters as the reisin sufficient variation between core and cortex colour.$

PL:Ourexpertsobservedalsoanothercharacteristics, which could be use ful.

Weproposetoadd:

leaflengthandfoliageattitude

 $\it UK: Root: firmness: no experience of this character; need to have a method and example varieties$

UK:root:weight:donotthinkthis is necessary for distinctness

[&]quot;Plant:hight:3 -low5 -medium7 -hight"

[&]quot;Root:firmnessofflesh:3 -loose5 -medium7 -firm"

[&]quot;Root:weight3 -small5 -medium7 -high".

8. ExplanationsontheTableofCharacteristics

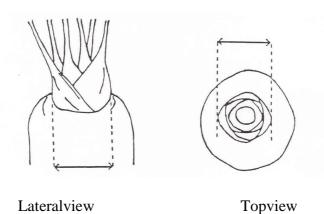
ASW 12

8.1 Explanationscoveringseveralcharacteristics

CharacteristicscontainingthefollowingkeyinthesecondcolumnoftheTableof Characteristicsshouldbeexaminedasindicatedbelow:

- (a) <u>PlantandLeaf</u>: All observations on the plant and the leaf should be made on fullydevelopedplantsbeforeharvestmaturity.
- 8.2 Explanationsforindividualcharacteristics

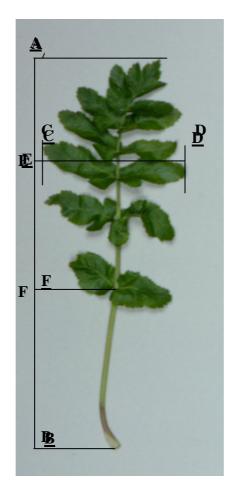
Ad.5:Foliage:widthofbasalLeavesatcrown



Ad.13:Leaflet:size

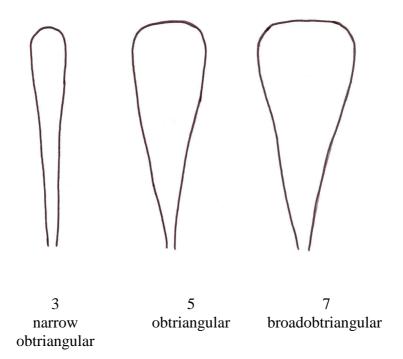
Assessmentshouldbemadeonthesec ondleafletononesideofthemidribforeachleaf recorded

Ad.7,8,9:Leaf:length(7),width(8),distancefromwidestpointtotip(9) Ad.15:Petiole:length

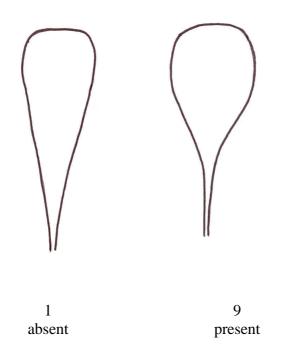


- 7.
- 8.
- Leaflength(A -B)
 Leaf:width(C -D)
 Leaf:distancefromwidestpointtotip(A 9. -E)
- Petiole:length(B -F) 15.

Ad.19Root:shape



Ad.20:Root:bulbousshapeofupperpart



Ad.16,17, 18,21,22,25:Rootcharacteristics



- 16. Root: length (A-D)
- 17. Root: width (C-I)
- 25. Root: core width (G-H)
- 18. Root: distance from widest point to crown (A-C)
- 21. Root: depth of crown depression (A-B)
- 22. Root: width of crown depression (E-F)

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9. <u>Literature</u>

Rubatzky, V.E., Quiros, C.F., Simon, P.W. 1999: "Carrots and Related Vegetable *Umbelliferae*." Crop Productions cience inhorticulture series 10. CAB International, Wallingford, UK. ISBN 0851991297

9. <u>TechnicalQuestionnaire</u>

TEC	CHNICALQUESTIONNAIRE	2	Page $\{x\}$ of $\{y\}$	ReferenceNumber:
				Applicationdate: (nottobefilledinbytheapplicant)
	TE tobecompletedinconnec		INICALQUESTIONN nwithanappl icatio	AIRE onforplantbreeders' rights
bree theh	W 13 [Inthecaseofhybridvaried ders' rights, and where the paren ybridvariety, this Technic all s, in addition to being completed for the state of th	tlin Que	esaretobesubmittedasa estionnaireshouldbecor	
1.	SubjectoftheTechnicalQuest	tion	nnaire	
	1.1 LatinName	Pa	stinacasativa L.)	
	1.2 CommonName	Par	rsnip	
2.	Applicant			
	Name			
	Address			
	TelephoneNo.			
	FaxNo.			
	E-mailaddress			
	Breeder(ifdifferentfromappl	ica	nt)	
3.	Proposeddenominationandb	ree	der'sreference	
	Proposeddenomination (ifavailable)			
	Breeder'sreference			

TECHN	NICALQUESTIONNAIRE	Page{x}of{y}	ReferenceNumber:	
4. Int	Formationonthebreedingschen Breedingscheme ASW [Varietyresultingfrom: 4.1.1 Crossing (a) controlleder (pleasestate (b) partiallyknow (pleasestate (c) totallyunknow) 4.1.2 Mutation (pleasestateparent) 4.1.3 Discovery (pleasestatewhere) 4.1.4 Other (pleaseprovidedet)	ross eparentvarieties) exhownparentvariety(iestowncross tvariety) e,whenandhowdevelope tails)]	[] (] (] []	
4.2	2 Methodofpropagatingthev	variety		
	haracteristicsofthevarietytob ondingcharacteristicinTestG		nbracketsreferstothe enotewhichbestcorresponds).	
	Characteristics		ExampleVarieties	Note
5.1 (7)	Leaf:length			
	short		Andover	3[]
	medium		NewWhiteSkin	5[]

long

weak

medium

strong

5.2 (14) Petiole:intensityofanthocyanin

7[]

3[]

5[]

7[]

Tenor

TenderandTrue

WhiteGem

MS2

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TECHNICALQUESTIONNAIRE	$Page\{x\}of\{y\}$	ReferenceNumber:

	Characteristics	ExampleVarieties	Note
5.3 (16)	Root:length		
	short	Alba	3[]
	medium	WhiteGem	5[]
	long	Paragon, Tenderand True	7[]
5.4 (19)	Root:shape		
	narrowobtriangular	Arrow	3[]
	obtriangular	Guernsey	5[]
	broadobtriangular	Avonresister, Tenderand True	7[]
5.5 (23)	Root:externalcolor		
	white	NewWhiteSkin	1[]
	whitishcream		2[]
	cream		3[]
5.6 (24)	Root:surfacetexture		
	smooth		3[]
	medium		5[]
	rough		7[]

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TECHNICALQUEST	IONNAIRE	Page{x}	x of {y} ReferenceN		lumber:	
6. Similarvarietiesa Pleaseusethetable,and yourcandidatevarietya knowledge,is(orare)ma conductitsexamination	lspaceprovided liffersfromthev ostsimilar.This	forcomm ariety(orv informati	ents,belowtop carieties)whic onmayhelpth	ch,tothebesto		
Denomination(s)of variety(ies)similarto yourcandidatevariety	Characterist whichyourca varietydifferst similarvarie	ndidate fromthe	ofthechara forthe	eexpre ssion cteristic(s) similar ty(ies)	Describetheexpression ofthecharacteristic(s) for your candidate variety	
Example			(exampletol	beinserted)	(exampletobeinserted)	
Comments:						

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IECI	INIC	ALQUE	SHONNAIRE	rage(x)01	- { y }	Referenceivamber.	
7.	Addi	tionalin	formationwh ich	nmayhelpinth	eexaminati	onofthevariety	
7.1	Inadditiontotheinformationprovidedinsections5and6,arethereanyadditional characteristicswhichmayhelptodistinguishthevariety?						
	Yes		No				
	(Ifyes	s,pleasep	providedetails)				
7.2	Specialconditionsfortheexaminationofthevariety						
	7.2.1		hereanyspecialc	onditionsforg	growingthe	varietyorconductingthe	
		Yes		No []			
	7.2.2	Ifye	s,pleasegivedeta	ils:			
7.3		rinforma		olorphotograp	phofthevari	letyshouldaccompanythe	
Techi	nicalQ	uestion	naire.				
8.	Auth	orizatio	nforrelease				
	(a) Doesthevarietyrequirepriorauthorizationforreleaseunderlegislationconcerning theprotectionoftheenvironment,humanandan imalhealth?						
		Yes	[]	No	[]		
	(b) Hassuchauthorizationbeenobtained?						
		Yes	[]	No			
	If the answer to (b) is yes, please attach a copy of the authorization.						

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TECHN	NICALQUESTIONNAIRE	$Page\{x\}of\{y\}$	ReferenceNun	nber:				
9. I	9. Informationonplantmaterialtobeexamined.							
9.1 Theexpressionofacha racteristicorseveralcharacteristicsofavarietymaybeaffected byfactors, such as pests and disease, chemical treatment (e.g. growth retardants or pesticides), effects of tissue culture, different rootstocks, scionstaken from different growth phases of a tree, etc.								
9.2 Theplantmaterialshouldnothaveundergoneanytreatmentwhichwouldaffectthe expressionofthecharacteristicsofthevariety,unlessthecompetentauthoritiesalloworrequest suchtreatment. If the plantmaterial has undergone suchtreatment, 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. vir	us,bacteria,phytoplasm	a)	Yes []	No[]			
(1	b) Chemicaltreatment(e.g.	growthretardantorpest	icide)	Yes[]	No[]			
(0	c) Tissueculture	•	Yes[]	No[]				
((d) Otherfactors				No[]			
P	Pleaseprovidedetailsofwhereyouhaveindicated"yes".							
10. Iherebydeclarethat,tothebestofmyknowledge,theinformationprovidedinthisform iscorrect:								
Applicant'sname								
S	ignature		Date					

[Endofdocument]