

**Technical Working Party for Fruit Crops****TWF/53/9****Fifty-Third Session****Original:** English**Virtual meeting, July 11 to 15, 2022****Date:** June 10, 2022

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**PARTIAL REVISION OF THE TEST GUIDELINES FOR WALNUT***Document prepared by an expert from the Czech Republic**Disclaimer: this document does not represent UPOV policies or guidance*

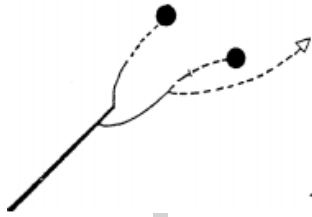
1. The purpose of this document is to present a proposal for a partial revision of the Test Guidelines for Walnut (document TG/125/7).
2. The Technical Working Party for Fruit Crops (TWF), at its fifty-second session, hosted by China and organized by electronic means, from July 12 to 16, 2021, agreed that the Test Guidelines for Walnut (document TG/125) be partially revised (see document TWF/52/10 "Report", Annex IV).
3. The following changes are proposed:
  - (a) Addition of a new characteristic "Tree: predominant location of fruit buds" after characteristic 2 "Tree: branching"
  - (b) Change from "ventral view" "to lateral view" in the following characteristics:
    - (i) Char. 10. Nut: shape in ventral view
    - (ii) Char. 11. Nut: shape in lateral view
    - (iii) Char. 13. Nut: shape of base in lateral view
    - (iv) Char. 14. Nut: shape of apex in lateral view
    - (v) Char. 18 Nut: width of pad on suture in lateral view
  - (c) Addition of a new characteristic "Time of leaf bud burst" after characteristic 27 "Kernel: ease of removal from shell"
4. The proposed changes are presented below in highlight and underline (insertion) and ~~striethrough~~ (deletion).

Proposal to add a new characteristic “Tree: predominant location of fruit buds” after characteristic 2 “Tree: branching”

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>2.</b>	<b>QN</b>	<b>VG</b>	<b>(+)</b>	<b>(a)</b>				
	<b>Tree: branching</b>		<b>Arbre : ramification</b>		<b>Baum: Verzweigung</b>	<b>Árbol: ramificación</b>		
	weak		faible		gering	escasa	Chico, Huashan 5, Shangluo 3, Vina, Xisiyu 1	3
	medium		moyenne		mittel	media	Chuanhe 2, Franquette, Hartley, Lübo, Marbot, Qinyou 1, Shangsong 6, Xinzaofeng	5
	strong		forte		stark	abundante	Corne, Daixiang, Jinfeng, Liaoning 1, Liaoning 4, Luguang, Lugu 2, Parisienne, Shaanhe 1, Xiangling, Xifu 2, Xilin 2, Zhonglin 1, Zhonglin 5	7
<b>NEW</b>	<b>QN</b>	<b>VG</b>	<b>(+)</b>					
	<b>Tree: predominant location of fruit buds</b>		<b>Arbre: localisation prédominante des bourgeons à fruit</b>		<b>Baum: vorwiegende Position der Fruchtknospen</b>	<b>Árbol: localización predominante de los yemas fructíferas</b>		
	at tip of one-year old shoot (fruiting on outer side of tree)		à l'extrémité des rameaux d'un an (fructification en périphérie de l'arbre)		an der Spitze der einjährigen Zweige (Fruchtbildung an der Außenseite des Baumes)	en el ápice de tallos de un año (fructificación en la parte externa del árbol)	Corne, Franquette, Marbot	1
	mainly on the top of long shoots bound on branches of 2 years or older (fruiting in clusters)		brincipalement en extrémité de pousses longues insérées sur des rameaux de 2 ans ou plus (fructification par bouquets)		an der Spitze langer Triebe an zweijährigen oder älteren Zweigen (Fruchtbildung in Gruppen)	predominantemente en el extremo de tallos largos, sobre ramos de 2 o más años (fructificación en grupos)	Hartley	2
	all along the one-year old shoot (fruiting on lateral brindilles)		tout le long des rameaux d'un an (fructification sur brindilles latérales)		auf die ganze Länge einjähriger Zweige verteilt (Fruchtbildung an kleinen Seitenzweigen)	a lo largo de tallos de 1 año (fructificación en brindillas laterales)	Chico, Payne, Serr	3
<b>4.</b>	<b>(*)</b>	<b>PQ</b>	<b>VG</b>	<b>(+)</b>				
	<b>Bud: shape</b>		<b>Bourgeon : forme</b>		<b>Knospe: Form</b>	<b>Yema: forma</b>		
	circular		circulaire		kreisförmig	circular	Daixiang, Jinlong 1, Luguang, Lugu 2, Milotai 10, Xiangling, Xilin 2, Xinzaofeng, Zhonglin 1	1
	flabellate		flabelliforme		fächerförmig	flabeliforme	Fenghui	2
	triangular		triangulaire		dreieckig	triangular	Chuanhe 2, Liaoning 4, Zhenzhuhetao	3

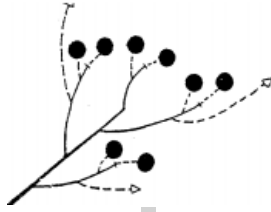
Ad. NEW: Tree: predominant location of fruit buds

The type of fruiting (predominant location of fruit buds) should be observed at the time of full bloom of the female flowers.



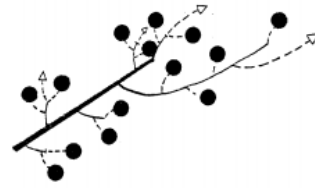
1

at tip of one-year old shoot  
(fruiting on outer side of tree)



2

mainly on the top of long  
shoots bound on branches of  
2 years or older (fruiting in  
clusters)



3

all along the one-year old shoot  
(fruiting on lateral brindilles)

Proposal to change from “ventral view” “to lateral view”*Characteristic 10 “Nut: shape in ventral view”*Current wording

10. (*)	PQ	VG	(+)	(b)			
	<b>Nut: shape in ventral view</b>		<b>Noix : forme en vue ventrale</b>		<b>Nuß: Form in Bauchansicht</b>	<b>Nuez: forma en vista ventral</b>	
	triangular		triangulaire		dreieckig	triangular	Hartley 1
	broad ovate		broad ovate		breit eiförmig	oval ancha	Marbot, Payne, Serr 2
	ovate		ovale		eiförmig	oval	Gustine, Jinfeng 3
	oblong		oblongue		breitrund	oblonga	Milotai bötermő, Mumahetao, Sunland 4
	elliptic		elliptique		elliptisch	elíptica	Corne, Daifeng, Franquette, Sorrento, Xilin 2 5
	circular		circulaire		kreisförmig	circular	Jinlong 1, Jinlong 2, Liaoning 4, Milotai 10, Meylannaise, Xiangling, Zhonglin 1, Zhonglin 5, 6
	broad elliptic		elliptique large		breit elliptisch	elíptica ancha	Parisiene, Luguang 7

Proposed new wording

10. (*)	PQ	VG	(+)	(b)			
	<b>Nut: shape in <u>lateral</u> ventral-view</b>		<b>Noix: forme en vue <u>latérale</u> ventrale</b>		<b>Nuß: Form in <u>Seitenansicht</u> Bauchansicht</b>	<b>Nuez: forma en vista <u>lateral</u> ventral</b>	
	triangular		triangulaire		dreieckig	triangular	Hartley 1
	broad ovate		broad ovate		breit eiförmig	oval ancha	Marbot, Payne, Serr 2
	ovate		ovale		eiförmig	oval	Gustine, Jinfeng 3
	oblong		oblongue		breitrund	oblonga	Milotai bötermő, Mumahetao, Sunland 4
	elliptic		elliptique		elliptisch	elíptica	Corne, Daifeng, Franquette, Sorrento, Xilin 2 5
	circular		circulaire		kreisförmig	circular	Jinlong 1, Jinlong 2, Liaoning 4, Milotai 10, Meylannaise, Xiangling, Zhonglin 1, Zhonglin 5, 6
	broad elliptic		elliptique large		breit elliptisch	elíptica ancha	Parisiene, Luguang 7

Characteristic 11 "Nut: shape in lateral view"

Current wording

11. (*)	PQ	VG	(+)	(b)			
	<b>Nut: shape in lateral view</b>		<b>Noix : forme en vue latérale</b>		<b>Nuß: Form in Seitenansicht</b>	<b>Nuez: forma en vista lateral</b>	
	triangular		triangulaire		dreieckig	triangular	Hartley 1
	broad ovate		ovale large		breit eiförmig	oval ancha	Payne, Serr, Xiangling 2
	ovate		ovale		eiförmig	oval	Gustine, Jinfeng 3
	circular		circulaire		kreisförmig	circular	Meylannaise, Milotai 10 4
	broad elliptic		elliptique large		breit elliptisch	elíptica ancha	Franquette 5
	oblate		arrondie aplatie		breitrund	achatada	Yuanbao 6

Proposed new wording

11. (*)	PQ	VG	(+)	(b)			
	<b>Nut: shape in ventral lateral view</b>		<b>Noix: forme en vue ventrale latérale</b>		<b>Nuß: Form in Bauchansicht Seitenansicht</b>	<b>Nuez: forma en vista ventral lateral</b>	
	triangular		triangulaire		dreieckig	triangular	Hartley 1
	broad ovate		ovale large		breit eiförmig	oval ancha	Payne, Serr, Xiangling 2
	ovate		ovale		eiförmig	oval	Gustine, Jinfeng 3
	circular		circulaire		kreisförmig	circular	Meylannaise, Milotai 10 4
	broad elliptic		elliptique large		breit elliptisch	elíptica ancha	Franquette 5
	oblate		arrondie aplatie		breitrund	achatada	Yuanbao 6

## Characteristic 13 "Nut: shape of base in lateral view"

Current wording

13. (*)	PQ	VG	(+)	(b)		
	<b>Nut: shape of base in lateral view</b>	<b>Noix : forme de la base en vue latérale</b>	<b>Nuß: Form der Basis in Seitenansicht</b>	<b>Nuez: forma de la base en vista lateral</b>		
	cuneate	cunée	keilförmig	cuneada	Corne, Milotai bõtermõ	1
	rounded	arrondie	abgerundet	redondeada	Chico, Franquette, Payne, Serr, Xiangling	2
	truncate	tronquée	gerade	truncada	Parisienne	3
	emarginate	récurrente	eingekerbt	emarginada	Hartley	4

Proposed new wording

13. (*)	PQ	VG	(+)	(b)		
	<b>Nut: shape of base in ventral lateral view</b>	<b>Noix: forme de la base en vue <u>ventrale</u> latérale</b>	<b>Nuß: Form der Basis in <u>Bauchansicht</u> Seitenansicht</b>	<b>Nuez: forma de la base en vista <u>ventral lateral</u></b>		
	cuneate	cunée	keilförmig	cuneada	Corne, Milotai bõtermõ	1
	rounded	arrondie	abgerundet	redondeada	Chico, Franquette, Payne, Serr, Xiangling	2
	truncate	tronquée	gerade	truncada	Parisienne	3
	emarginate	récurrente	eingekerbt	emarginada	Hartley	4

## Characteristic 14 "Nut: shape of apex in lateral view"

Current wording

14. (*)	PQ	VG	(+)	(b)			
	<b>Nut: shape of apex in lateral view</b>		<b>Noix : forme du sommet en vue latérale</b>		<b>Nuß: Form der Spitze in Seitenansicht</b>	<b>Nuez: forma del ápice en vista lateral</b>	
	obtuse		obtus		stumpf	obtusos	Vina 1
	rounded		arrondi		abgerundet	redondeado	Zhonglin 1 2
	truncate		tronqué		gerade	truncado	Milotai bõtermõ, Zhonglin 5 3
	emarginate		récurrent		eingekerbt	emarginado	Xiangling 4

Proposed new wording

14. (*)	PQ	VG	(+)	(b)			
	<b>Nut: shape of apex in <u>ventral lateral</u> view</b>		<b>Noix : forme du sommet en vue <u>ventrale latérale</u></b>		<b>Nuß: Form der Spitze in <u>Bauchansicht</u> <u>Seitenansicht</u></b>	<b>Nuez: forma del ápice en <u>ventral lateral</u></b>	
	obtuse		obtus		stumpf	obtusos	Vina 1
	rounded		arrondi		abgerundet	redondeado	Zhonglin 1 2
	truncate		tronqué		gerade	truncado	Milotai bõtermõ, Zhonglin 5 3
	emarginate		récurrent		eingekerbt	emarginado	Xiangling 4

## Characteristic 18 "Nut: width of pad on suture in lateral view"

Current wording

18.	QN	VG	(+)	(b)				
	<b>Nut: width of pad on suture in lateral view</b>		<b>Noix : largeur du bourrelet de suture en vue latérale</b>		<b>Nuß: Breite des Wulstes auf der Naht in Seitenansicht</b>	<b>Nuez: anchura del almohadillado de la sutura en vista lateral</b>		
	narrow		étroit		schmal	estrecho	Chico, Grandjean, Parisienne, Xiangling	1
	medium		moyen		mittel	medio	Gustine, Hartley	3
	broad		large		breit	ancho	Corne, Marbot, Payne, Serr	5

Proposed new wording

18.	QN	VG	(+)	(b)				
	<b>Nut: width of pad on suture in <u>ventral lateral</u> view</b>		<b>Noix : largeur du bourrelet de suture en vue <u>ventrale latérale</u></b>		<b>Nuß: Breite des Wulstes auf der Naht in <u>Bauchansicht</u> <u>Seitenansicht</u></b>	<b>Nuez: anchura del almohadillado de la sutura en vista <u>ventral lateral</u></b>		
	narrow		étroit		schmal	estrecho	Chico, Grandjean, Parisienne, Xiangling	1
	medium		moyen		mittel	medio	Gustine, Hartley	3
	broad		large		breit	ancho	Corne, Marbot, Payne, Serr	5



Proposal to add of a new characteristic "Time of leaf bud burst" after characteristic 27 "Kernel: ease of removal from shell"

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>27.</b>	<b>QN</b>	<b>VG</b>	<b>(+)</b>	<b>(c)</b>				
	<b>Kernel: ease of removal from shell</b>		<b>Cerneau : facilité d'extraction de la coquille</b>		<b>Kern: Leichtigkeit des Entfernens von der Schale</b>	<b>Semilla: facilidad con que se extrae de la cáscara</b>		
	very easy		très aisée		sehr leicht	muy fácil	Milotai 10, Payne, Pedro, Serr	1
	easy		aisée		leicht	fácil	Franquette, Hartley, Marbot	2
	medium		moyenne		mittel	media	Jinlong 2, Meylannaise	3
	difficult		difficile		schwer	difícil	Corne	4
	very difficult		très difficile		sehr schwer	muy difícil	Aodidaguanmao, Jilong	5
<b>NEW</b>	<b>QN</b>	<b>MG</b>	<b>(+)</b>					
	<b>Time of leaf bud burst</b>		<b>Époque de débourrement foliaire</b>		<b>Zeitpunkt des Blattknospenaufbruchs</b>	<b>Época de brotación de las hojas</b>		
	very early		très précoce		sehr früh	muy precoz		1
	very early to early		très précoce à précoce		sehr früh bis früh	muy precoz a precoz	Ashley, Chico, Payne	2
	early		précoce		früh	precoz	Chase D 9, Vina	3
	early to medium		précoce à moyenne		früh bis mittel	precoz a media	Adams 10, Hartley, Pedro	4
	medium		moyenne		mittel	media	Chandler, Howard	5
	medium to late		moyenne à tardive		mittel bis spät	media a tardía	Grandjean, Marbot, Mayette	6
	late		tardive		spät	tardía	Franquette, Parisienne	7
	late to very late		tardive à très tardive		spät bis sehr spät	tardía a muy tardía	Ronde de Montignac	8
	very late		très tardive		sehr spät	muy tardía		9
<b>28.</b>	<b>QN</b>	<b>MG</b>	<b>(+)</b>					
	<b>Time of beginning of female flowering</b>		<b>Époque de début de floraison femelle</b>		<b>Zeitpunkt des Beginns der weiblichen Blüte</b>	<b>Época de inicio de la floración femenina</b>		
	early		précoce		früh	temprana	Chase D 9, Lübo, Luguó 2, Sorrento, Xilin 2	3
	medium		moyenne		mittel	media	Daifeng, Daixiang, Fenghui, Luguang, Marbot, Milotai 10	5
	late		tardive		spät	tardía	Bonifác, Jinlong 1, Jinlong 2, Liaoning 1, Liaoning 4, Milotai kései	7

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