Technical Working Party for Fruit Crops

Fifty-Fourth Session Nîmes, France, July 3 to 7, 2023

TWF/54/13

Original: English Date: July 7, 2023

REPORT

Adopted by the Technical Working Party for Fruit Crops

Disclaimer: this document does not represent UPOV policies or guidance

Opening of the session

- 1. The Technical Working Party for Fruit Crops (TWF) held its fifty-fourth session in Nîmes, France, from July 3 to 7, 2023. The list of participants is reproduced in Annex I to this report.
- 2. The session was opened by Mr. Chris Barnaby (New Zealand), Chairman of the TWF, who welcomed the participants and thanked France for hosting the TWF session.
- 3. The TWF was welcomed by Mr. Laurent Jacquiau, Head, *Bureau des semences et des solutions alternatives, Direction générale de l'alimentation, Ministère de l'Agriculture et de la Souveraineté alimentaire*, France, who gave a presentation on plant variety protection and fruit activities in France. A copy of the presentation is provided in Annex II to this document.
- 4. The TWF received a presentation by Mr. Fabien Masson, Head of the Variety Study Department (SEV), Groupe d'Etude et de contrôle des Variétés et des Semences (GEVES), on the activities of GEVES. A copy of the presentation is provided in Annex III to this report.

Adoption of the agenda

5. The TWF adopted the agenda as reproduced in document TWF/54/1 Rev.

Increasing participation in the work of the TC and restructuring the work of the TWPs

- 6. The TWF considered document TWP/7/1 and the proposed draft recommendations under development at the Working Group on DUS support.
- 7. The TWF agreed that Technical Working Party (TWP) meetings were important for the development of Test Guidelines and agreed that further emphasis should be provided in document TWP/7/1 on this aspect.
- 8. The TWF agreed with the recommendation in paragraph 30 to organize discussions on Test Guidelines as hybrid meetings during the TWP sessions and as separate online meetings to increase the involvement of crop experts and members. The TWF agreed that online meetings should be used to reduce the time required to complete the drafting of Test Guidelines.
- 9. The TWF agreed with recommendation in paragraph 35 that discussions on DUS procedures include a technical visit to demonstrate the model and arrangements for DUS examination used by the UPOV member hosting the TWP meeting, while not restricting the possibility for any member of the Union to host a TWP meeting. The TWF agreed that there should be sufficient flexibility for hosts to organize technical visits according to local conditions at each host.
- 10. The TWF agreed with the conclusion of the WG-DUS, at its second meeting, that technical visits and ring-tests provided a means of sharing experiences but, beyond these aspects, TWPs were not the best forum

to provide training and that training initiatives by the Office of the Union and UPOV members should be developed outside the scope of TWP meetings.

11. The TWF noted the request for information about quality assurance of DUS tests identified by participants in the interviews and agreed with the recommendation in paragraph 60 that the DUS Report Exchange Platform enable UPOV members to make their documented DUS procedures and information on their quality systems available. The TWF noted that the recommendations in document TWP/7/1 did not propose the establishment of a UPOV quality accreditation system.

Development of guidance and information materials

12. The TWF considered documents TWP/7/2 and TWF/54/10.

Matters for consideration by the Technical Working Parties

Document TGP/7 "Development of Test Guidelines"

Example varieties for asterisked quantitative characteristics when illustrations are provided

- 13. The TWF considered the situations described by the TWO as the basis to develop guidance on possible exceptions to the requirement to provide example varieties for asterisked quantitative characteristics when illustrations were provided.
- 14. The TWF agreed that Test Guidelines should provide example varieties and illustrations as far as possible. The TWF noted that there could be difficulty obtaining plant material of certain example varieties not widely available or no longer in cultivation. The TWF noted the expressions of interest of the experts from Australia and Hungary to join the experts from the TWA and TWO drafting a proposal to amend document TGP/7, GN 28.

New proposals for revisions to document TGP/7

- ASW 3 Explanation of the growing cycle
- 15. The TWF considered document TWF/54/9, presented by an expert from Germany. The TWF noted that certain characteristics in the Test Guidelines for Apples were assessed before bud burst and agreed that this was inconsistent with the current standard wording of growing cycle for "fruit species with clearly defined dormant period". The TWF agreed to propose amending document TGP/7, ASW 3 (a) to read as follows:
 - (a) "Fruit species with clearly defined dormant period
 - "3.1.2 The growing cycle is considered to be the duration of a single growing season, beginning with the dormancy period, followed by bud burst (flowering and/or vegetative), flowering and fruit harvest and concluding when the following dormant period starts ends with the swelling of new season buds."
 - ASW 7(b) Number of plants / parts of plants to be examined
- 16. The TWF considered the guidance in Test Guidelines on the number of parts of single plants to be observed for distinctness and agreed that it should be clarified that the number provided in the Test Guidelines was an indication of a minimum number. The TWF agreed to propose amending the additional standard wording 7(b) in document TGP/7 to read as follows:

"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 at least { y }."

Cooperation in examination

Information required to enhance the use of existing DUS test reports

17. The TWF considered document TWF/54/7, presented by an expert from New Zealand.

- 18. The TWF agreed to propose amending document TGP/5, Section 6 "UPOV Report on Technical Examination and UPOV Variety Description" to provide further guidance on information about similar varieties considered in the examination. The TWF agreed to propose including the following additional explanations under Section 16 "Similar Varieties and Differences from These Varieties" to clarify which varieties should be reported in the UPOV variety description:
 - All similar/closest/reference varieties as determined by the Examiner. If there is no such variety(s), a sentence such as "No similar/closest variety was identified in the growing trial" should be stated.
 - Only varieties which have been tested under the same growing conditions as the candidate variety.
 - Varieties that express the least number of characteristic differences from the candidate variety.
 - All characteristics are treated equally, with all characteristics providing distinctness to be included for each similar variety.

Access to plant material for the purpose of management of variety collections and DUS examination

- 19. The TWF considered document TWF/54/7, presented by an expert from the European Union.
- 20. The TWF agreed to propose amending document TGP/5, Section 10 "Examples of Policies and Contracts for Material Submitted by the Breeder" to include the following list of elements to be considered for inclusion in requests for the submission of plant material of candidate varieties and varieties of common knowledge for DUS examination:
 - Letter to be addressed to the PVP holder of the variety or their formal representative in the territory
 - Technical details, especially quality, quantity, date and place of submission. In the fruit sector, material of the desired quality often may need to be organized more than one year in advance. The authority should accept some flexibility in its availability.
 - Detailed explanation of the purpose
 - Variety collection
 - Side by side comparison with a potentially similar candidate variety
 - What will and will not be done with the material during and after the trial, including DNA sampling and DNA profiles
 - Responsible body to enforce the policy is the PVP authority
 - Triggering purpose is the DUS test
 - Physical location of the material, possibility to have access for the owner, description of due care and cultivation circumstances
 - Ownership of the material
 - Clarification of possible other uses, e.g. other official purposes, which ones
 - Under which circumstances the material may be made available to another party/authority
 - Clarification of situations requiring or not the consent from the breeder
 - Who has access to the material
 - Which information will need to be made available to the public as a requirement (photographs, descriptions)

Information on mutant varieties of apple useful for DUS examination

- 21. The TWF considered document TWF/54/6, presented by an expert from the European Union.
- 22. TWF noted the past exchange of information on applications and registered varieties in some apple mutation groups through a spreadsheet disseminated by email to TWF experts.

- 23. The TWF agreed to invite authorities to provide the following information whenever an application for a mutant variety of apple was filed, including parent variety or variety group:
 - Country
 - Breeder's reference
 - Denomination
 - Parent Variety or group
 - Type of procedure: PBR/other
 - Variety status: application / registered / rejected / Terminated
 - Application date (if any)
 - Granting date (if any)
 - Title holder's name
 - Commercial synonyms
- 24. The TWF agreed that any information provided on parentage or variety groups should be treated as privileged information and not be made available outside the participating PVP offices. The TWF acknowledged that not all authorities would be in a position to submit information due to restrictions on disclosing information on parentage or variety group before the information was publicly available.
- 25. The TWF considered options for hosting the information on mutant varieties of apple and agreed that a restricted area on the UPOV website would be preferred. The TWF agreed to invite the Office of the Union to explore possibilities to make an editable version of the spreadsheet available on the UPOV website for contributing data (e.g. "SharePoint"). The TWF agreed that the restricted area on the website should also enable uploading technical questionnaires or variety descriptions.

Information and databases

Variety description databases

Pomological descriptive databases

- 26. The TWF received a presentation on the "New Australian PBR Database Search", from an expert from Australia. A copy of the presentation would be provided in document TWF/54/3. The TWF noted the availability of variety data in searchable format, including descriptions and DUS trial data.
- 27. The TWF received a presentation on "Pomological descriptive databases" by an expert from the International Community of Breeders of Asexually Reproduced Ornamental and Fruit Varieties (CIOPORA). A copy of the presentation is provided in document TWF/54/8.

Denomination classes for Allium, Brassica and Prunus

28. The TWF considered document TWP/7/4.

New variety denomination classes for Prunus

- 29. The TWF agreed to propose creation of new exceptional variety denomination classes for *Prunus*, as set out in document TWP/7/4, paragraph 18.
- 30. The TWF considered the comment from the TWO, at its fifty-fifth session, on the existence of ornamental varieties of plums produced from interspecific crossings and agreed that such cases could be treated according to the proposal to apply the denomination classes of all parents involved without causing confusion concerning the identity of the variety.
- 31. The TWF agreed that breeding of new *Prunus* varieties could lead to complex hybrids requiring the use of more than one denomination class and careful interpretation of the nomenclature.

Molecular Techniques

- 32. The TWF received a presentation on the use of molecular markers in support of DUS examination in France, a copy of which would be provided in document TWF/54/3.
- 33. The TWF considered document TWP/7/3.

Confidentiality and ownership of molecular information

- 34. The TWF noted that experts from members and observers at the TWPs were invited to report existing policies on confidentiality of molecular information.
- 35. The TWF received a presentation on "Confidentiality of Molecular Information" by an expert from CropLife International, on behalf of the African Seed Trade Association (AFSTA), the Asia and Pacific Seed Association (APSA), the International Community of Breeders of Asexually Reproduced Horticultural Plants (CIOPORA), CropLife International, Euroseeds, the International Seed Federation (ISF) and the Seed Association of the Americas (SAA). A copy of the presentation is provided in document TWF/54/4.
- 36. The TWF requested clarifications on the situations described in the presentation and noted the particular concern from breeders' organizations in relation to the disclosure of molecular information of parent lines of hybrid varieties. The TWF noted the encouragement from breeders' organizations for members to provide information on their policies on confidentiality of molecular information.
- 37. The TWF noted the report from France that a policy on confidentiality and ownership of molecular information was being discussed in the framework of a regional project (INVITE project).

Experiences with new types and species

38. The TWF received a presentation on the "US Plant Variety Protection Office" by an expert from the United States of America. A copy of the presentation is provided in document TWF/54/5.

Matters to be resolved concerning Test Guidelines put forward for adoption by the Technical Committee

*Apple (fruit varieties) (Revision) (Malus domestica (Suckow) Borkh.)

39. The subgroup discussed documents TG/14/10(proj.7) and TWF/54/9, presented by Mr. Erik Schulte (Germany), and agreed the following:

3.1.4	to correct spelling of "dormancy"
4.1.4	to combine the last two paragraphs to read "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 at least 2."
8.1 (b)	to read "Observations should be made in the middle third of lateral dormant shoots in winter, on trees that have completed at least one growing season."
8.1 (g)	to be deleted
Ad. 1	to read "The vigor of the tree should be considered as the overall abundance of vegetative growth. It can either be assessed at the peak of vegetative growth in summer (growth stage 39), or during the dormant season before pruning (stage 00), considering shoot length and thickness, and trunk diameter."
Ad. 4	to delete first sentence
Ad. 5	to read "Observations should be made by counting in a defined area"
Ad. 20	to enlarge the tip of the arrow
Ad. 26	to delete "See Ad. 25"
Ad. 35	to add "See Ad. 40"
Ad. 36	to add "See Ad. 35. Observations should be made on the outer part of the fruit skin, in the area between the stalk cavity and the eye basin (see Ad. 40: fruit outline between the lines through e-f and a-b)."
Ad. 37	to read "See Ad. 35 and 40."
Ad. 40	last bullet point to read "In the case of asymmetric or irregular sections, observations should be made on the larger side (i.e)"

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Ad. 44	to read "Observations can be made by measuring, using a penetrometer."
Ad. 45	to replace "darkest color" with "darker color"
Ad. 51	to replace "degression" with "degradation"

Discussion on draft Test Guidelines

Full draft Test Guidelines

*Goji (Lycium barbarum L., L. chinense Mill., L. cylindricum Kuang & A. M. Lu, L. dasystemum Pojark., L. ruthenicum Murray, L. truncatum Y. C. Wang, L. yunnanense Kuang & A. M. Lu)

- 40. The subgroup received a presentation on characteristics proposed in the draft Test Guidelines for Goji. A copy of the presentation would be provided in document TWF/54/3.
- 41. The subgroup discussed document TG/LYCIUM_BAR(proj.3), presented by Ms. Chuanhong Zhang (China), and agreed the following:

2.2	to read "in the form of young plants"		
4.1.4	to reduce the number of plants to 3		
6.4	to add the following to indicate to which species example varieties belong:		
0.4	Lycium barbarum L. 'Ningqi 1 Hao'		
	Lycium barbarum L. 'Ningqi 1 Hao'		
	Lycium barbarum L. 'Ningqi 5 Hao',		
	Lycium barbarum L. 'Ningqi 7 Hao',		
	Lycium barbarum L. 'Ningqi 8 Hao'		
	Lycium barbarum L. 'Ningnongqi 1 Hao'		
	Lycium barbarum L. 'Ningnongqi 9 Hao'		
	Lycium barbarum L. 'Ningnongqi 18 Hao'		
	Lycium barbarum L. 'Qixin 3 Hao'		
	Lycium barbarum L. 'Mengqi 1 Hao'		
	Lycium barbarum L. 'Keqi 6081'		
	Lycium barbarum L. 'Keqi 6082'		
	Lycium barbarum L. var. auyanticarpum K. F. Ching 'Ningnongqi 4 Hao'		
	Lycium barbarum L. var. auyanticarpum K. F. Ching 'Ningnonggi 5 Hao'		
	Lycium barbarum L. var. auyanticarpum K. F. Ching 'Ningnonggi 20 Hao'		
	Lycium ruthenicum Murray. 'Jin mo zhu'		
	Lycium chinense Mill. 'Tianjing 3 Hao'		
Char. 2	to have states (1) few, (2) few to medium, (3) medium, (4) medium to many, (5) many		
Char. 3	- to read "One-year-old shoot: length"		
	- use scale of 9 notes and add example varieties (compulsory QN characteristic)		
Char. 4	to read "One-year-old shoot: length of internode"		
Char. 5	- to read "Previous year's shoot: density of fruits"		
	- to delete (b)		
	- to add example varieties		
	- to extend scale to 9 notes		
Char. 6	to read "One-year-old shoot:"		
Char. 7	to read "Only for varieties with present spines: one-year-old shoot: length of spines"		
Char. 9	- to move after Char. 3		
	- to read "One-year-old shoot:"		
Char. 10	- state 1: to replace 'Ningqi 5 Hao' with 'Ningnongqi 5 Hao'		
	- state 3: replace 'Ningnongqi 6 Hao' and 'Ningnongqi 7 Hao' with 'Ningqi 5 Hao'		
	- state 4: to delete 'Ningqi 2 Hao'		
	- state 5: to add 'Ningnongqi 20 Hao'		
Char. 11	- state 1: to add 'Ningnongqi 5 Hao'		
	- state 3: to replace 'Ningnongqi 7 Hao' and 'Ningnongqi 8 Hao' with 'Ningqi 3 Hao'		
	- state 4: to delete 'Keqi 6082'		
	- state 5: to add 'Ningnongqi 4 Hao'		

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Char. 13	- to extend scale to 9 notes
	- state 1: to replace 'Jin mo zhu' with 'Tianjing 3 Hao'
	- state 3: to replace 'Ningqi 7 Hao variety' with 'Ningqicai 4 Hao'
	- state 4: to delete 'Ningqi 6 Hao'
	- state 5: to replace 'Ningqicai 1 Hao' with 'Ningqicai 3 Hao' and 'Ningnongqi 4 Hao'
	- state 7: to add 'Ningqi 3 Hao'
	- state 9: to add 'Ningqi 8 Hao'
Char. 14	- state 1 to read "grey green"
	- state 1: to replace 'Mengqi 1 Hao' with 'Jin mo zhu'
	- state 3: to replace 'Mengqi 1 Hao' with 'Jin mo zhu'
Char. 15	- state 2: to delete 'Ningqi 1 Hao'
	- state 3: to delete 'Ningqi 7 Hao'
Char. 16	- to extend scale to 5 notes
	- state 1: to add 'Mengqi 1 Hao'
	- state2: to delete 'Ningnongqi 5 Hao'
	- state 3: to add 'Jingqi 4 Hao'
	- state 5: to add 'Ningnongqi 20'
Char. 17	to delete example varieties
Char. 19	to be indicated as QN
Char. 20	to extend scale to 9 notes and have the following states and example varieties:
Oriar. 20	(1) very short ('Mengqi 1 Hao'), (2) very short to short, (3) short ('Ningnongqi 4 Hao'), (4)
	short to medium, (5) medium ('Ningqi 1 Hao'), (6) medium to long, (7) long ('Ningnongqi
	9 Hao'), (8) long to very long, (9) very long ('Ningqi 8 Hao')
	3 riad j, (d) long to very long, (3) very long (wingqi o riad)
Char. 21	to have the following states and example varieties: narrow/1(Mengqi 1 Hao), medium/2
	(Ningqi 7 Hao), broad/3 (Ningnongqi 18 Hao)
Char. 23	state 1 to read "whitish"
Char. 24	to have the following states and example varieties:
	(1) very short ('Mengqi 1 Hao'), (2) very short to medium, (3) medium ('Ningqi 7 Hao'),
	(4) medium to long, (5) very long ('Keqi 6081')
Char. 25	- to delete "only" from states
	- state 3 to read "green and purple"
	- to move wording in brackets to an explanation as Ad. 25 to read "Observations should
	be made including the calyx."
Char. 26	-to expand to 5 states with the following states and example varieties: very early (1)
	('Ningnongqi 18 Hao'), early (2), medium (3) ('Ningqi 1 Hao'), late (4), very late (5)
	('Ningnongqi 4 hao')
	-to add explanation "Time of beginning of first fruit maturity is reached when 10% of the
	fruits, on the whole plant, are ripe."
8.1 (b)	to read "Observations should be made on the middle third of a one-year-old fruiting shoot
- (-)	in the dormant period.
8.1 (d)	to read "Observations should be made on the fully open flowers taken from the middle
(4)	third of a previous year's fruiting shoot." (for chars. 16 and 18)
8.1 (e)	to read "Observations should be made on the fully ripened fruits taken from the middle
0.1 (0)	third of a previous year's fruiting shoot, when the fruits have ripened in summer."
Ad. 1	to delete wording and improve illustrations
Ad. 2	to adjust wording of states according to those in char. 2
Ad. 3	to read "Observations should be made on the whole one-year-old fruiting shoot in the
Λu. J	· · · · · · · · · · · · · · · · · · ·
Λ <i>d</i> Ε	dormant period."
Ad. 5	to improve illustrations and to add "Observations should be made on the middle third of
Λdc 9 Ω	a previous year's fruiting shoot when the fruits have ripened in summer."
Ads. 8, 9	to read "shoots"
Ad. 10, 12, 15,	to improve illustrations
16, 18, 19, 20,	
22	to correct analling of "aircular"
Ad. 22	to correct spelling of "circular"
TQ 1.	to add a set of blank boxes 1.8.1 "Botanical Name" and 1.8.2 "Common Name"
TQ 5.14	to be deleted

*Grapevine (Vitis L.) (Revision)

Ad. 39

42. The subgroup discussed document TG/50/10(proj.6), presented by Mr. Roberto Carraro (Italy), and agreed the following:

1.	to correct spelling of "rootstocks"
Char. 33	to replace "lax" with "sparse"
Char. 35	 - state 2 to read "very short to short" - state 10 to read "very long to extremely long" - state 11 to read "extremely long"
Char. 37	- to add new state 11 "waisted obovoid" with example variety "Itumeighteen" - state 5 to read "cylindric" (see Ad. 37)
Char. 42	state 6 to read "other"
Ad. 2	to add "To observe the part of young shoot in squares."
Ads. 4, 5	to read "See Ad. 2 and 3"
Ad. 27	to delete blank letter before "Interruptions"
Ad. 37	to replace current illustrations with the grid below:

			ratio height/diameter			
		low	medium		high	
	dle		8 obovoid			11 waisted obovoid
+	e above middle				4	
broadest part	at middle	1 obloid	2 globose	3 broad ellipsoid	narrow ellipsoid	5 cylindric
→ brd	niddle					
	below middle			6 broad ovoid	7 narrow ovoid	9 horn-shaped 10 finger-shaped

to read "Observations should be made..."

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Ad. 42	The state of expression "other" includes any other flavor not clearly referred to in the other states.
8.3	to delete the hyphen in "Bundessortenamt" from the literature reference at the bottom
TQ 1.	to read as follows: 1.1 Botanical name Vitis L. 1.2 Species (please specify): [blank box] 1.3 Common name Grapevine
TQ 4.2.1	to read as follows: (a) cuttings (b) graftings (please specify the rootstock:) (c) in vitro propagation (d) Other (state method)

Hazelnut (Corylus avellana L.; Corylus colurna L.) (Revision)

43. The subgroup discussed document TG/71/4 (proj.4), presented by Mr. Flavio Roberto de Salvador (Italy), and agreed the following:

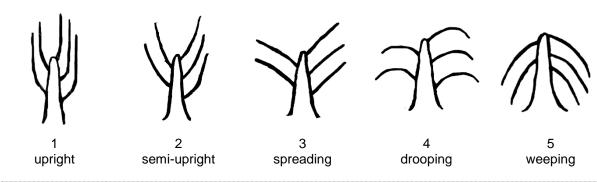
1.	to read "These Test Guidelines apply to all varieties of <i>Corylus avellana</i> L. and <i>Corylus colurna</i> L. for fruit production."		
2.2	to delete the last two sentences		
2.3	minimum quantity of plant material, to be supplied by the applicant, to be indicated as 5 plants		
4.1.4	second paragraph to read "the number of parts to be taken from each of the plants should be 3."		
4.2.3	to replace with relevant Additional Standard Wording (see TGP/7, ASW 8)		
Table of Chars.	to add the following new characteristics: - "Male inflorescence: number of catkins per cluster" with states "one to two", "three to four", "more than five" - "Kernel: color of skin" with states "yellow", "light brown", "dark brown"		
Table of Chars.	to check whether to have two sets of example varieties (for <i>C. avellana</i> and <i>C. colurna</i>) and indicate the species or have example varieties of only one species		
Char. 1	to add example varieties		
Char. 2	to delete "Corulus colurna" from state 1		
Char. 3	- to add example varieties (to check whether to add "Bergeri & Cosford" for state "dense"		
Char. 4	- to read "Plant: suckers" - to delete growth stage 3		
Chars. 5, 6, 7, 12, 15	to delete (c)		
Char. 10	to add "Rote Zellernuss" as example variety for state 3		
Char. 11	example variety for state 1 to read "OSU 899.010"		
Char. 14	state "very long" to have note 5		
Char. 18	to delete ":" after "of"		
Chars. 20, 25, 32, 34, 36, 45, 46, 47, 48, 49	to add "(c)"		
Char. 21	to be deleted		
Char. 22	to add (*)		
Char. 25	to be indicated as MG/VG		
Char. 27	- state 1 to read "transverse elliptic" - to check wording of state 3		
Char. 28	example variety "Ennis" to be moved to state 2		
Char. 34	- to read: "Nut: ratio size of basal scar / size of nut" - to have states "low", "medium", "high"		
Char. 45	add more example varieties		
8.1 (a) - (h)	to read "Observations should be made"		
Ad. 8	to be deleted		
Ads. 18, 19	to add a drawing for state 3		
Ads. 20, 22, 23, 28, 29, 32, 33, 34, 42	to check whether to delete or to replace by a drawing		

·····	
A I OO	alaman ta la munanuta d'in a muid (ana TOD(4.4)
: Ad 26	
: Au. Zu	Shapes to be presented in a grid (see TGF/14)
<u> </u>	1 J J J

*Mulberry (Morus L.)

44. The subgroup discussed document TG/MORUS(proj.5), presented by Mr. Yosuke Abe (Japan), and agreed the following:

4.1.4	to add "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 at least 2."
Char. 6	to read "Current year's shoot: zigzag habit"
Char. 7	to add explanation to read "Twisting is a three-dimensional characteristic." to correct spelling of "absent"
Char. 8	to move "light grey" after brown colors
Char. 16	be moved after characteristic 17
Char. 19	- to read "Leaf blade: length of tip"
	- to have states (1) absent or short (with example varieties "Romana rabelaire" and "Rougetto"), (2) medium (with example varieties "Indiana", "Kenmochi" and "Limoncina"), (3) long (with example varieties "Ascolana", "Florio", "Fukayuki", and "Takinokawa")
Char. 24	to have states (1) shallow, (2) shallow to medium, (3) medium, (4) medium to deep, (5) deep
Char. 25	to move state (6) serrate before state 5
Char. 29	to have states (1) absent or weak (with example varieties "Ichibei" and "Keguwa") and (2) medium, (3) strong
Char. 33	- state 1 to read "male" - state 3 to read "female"
Ad. 2	to replace illustrations for states (3) spreading and (5) weeping (latter to be replaced by illustration from document TGP/14)



Ad. 19	- illustration for state "caudate" to become illustration for state 3 "long" and state
	"acuminate" to become illustration for state of expression "medium"
TQ 7.3	- add option "(c) silk worm feed" to main use
	- add a question asking for the rootstock used

Granadilla, Passion fruit (Passiflora edulis Sims) (Revision)

45. The subgroup discussed document TG/256/2(proj.1), presented by Mr. Barkat Mustafa (Australia), and agreed the following:

Char. 2	to read "Plant: color of shoot"
Char. 3	- to read "Shoot: surface"
	- to have same explanation as for char. 2 ("See Ad. 2)
Char. 4	to have notes 1 and 9
Char. 5	to read "Plant: relative number of mature leaves with three lobes"
Char. 6	to have states (1) absent or weak, (2) medium, (3) strong
Char. 7	to have states (1) absent or weak, (2) medium, (3) strong
Char. 13	to correct spelling of "weakly" in state 4
Char. 22	to have states (1) absent, (9) present
Char. 23	- to read "Only for varieties with nectaries on bract: present: Flower: color of nectaries
	on bract"
	- to be indicated as QL

Char. 30	to read "Flower: diameter of corona including filaments"
Char. 31	to read "Flower: width of purple ring on corona filaments"
Char. 32	to check whether to enlarge scale to 5 notes
Char. 41	- to read "Fruit: height"
	- to have states from (1) very short to (9) very tall
Char. 42	- to read "Fruit: diameter"
	- to have states from (1) very small to (9) very large
Char. 43	- to read "Fruit: ratio height/diameter"
	- to have states from (1) very low to (5) very high
Char. 48	- to add "very thin" as state 1
	- to check allocation of example varieties (is OPA6 very thin?)
Char. 49	- to add intermediate states
	- to be indicated as MG/MS
Char. 50	- to read "Fruit: weight of pulp including seeds"
	- to be indicated as MG/MS
Char. 51	to delete VS
Char. 52	to be deleted
8.1 (a)	to delete " on the leaf blade and on the petiole"
8.1 (b)	to delete " on the flower"
8.1 (d)	to check whether to combine illustrations in (d) and (e)
Ad. 18	to check whether to remove shade from photo for state 1
Ad. 44	to present shapes in a grid (see TGP/14)
	to add stalks to illustrations and have illustrations with stalk at the bottom
TQ 4.2.1 (c)	to add a line asking for the rootstock used
TQ 6.	to add example

*Raspberry (Rubus idaeus L.; Rubus occidentalis L.) (Revision)

46. The subgroup discussed document TG/43/8(proj.3), presented by Mr. Erik Schulte (Germany), and agreed the following:

2.3	minimum quantity 10 plants	of plant material, to be supplied	by the applicant, to be indicated as
Char. 9			be made on the glaucosity on the
Char. 14	state 1 to read "ve	ry sparse"	
Char. 20	······································	as in TG strawberry:	
			•
	1	2	3
	1 concave	2 straight	3 convex
Char. 21	1 concave to read "Terminal I	straight	3 convex
	to read "Terminal I	straight eaflet: undulation"	convex
Char. 21	to read "Terminal I to have states (1)	straight	convex izontal to downwards
Char. 21 Char. 23	to read "Terminal I to have states (1) to delete "(Proposa	straight eaflet: undulation" upright, (2) semi-upright, (3) hor	convex izontal to downwards
Char. 21 Char. 23 Char. 35	to read "Terminal I to have states (1) to delete "(Proposa	straight eaflet: undulation" upright, (2) semi-upright, (3) hori al not to take in)" and keep chara to 1, 2, 3 as in char. 7	convex izontal to downwards
Char. 21 Char. 23 Char. 35 Ad. 7	to read "Terminal I to have states (1) to delete "(Proposa to updated states to	straight eaflet: undulation" upright, (2) semi-upright, (3) hori al not to take in)" and keep chara to 1, 2, 3 as in char. 7 8"	convex izontal to downwards

*Sour Cherry (Prunus cerasus L.); Duke Cherry (Prunus xgondouinii (Poit. & Turpin) Rehder) (Revision)

47. The subgroup discussed document TG/230/2(proj.3), presented by Ms. Szilvia Márkné Deák (Hungary), and agreed the following:

2.2	to read "The material is to be supplied in the form of one-year-old grafts or budwood	
	for grafting."	

4.1.4	to read "Unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 5 plants or parts of plants taken from each of 5 plants and any other observations made on all plants in the test, disregarding any off-type plants.	
	"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 at least 2."	
4.2	to add "For the assessment of uniformity in a sample of 5 plants, 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.	
Char. 11	to have states from (1) very low to (9) very high	
Char. 15	- to read "Petiole: intensity of anthocyanin coloration on upper side" - to reduce scale to have states (1) very weak (to add "Érdi ipari") to (5) very strong (to add "Csengődi") (example varieties for "weak", "medium" and "strong" remain unchanged)	
Char. 16	to be indicated as PQ	
Char. 22	to read "Stipule: degree of lobing"	
Char. 40	 to add explanation "The acidity of the fruit may be observed as the titrable acidity in meq 100/ml." to be indicated as MG/VG to delete intermediate states and to reduce scale to 5 notes 	
Char. 41	- to add explanation "The sweetness of the fruit may be observed in degrees Brix %." - to be indicated as MG/VG	
Char. 44	- to be indicated as PQ - to add new state 2 "medium" with example variety "Csengődi, Meteor" from state 1	
Char. 45	- to add example varieties "Cass, Lake" for state 1	
	to have states from (1) very low to (9) very high to read "Observations should be made"	
8.1 (a)-(f) 8.1 (d)	to read "Observations should be made to read "Observations should be made on the fifth or sixth fully developed leaf from the	
Ad. 3	base of a long shoot, during rapid growth." to read "Observations should be made on scaffold branches, as the density of lateral	
Au. 3	branches and shoots, excluding fruiting shoots."	
Ad. 19	to read "Observations should be made"	
Ad. 23	to read "Observations should be made"	
Ad. 25	to replace current illustration for state 3 with the following one:	
Ad. 44	to replace current illustration with the following one:	
7.3.3.47) () () () () () () () () () (
1	2 3 4	

narrow elliptic

medium elliptic

broad elliptic

circular

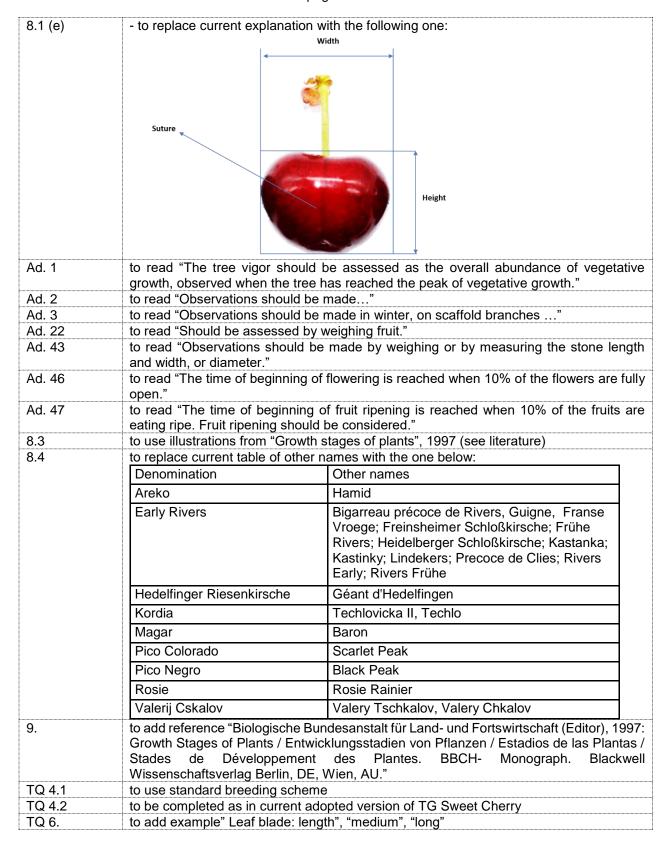
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Ad. 46	to read "The time of beginning of flowering is reached when 10% of the flowers are full open."	
Ad. 47	to read "The time of beginning of fruit ripening is reached when 10% of the fruits are fully ripe. Fruit ripening"	
8.3	to add the following synonyms: 'Schattenmorelle' Black Morello; Cerise du Nord; Dubbelte Morelkers; Griotte Noire Tardive; Große Lange Lothkirsche; Große Lange Lotkirsche; Lutowka; Moreillska; Morel; Morello; Noordkrieg; Nordkirsche; Sauerlothkirsche; Skyggemorel 'Fanal' Fanal; Gorsemkriek; Heimann 23; Heimanns Konservenkirsche; Heimanns Konservenkirsche; Nefris	
9.	to read "Süß- und Sauerkirschen"	
TQ 4.1.1 (a)	to add request for indication of parent varieties (as for (b))	
TQ 4.2	to delete the production scheme for hybrids	
TQ 6.	to add example "Fruit: size", "small", "large"	

*Sweet Cherry (Prunus avium (L.) L.) (Revision)

48. The subgroup discussed document TG/35/8(proj.4), presented by Ms. Carole Dirwimmer (France), and agreed the following:

Cover page	to correct spelling of French alternative name to "Cerisier doux"
2.2	to read "The material is to be supplied in the form of one-year old grafts or budwood for grafting."
3.1.4	to read "The growing cycle is considered to be the duration of a single growing season, beginning with the dormancy period, followed by bud burst (flowering and/or vegetative), flowering and fruit harvest and concluding when the following dormant period starts."
4.1.4	second paragraph to read " should be at least 3."
Table of	to re-include the following characteristics as in proj.3 after "Fruit: firmness":
Chars.	 - "Fruit: sweetness" (5 notes from "low" to "high", ex. varieties to be kept as in proj.3, add growth stage BBCH 87, VG/MG and explanation to read "The sweetness of the fruit may be observed in degrees Brix.") - "Fruit: acidity" (add growth stage BBCH 87, VG/MG, and explanation to read "The acidity of the fruit may be observed as the titrable acidity in meq 100/ml.")
Char. 1	to add growth stage BBCH 81
Char. 5	to add growth stage BBCH 00
Char. 9	to replace "Géant d'Hedelfingen" with "Hedelfinger Riesenkirsche" and add to table of synonyms in chapter 8.4
Char. 20	to change "Schneiders spaete Knorpelkirsche" to "Scheider Späte Knorpelkirsche"
Char. 22	 to read "Fruit: weight" to have states from (1) very low to (9) very high to change "Munchenberger" to "Müncheberger Frühernte" to delete "Bing" from state 4 and move to state 5 to delete "Tip Top" from state 5
Char. 30	to add (e)
Char. 47	to replace "Staccato" with "13S-2009"
8.1 (a)	to read "Observations should be made during winter, on trees that have fruited at least once."
8.1 (b)	to read "Observations should be made on fully developed leaves on the middle of a fruiting spur in summer."
8.1 (c)	to read "Observations should be made on fully developed flowers at the beginning of anther dehiscence."
8.1 (d)	to read "Observations should be made at full fruit maturity."



Partial revisions

Blueberry

49. The subgroup discussed documents TG/137/5 Rev. and TWF/54/11, presented by Mr. Barkat Mustafa (Australia), and agreed the following:

New char. "Leaf blade: hair density on lower side"	 to read "Leaf blade: density of hair on lower side" to have notes 1 to 5 to be indicated as QN and VG to add (b) example varieties to be indicated as (L) or (H) to check whether to add example variety for state "very dense"
New char. "Fruit: height/width ratio"	 to be reviewed and check whether not to add this new char. but add more shapes to char. 23 "Fruit: shape in longitudinal section" if new char. is kept, to check whether to have the following states and example varieties: (1) much taller than broad (2) slightly taller than broad ("Primadonna") (3) as tall as broad ("Jubilee") (4) slightly broader than tall ("Palmetto") (5) much broader than tall ("DrisBlueThirteen")
Char. 24	to keep characteristic name as in current adopted version "Fruit: attitude of sepals"to add illustrations
New char. "Time of beginning of flowering on current year's shoot"	- to read "Time of beginning of flowering on current season's shoot) - to add method of observation, type of expression, explanation from 8.1 and (*) if appropriate - to check whether to have states (1) extremely early, (2) very early, (3) very early to early, (4) early, (5) early to medium, (6) medium, (7) medium to late, (8) late, (9) late to very late, (10) very late, (11) extremely late

Recommendations on draft Test Guidelines

- (a) Test Guidelines to be put forward for adoption by the Technical Committee
- 50. The TWF agreed that the following draft Test Guidelines should be submitted to the TC for adoption at its fifty-eighth session, to be held in Geneva on October 23 and 24, 2023, on the basis of the following documents and the comments in this report:

Full draft Test Guidelines

Subject	Basic Document(s) (2023)
*Apple (Malus domestica (Suckow) Borkh.) (Revision)	TG/14/10(proj.7)
*Grapevine (Vitis L.) (Revision)	TG/50/10(proj.6)
*Mulberry (<i>Morus</i> L.)	TG/MORUS(proj.5)
*Raspberry (Rubus idaeus L.; Rubus occidentalis L.) (Revision)	TG/43/8(proj.3)
*Sour Cherry (<i>Prunus cerasus</i> L.); Duke Cherry (<i>Prunus</i> ×gondouinii (Poit. & Turpin) Rehder) (Revision)	TG/230/2(proj.3)
*Sweet Cherry (<i>Prunus avium</i> (L.) L.) (Revision)	TG/35/8(proj.4)

- (b) Test Guidelines to be discussed at the fifty-fifth session
- 51. The TWF agreed to discuss the following draft Test Guidelines at its fifty-fifth session:

Full draft Test Guidelines

<u>Subject</u>	Basic Document(s) (2023)
Argania (Argania spinosa (L.) Skeels)	TG/ARGAN(proj.5)
*Goji (<i>Lycium barbarum</i> L., <i>L. chinense</i> Mill., <i>L. cylindricum</i> Kuang & A. M. Lu, <i>L. dasystemum</i> Pojark., <i>L. ruthenicum</i> Murray, <i>L. truncatum</i> Y. C. Wang, <i>L. yunnanense</i> Kuang & A. M. Lu)	TG/LYCIUM_BAR (proj.3)
Guava (<i>Psidium guajava</i> L.; <i>Psidium cattleyanum</i> Sabine var. <i>littorale</i> (Raddi) Fosberg) (Revision)	TG/110/4(proj.2)
*Hazelnut (Corylus avellana L.; Corylus colurna L.) (Revision)	TG/71/4(proj.4)
Japanese Pear (<i>Pyrus pyrifolia</i> (Burm. f.) Nakai var. <i>culta</i> (Mak.) Nakai) (Revision)	TG/149/2
Japanese Plum (Prunus salicina Lindl.) (Revision)	TG/84/4 Corr. 2 Rev. 2
Lemon (Lemons and Limes (Citrus L Group 3)) (Revision)	TG/203/2(proj.1)
Mandarin (<i>Citrus</i> L. – Group 1) (Revision)	TG/201/2(proj.1)
*Granadilla, Passion fruit (Passiflora edulis Sims) (Revision)	TG/256/2(proj.1)
Trifoliate Orange ((Poncirus) (Citrus L Group 5)) (Revision)	TG/83/5(proj.1)

Partial revisions

Subject	Basic Document(s) (2023)
Blueberry (Partial revision: Char. 24; addition of three new char.)	TG/137/5
Oranges (<i>Citrus</i> L Group 2) (Partial revision: move relevant botanical names from the "principle botanical names" box to the "alternative botanical names" box)	
Pummelo (Grapefruit and) (<i>Citrus</i> L Group 4) (Partial revision: move relevant botanical names from the "principle botanical names" box to the "alternative botanical names" box)	TG/204/1 Rev. 2, TC/57/11, Annex III

- 52. The leading experts, interested experts and timetables for the development of the Test Guidelines are set out in Annex IV to this report.
- (c) Possible Test Guidelines to be discussed in the future
- 53. The TWF agreed that it should consider the development of Test Guidelines for the following at a future session:

Subject	Basic Document(s)
Carambola (Averrhoa carambola L.)	NEW
Cape Gooseberry (Physalis peruviana L.)	NEW
Date Palm (<i>Phoenix dactylifera</i>)	TG/PHOEN_DAC(proj.1) (IL)
Soursop (Annona muricata L.)	NEW

Matters for information

- 17. Short reports on developments in plant variety protection
 - (a) Reports from members and observers (document TWF/54/3)
 - (b) Reports on developments within UPOV (document TWF/54/2)
- 18. Variety denominations: Matters for information (document TWP/7/8)
- 19. Revision of Test Guidelines (document TWP/7/9)
- 20. Information and databases
 - (a) UPOV information databases (document TWP/7/7)
 - (b) Variety description databases (document TWP/7/6)
 - (c) Exchange and use of software and equipment (document TWP/7/5)
 - (d) UPOV PRISMA (document TWP/7/1)
- 21. Guidance for drafters of Test Guidelines (document TWP/7/1)

Chairperson

54. The TWF thanked Mr. Chris Barnaby for chairing the TWF and noted that he was awarded a UPOV bronze medal in recognition of chairing the TWF from 2021 to 2023.

Date and place of the next session

55. The TWF agreed to hold its fifty-fifth session from June 3 to 7, 2024, via electronic means.

Future program

- 56. The TWF agreed that documents would be prepared in case of developments to be reported or presentations from members and observers on agenda items proposed for the session.
- 57. The TWF agreed that documents for its fifty-fifth session should be submitted to the Office of the Union by April 19, 2024. The TWF noted that items would be deleted from the agenda if the planned documents have not reached the Office of the Union by the agreed deadline.
- 58. The TWF proposed to discuss the following items at its fifty-fifth session:
 - 1. Opening of the Session
 - Adoption of the agenda

Matters for discussion

- 3. Procedures for DUS examination (presentations invited)
- 4. Number of growing cycles and concluding examination of fruit crops (document to be prepared by Canada and documents invited)
- 5. Harmonization of content in Technical Questionnaires, Section 7 (document to be prepared by the European Union)
- 6. Variety collections (presentations invited)
- 7. Information databases (presentations invited)
- 8. Information on mutant varieties of apple useful for DUS examination (presentations invited)
- 9. Image analysis and new technologies in DUS examination (presentations invited)

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- 10. Molecular techniques in DUS examination (presentations invited)
- 11. Reports on existing policies on confidentiality of molecular information (presentations invited)
- 12. Experiences with new types and species (oral reports invited)
- 13. Discussion on draft Test Guidelines
- 14. Recommendations on draft Test Guidelines
- 15. Date and place of the next session
- 16. Future program
- 17. Adoption of the Report on the session (if time permits)

Matters for information

- 18. Reports from members and observers (written reports to be prepared by members and observers)
- 19. Report on developments within UPOV (general developments, including variety denominations, information databases, exchange and use of software and equipment)
- 20. Closing of the session

<u>Visit</u>

- 59. In preparation for the technical visit, on Tuesday, July 4, 2023, the TWF received a presentation on "DUS examination of fruit crops in France", from Ms. Carole Dirwimmer, Head, Fruit DUS Testing, GEVES, a copy of which would be provided in document TWF/54/3.
- 60. On Wednesday, July 5, 2023, the TWF visited the *Institut National de Recherche pour l'Agriculture, l'Alimentation et l'Environnement* (INRAE), Experimental Unit '*Arboriculture et Horticulture Méditerranéenne*' on the site of l'Amarine. The TWF participated in a practical exercise to assess DUS characteristics in peach, apricot and Japanese plum varieties from the variety collection at l'Amarine, under the supervision of Mr. Christophe Tuéro, DUS examiner for peach, and Mr. Eric Martin, DUS examiner for apricot and Japanese plums. The TWF received a presentation on the research activities on fruit species developed by INRAE from Mr. Jean-Marc Audergon, Fruit group animator Responsible of Apricot program (INRAE), and Mr. José Quero Garcia, Sweet Cherry Researcher (INRAE), a copy of which would be provided in document TWF/54/3.
- 61. The TWF visited the Toulemonde Nurseries at Jonquières-Saint-Vincent, France, and was welcomed by Mr. Philippe Toulemonde, Directeur commercial, who welcomed participants and explained the activities of the company, including plant breeding and licensing of protected varieties. The TWF noted that the Toulemonde Nurseries had contributed to create Star Fruits® group and are highly involved in Pink Lady® brand management. They had protected 177 varieties of different fruit crops and only commercialized varieties in UPOV members.
 - 62. The TWF adopted this report at the close of its session.

[Annex I follows]

ANNEX I

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(e-mail: ruihong.guo@usda.gov)

Kaylee LEWIS (Ms.), Plant Variety Examiner, Plant Variety Protection Office, USDA, AMS, S&T, Washington D.C.

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II. ORGANIZATIONS

CROPLIFE INTERNATIONAL

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INTERNATIONAL COMMUNITY OF BREEDERS OF ASEXUALLY REPRODUCED HORTICULTURAL PLANTS (CIOPORA)

Paulo PERALTA (Mr.), Technical Expert, International Community of Breeders of Asexually Reproduced Horticultural Plants (CIOPORA), Hamburg, Germany (e-mail: paulo.peralta@ciopora.org)

David KARP (Mr.), Assistant Specialist, Department of Botany & Plant Sciences University of California, Riverside, United States of America

(e-mail: dkarp@ucr.edu)

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IV. OFFICE OF UPOV

Leontino TAVEIRA (Mr.), Head of Technical Affairs and Regional Development (Latin America, Caribbean)
Manabu SUZUKI (Mr.), Technical/Regional Officer (Asia)
Kees VAN ETTEKOVEN (Mr.), Technical Expert
Romy OERTEL (Ms.), Secretary II
Jessica MAY (Ms.), Secretary I

[Annex II follows]



Liberté Égalité Fraternité

General Directorate for Food



Liberté Égalité Fraternité

FRUIT SECTOR AND REGULATORY FRAMEWORK IN FRANCE

UPOV TWF – 3rd July 2023 Nîmes, France

Laurent Jacquiau - Head of the seeds office

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French agriculture - key figures

France:

Total: 63,8 millions of hectares

- · Mainland : 54,4 Millions of hectares
- Overseas departments and regions : 8,9 Millions of hectares

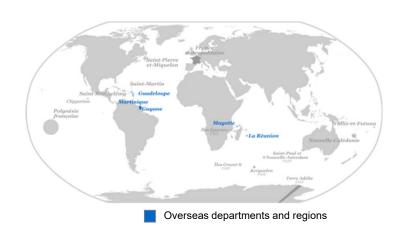
Agricultural area (data 2020):

Mainland: 28,6 Millions of hectares

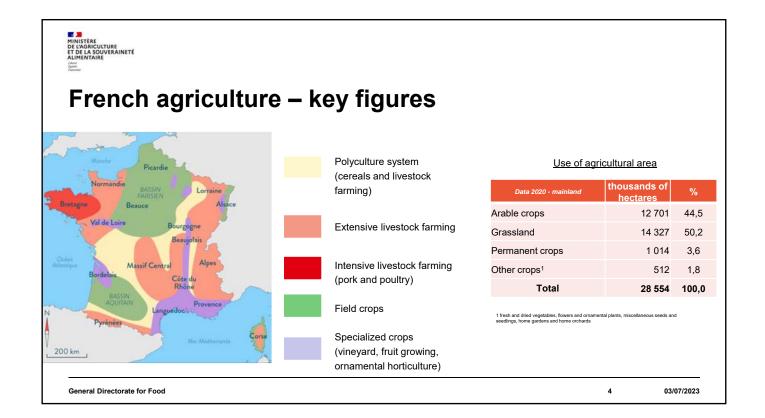
(52,5%

Overseas departments and regions: 134

708 hectares (2%)



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French agriculture - key figures

Production

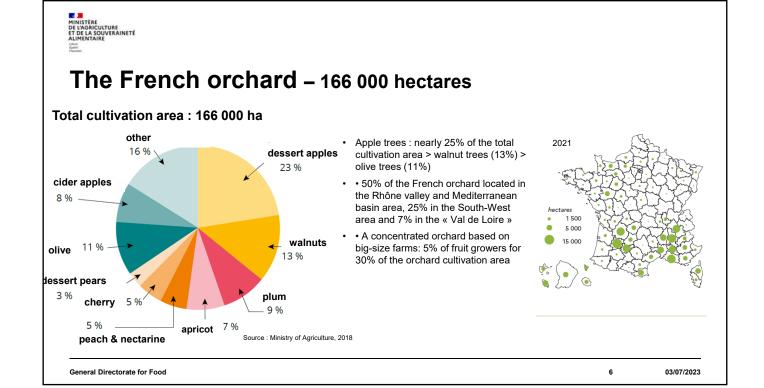
billion euros	2021
Crop production	49,5
Cereals	15,1
Oilseeds	3,4
Fruit	3,0
Vegetables	3,2
Wine	10,5
Other	14,3
Animal production	26,8
Cattle	6,9
Pigs	3,2
Milk	10,2
Poultry products	4,9
Other	1,6

Fruit production

thou	sand tonnes
	2021
Mainland France	
Table apples	1 316
Peach and nectarine	179
peach	94
Nectarine	85
Plums	97
Dessert pear	65
Apricot	59
Table grapes	38
Strawberry	75
Cherry	15
Other table fruit	194
kiwi	62
walnut	40
clementine	39
chestnut	9
other fruit	44
Total table fruit	2 040

French overseas
departments
Bananas 229
Pincapple 32

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Official indications of quality and origins









Rouge du Roussillon Figue de Solliès

Kiwi de l'Adour

Châtaigne d'Ardèche







Noix du Périgord

Clémentine de Corse

Fraises de Nîmes

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European legal framework for seeds et plants

- 12 European directives on the common catalogue and on the marketing of seeds and plants
- 1 European regulation for Plant Breeders' rights
- 1 European regulation for Protective measures against plant pests

Ongoing revision of seeds and plants directives : European Commission proposal expected on 5th July 2023

European requirements for marketing fruit plants :

- DUS mandatory for new varieties, via catalogue registration or PBR
- 2 material qualities possible : basic requirements ("CAC") or certification

In France:

Legal framework: ministry of agriculture

Grant of PBR:

- National scope: INOV - European scope: CPVO

National office for DUS: GEVES, which delegates some DUS tests to INRAE (National Research Institute for Agriculture, Food and the Environment)

National authority for fruit plants certification: CTIFL (Interprofessional technical center for fruits and vegetables)

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PBR and catalogue figures for fruit plants

PBR national scope (INOV)

Apricot	5
Almond tree	1
Blackcurrant	1
Cherry	18
Strawberry	7
Raspberry	1
Hazel	2
Walnut	2
Peach	46
Plumcot	1
Pear	2
Apple	21
Plum tree	4
Japanese plum	1
Total	112

National catalogue

Peach	477
Apple	419
Apricot	184
Olive	101
Cherry	89
Other fruits	503
Total	1 773

Including 143 varieties with no DUS but an « Officially Recognized Description » (varieties marketed before 2012)

European level

Catalogue: 21 000 varieties of fruit plants, that can be produced and marketed throughout European Union (some varieties sometimes appear several times due to synonyms)

These include:

2 192 varieties with a PBR

-> Prunus persica (L.) Batsch : 475 -> Fragaria x ananassa Duch. : 379 -> Malus domestica Borkh. : 291 -> Prunus armeniaca L. : 138

- > Rubus idaeus L. : 138

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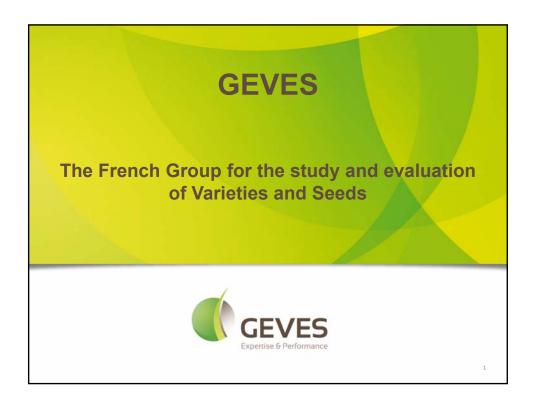


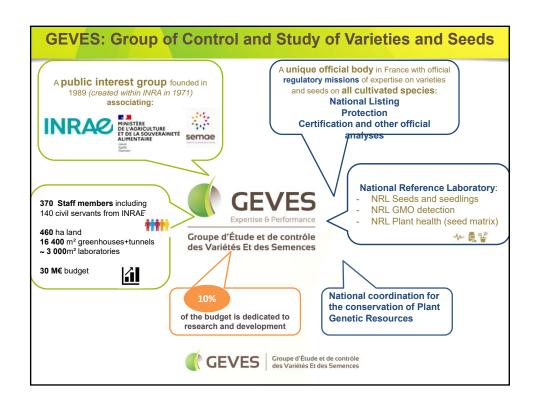
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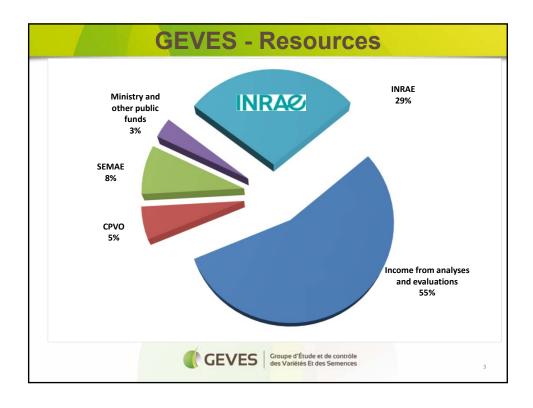
Welcome in France!

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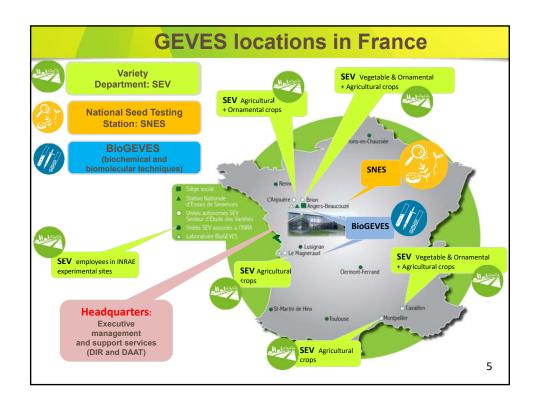
ANNEX III

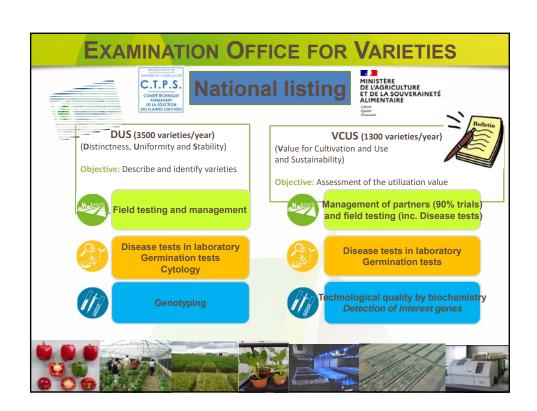






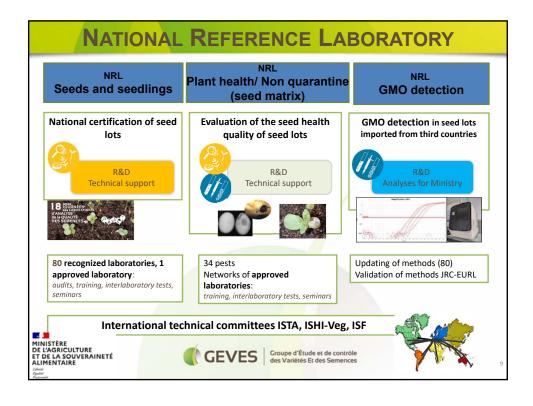


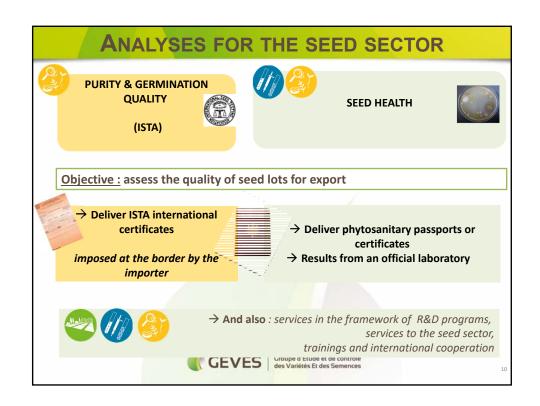


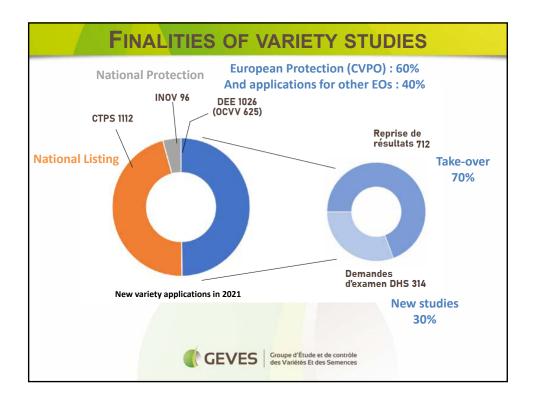


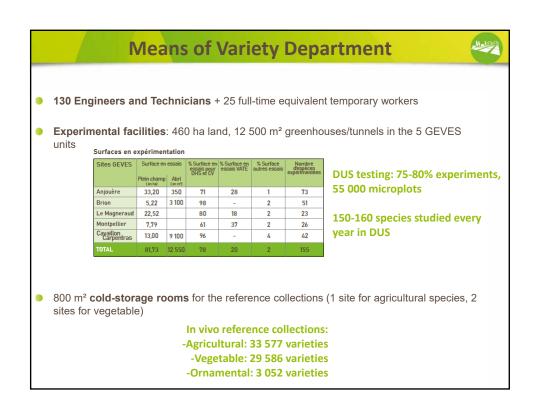








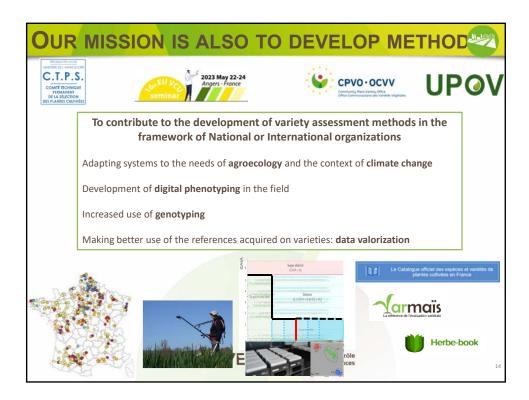




Contribution of other organizations to variety

activities

- Technical Qualified Bodies involved in DUS studies:
 - INRAE for Fruits, Vine, Maize (late types), Sugar Beet, Industrial chicory, Lupinus, some disease tests
 - CIRAD for Banana, Vanilla, tropical Onions
 - ONF for Populus
 - CATE for cauliflower and APEF for endive
 - + some laboratories for the analyze of particular components
- Partners of VCUS networks:
 - 10% trials carried out by GEVES
 - 20% INRAE
 - 20% technical institutes
 - 40% breeders
 - 10% Others like cooperatives



TWF/54/13

ANNEX IV

LIST OF LEADING EXPERTS

DRAFT TEST GUIDELINES TO BE SUBMITTED TO THE TECHNICAL COMMITTEE IN 2023

All requested information to be submitted to the Office of the Union

by August 18, 2023

Full draft Test Guidelines

Species	Basic Document(s)	Leading expert(s)
*Apple (<i>Malus domestica</i> (Suckow) Borkh.) (Revision)	TG/14/10(proj.7)	Mr. Erik Schulte (DE)
*Grapevine (Vitis L.) (Revision)	TG/50/10(proj.6)	Mr. Luca Aggio (IT)
*Mulberry (<i>Morus</i> L.)	TG/MORUS(proj.5)	Mr. Yosuke Abe (JP)
*Raspberry (<i>Rubus idaeus</i> L.; <i>Rubus occidentalis</i> L.) (Revision)	TG/43/8(proj.3)	Mr. Erik Schulte (DE)
*Sour Cherry (<i>Prunus cerasus</i> L.); Duke Cherry (<i>Prunus ×gondouinii</i> (Poit. & Turpin) Rehder) (Revision)	TG/230/2(proj.3)	Ms. Szilvia Márkné Deák (HU)
*Sweet Cherry (<i>Prunus avium</i> (L.) L.) (Revision)	TG/35/8(proj.4)	Ms. Carole Dirwimmer (FR)

DRAFT TEST GUIDELINES TO BE DISCUSSED AT TWF/55

(* indicates possible final draft Test Guidelines)

(Guideline date for Subgroup draft to be circulated by Leading Expert: February 23, 2024 Guideline date for comments to Leading Expert by Subgroup: March 22, 2024)

New draft to be submitted to the Office of the Union April 19, 2024

Full draft Test Guidelines

Species	Basic Document(s)	Leading expert(s)	Interested experts (States/Organizations) 1
Argania (<i>Argania spinosa</i> (L.) Skeels)	TG/ARGAN(proj.5)	Ms. Ibtihaj Belmehdi (MA)	IL, Office
*Goji (Lycium barbarum L., L. chinense Mill., L. cylindricum Kuang & A. M. Lu, L. dasystemum Pojark., L. ruthenicum Murray, L. truncatum Y. C. Wang, L. yunnanense Kuang & A. M. Lu)	TG/LYCIUM_BAR (proj.3)	Ms. Chuanhong Zhang (CN)	AU, DE, GE, KR, QZ, Office
Guava (<i>Psidium guajava</i> L.; <i>Psidium cattleyanum</i> Sabine var. <i>littorale</i> (Raddi) Fosberg) (Revision)	TG/110/4(proj.2)	Ms. Ling Gao (CN)	BR, KE, KR, MX, MY, QZ, Office
*Hazelnut (<i>Corylus avellana</i> L.; <i>Corylus colurna</i> L.) (Revision)	TG/71/4(proj.4)	Mr. Flavio Roberto de Salvador (IT)	TWO, AU, CA, CN, CZ, DE, ES, GE, HU, QZ, CIOPORA, Office
Japanese Pear (<i>Pyrus pyrifolia</i> (Burm. f.) Nakai var. <i>culta</i> (Mak.) Nakai) (Revision)	TG/149/2	Mr. Koji Nakanishi (JP)	AU, CZ, FR, GE, HU, KR, NZ, QZ, CIOPORA, Office
Japanese Plum (<i>Prunus salicina</i> Lindl.) (Revision)	TG/84/4 Corr. 2 Rev. 2	Ms. Carole Dirwimmer (FR)	AU, CZ, GE, HU, IT, JP, KR, NZ, QZ, ZA, CIOPIORA, Office
Lemon (Lemons and Limes (Citrus L Group 3)) (Revision)	TG/203/2(proj.1)	Ms. Nuria Urquía Fernández (ES)	AU, BR, CN, FR, IL, JP, MA, MX, QZ, CIOPORA, Office
Mandarin (<i>Citrus</i> L. – Group 1) (Revision)	TG/201/2(proj.1)	Ms. Nuria Urquía Fernández (ES)	AU, BR, CN, FR, GE, IL, JP, KR, MA, MX, NZ, QZ, ZA, CIOPORA, Office
*Granadilla, Passion fruit (<i>Passiflora edulis</i> Sims) (Revision)	TG/256/2(proj.1)	Mr. Barkat Mustafa (AU)	TWO, CN, ES, JP, KR, QZ, ZA, CIOPORA, Office
Trifoliate Orange ((Poncirus) (Citrus L Group 5)) (Revision)	TG/83/5(proj.1)	Ms. Nuria Urquía Fernández (ES)	AU, CN, FR, JP, MA, NZ, QZ, CIOPORA, Office

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¹ for name of experts, see List of Participants

Partial revisions

Species	Basic Document(s)	Leading expert(s)	Interested experts (States/Organizations) ²
Blueberry (Partial revision: Char. 24; addition of three new char.)	TG/137/5	Ms. Nahida Bhuiyan (AU), Mr. Chris Barnaby (NZ)	AU, CA, CN, CZ, GE, HU, IT, JP, KE, KR, MX, NZ, PL, PT, QZ, ZA, CIOPORA, Office
Oranges (<i>Citrus</i> L Group 2) (Partial revision: move relevant botanical names from the "principle botanical names" box to the "alternative botanical names" box)	TG/202/1 Rev. 2, TC/57/11, Annex III	Ms. Nuria Urquía Fernández (ES)	BR, CN, FR, IL, JP, KR, MA, MX, NZ, QZ, ZA, CIOPORA, Office
Pummelo (Grapefruit and) (<i>Citrus</i> L Group 4) (Partial revision: move relevant botanical names from the "principle botanical names" box to the "alternative botanical names" box)	TG/204/1 Rev. 2, TC/57/11, Annex III	Ms. Nuria Urquía Fernández (ES)	BR, CN, FR, IL, JP, KR, MA, MX, NZ, QZ, CIOPORA, Office

Possible Test Guidelines to be discussed in the future

Species	Basic Document(s)
Carambola (Averrhoa carambola L.)	NEW
Cape Gooseberry (Physalis peruviana L.)	NEW
Date Palm (Phoenix dactylifera)	TG/PHOEN_DAC(proj.1) (IL)
Soursop (Annona muricata L.)	NEW

[End of Annex IV and of document]

² for name of experts, see List of Participants