UPOV
International Union for the Protection of New Varieties of Plants

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Technical Working Party for Fruit Crops

Fifty-Sixth Session
Bursa, Türkiye, June 23 to 26, 2025

TWF/56/7

Original: English
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REPORT

Adopted by the Technical Working Party on Fruit Crops

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OPENING OF THE SESSION

1. The Technical Working Party for Fruit Crops (TWF) held its fifty-sixth session in Bursa, Türkiye, from June 23 to 26, 2025. The list of participants is provided in Annex I to this report.

2. The session was opened by Ms. Carole Dirwimmer (France), Chairperson of the TWF, who welcomed the participants.

3. The TWF was welcomed by Mr. Ibrahim Acar, Bursa Provincial Director of Agriculture and Forestry, Ministry of Agriculture and Forestry. The TWF received welcome remarks from Mr. Sakir Berktas, Director, Central Seed Registration and Certification Directorate, Variety Registration and Seed Certification Centre, and Mr. Sezgin Karadeniz, Head of Seed Policies Department and PBR Office, Ministry of Agriculture and Forestry. The welcome remarks are reproduced in Annex II to this document.

ADOPTION OF THE AGENDA

4. The TWF adopted the agenda as provided in document TWF/56/1 Rev.

PROCEDURES FOR DUS EXAMINATION

5. The TWF considered documents TWP/9/1 and TWF/56/6.

Guidance and information materials – matters for consideration

TGP Documents

Document TGP/5 “Experience and Cooperation in DUS Testing”, Section 6 “UPOV Report on Technical Examination and UPOV Variety Description” (Revision)

6. The TWF agreed with the revision of document TGP/5 “Experience and Cooperation in DUS Testing”, Section 6 “UPOV Report on Technical Examination and UPOV Variety Description”, on the basis of document TGP/5, Section 6 (draft 1).

Document TGP/7: Development of Test Guidelines (Revision): Guidance Note (GN) 28 “Example Varieties” – Example varieties for asterisked quantitative characteristics when illustrations are provided

7. The TWF agreed with the proposal to amend document TGP/7, Guidance Note (GN) 28 “Example Varieties”, as provided in document TWP/9/5. The TWF agreed with the proposal from the TWA for paragraph 2.1, as provided in document TWF/56/6, with an amendment to read as follows:

"2.1 Example varieties enable examiners to see a characteristic in 'real life'. Specifically, example varieties are required for characteristics which are important for international harmonization of variety descriptions (asterisked characteristics), that are influenced by the environment and when a diagram or illustration is not effective in demonstrating the states of expression."

REPORT ON COURT CASES DEALING WITH TECHNICAL MATTERS

8. The TWF received a presentation "Report on court cases dealing with technical matters" by an expert from the European Union. A copy of the presentation is provided in document TWF/56/4.

9. The TWF discussed the number of characteristics in Test Guidelines and agreed there should be a balance between having a sufficient number of characteristics that allowed describing the variety while focusing on the characteristics most useful for distinctness.

10. The TWF welcomed the initiative to present a court case dealing with technical matters and agreed to invite similar presentations in future.

NUMBER OF GROWING CYCLES AND CONCLUDING EXAMINATION OF FRUIT CROPS

10. The TWF considered document TWF/56/3, as presented by an expert from Canada.

11. The TWF discussed situations when two growing cycles would be required for the expression of characteristics to be sufficiently consistent and clear, according to UPOV guidance, and to generate reliable variety descriptions.

12. The TWF noted the comments from Japan and the Republic of Korea on how UPOV guidance was interpreted in those countries providing flexibility for authorities to decide when two growing cycles would be required, or examination could be concluded when the authority could determine with certainty the outcome of the test.

13. The TWF considered the standard wording for number of growing cycles in Test Guidelines, in particular the sentences on "number of growing cycles" and that "The testing of a variety may be concluded when the competent authority can determine with certainty the outcome of the test." The TWF agreed that the guidance in Test Guidelines could be improved to further clarify that authorities could conclude the examination of fruit crops earlier than two growing cycles, when that was recommended in Test Guidelines.

14. The TWF considered the use of the terms "minimum" and "normally" in relation to the minimum duration of tests and agreed to propose amending document TGP/7, Additional Standard Wording (ASW) 2 to replace the term "normally" by "generally", as follows:

ASW 2 (Chapter 3.1) – Number of growing cycles

(a) Single growing cycle

"The minimum duration of tests should ~~normally~~ generally be a single growing cycle."

(b) Two independent growing cycles

"The minimum duration of tests should ~~normally~~ generally be two independent growing cycles."

15. The TWF noted that the sequence of standard wording in Test Guidelines presented the explanation on "number of growing cycles" separated from the explanation that "The testing of a variety may be concluded when the competent authority can determine with certainty the outcome of the test". The TWF agreed that the latter sentence was an important explanation of the number of growing cycles and agreed to propose amending the "TG Structure and Universal Standard Wording" to present consecutively both sentences, as follows:

ANNEX 1: TG STRUCTURE AND UNIVERSAL STANDARD WORDING

3. Method of Examination

3.1 Number of Growing Cycles

The minimum duration of tests should ~~normally~~ generally be:

{ **ASW 2** (Chapter 3.1(.1)) – number of growing cycles }

The testing of a variety may be concluded when the competent authority can determine with certainty the outcome of the test.

{ GN 8 (Chapter 3.1.2) – explanation of the growing cycle }
{ **ASW 3** (Chapter 3.1.2) – explanation of the growing cycle }

~~The testing of a variety may be concluded when the competent authority can determine with certainty the outcome of the test.~~

16. The TWF noted the comment from the European Union that the standard sentence on "concluding testing" should not be interpreted as contradictory to the standard wording on number of growing cycles, in particular that the testing of a variety may be concluded earlier.

17. The TWF agreed to propose considering whether the provision on "concluding testing" should be added to the different standard wording options in ASW 2 "number of growing cycles" to ensure that the basic principles contained in the General Introduction could be used, rather than following the detailed recommendations of the Test Guidelines.

18. The TWF considered a proposal to amend Additional Standard Wording 3 (ASW 3) for fruit species to clarify the notion of "satisfactory crop of fruit", as provided in document TWF/56/3, as follows:

"In particular, it is essential that the [trees] / [plants] produce a ~~satisfactory crop~~ sufficient quantity of fruit for testing purposes and are representative of the variety in any ~~in each~~ ~~of the two~~ growing cycle~~s~~. Testing of a variety should begin in the following growing cycle after trial trees have had at least one crop of fruit."

19. The TWF agreed there was no need to provide guidance to avoid examining plants / trees in juvenile stage, as this was already covered by the word "representative". The TWF agreed that the term "satisfactory" could be defined in relation to quantity, quality and representativeness of a crop of fruit of the variety. The TWF agreed to propose amending guidance in document TGP/7, ASW 3 (d) "Fruit species" to read as follows:

"ASW 3 (Chapter 3.1.2) – Explanation of the growing cycle

[…]

"(d) Fruit species

"In the case of Test Guidelines covering fruit species, the following sentence may be added in Chapter 3.1:

"In particular, it is essential that the [trees] / [plants] produce a ~~satisfactory crop~~ sufficient quantity and quality of fruit for testing purposes and are representative of the variety in any ~~in each~~ ~~of the two~~ growing cycle~~s~~."

VARIETY COLLECTIONS

Variety collection of fruit crops in Ukraine

20. The TWF received a presentation "Variety Collection of Fruit Crops in Ukraine" by an expert from Ukraine. A copy of the presentation is provided in document TWF/56/5.

21. The TWF noted the procedures for DUS examination, including cooperation with breeders. The TWF noted the report from Ukraine on the challenges for breeders to describe varieties, which would be addressed in the future with further support for cooperation in DUS examination.

22. The TWF noted that Ukraine provided access to the national plant variety database, which included variety descriptions (available at: http://sort.sops.gov.ua/search/search).

INFORMATION DATABASES

Information on cooperation agreements for DUS examination

23. The TWF considered document TWP/9/2 and agreed with the proposal to discontinue the section on "Cooperation in DUS Examination" in the GENIE database, as set out in document TWP/9/2, paragraphs 7 to 26.

24. The TWF noted that information on "Practical experience in DUS examination" would continue to be provided in the GENIE database and as a document prepared annually for the Technical Committee.

Reclassification, valid taxonomy and UPOV codes for the *Citrus* complex

25. The TWF considered the proposals for amending the UPOV codes for *Citrus* and related genera and species, as provided in document TWP/9/2, Annex I.

26. The TWF agreed to invite experts to provide comments on the proposed amendments, to be submitted to the Office of the Union by July 24, 2025 (email to: upov.mail@upov.int). The TWF agreed that UPOV Codes receiving comments would be considered by the TWF, at its fifty-seventh session; and remaining UPOV Codes would be proposed to the Technical Committee to be amended.

27. The TWF agreed that the common names for some UPOV Codes for *Citrus* should be revised.

28. The TWF agreed that the revision of UPOV Codes provided the opportunity to redefine the scope of the five Test Guidelines for *Citrus* groups (documents TG/83, TG/201, TG/202, TG/203 and TG/204).

29. The TWF noted the proposal from Spain "To provide a structured classification of *Citrus* varieties adapted to official registration [plant variety protection/national listing], integrating the most current and scientifically rigorous classification proposal with practical and commercial use."

30. The TWF agreed to invite Spain to lead the revision of the common names associated with the UPOV Codes for *Citrus*, in collaboration with Australia, Canada, China, European Union, Japan, Morocco, New Zealand, Republic of Korea and CIOPORA.

31. The TWF agreed that the outcome of the work led by Spain would provide the basis for the revision of scope of the five Test Guidelines for *Citrus* and confirming the common names associated with the respective UPOV Codes for consideration by the TWF, at its session in 2026.

MOLECULAR TECHNIQUES IN DUS EXAMINATION

Guidelines for the validation of characteristic-specific molecular marker protocol

32. The TWF considered document TWP/9/4 and the proposed guidelines for validating assessment methods of characteristic-specific molecular markers for DUS examination, as presented by an expert from the Netherlands (Kingdom of the).

33. The TWF agreed with the procedure proposed to validate molecular markers developed by examination authorities for characteristic-specific molecular markers, to be used as alternative methods for the assessment of characteristics in Test Guidelines.

34. The TWF agreed that the protocol for characteristic assessment using molecular marker in document TWP/9/4, Section V provided a suitable basis for harmonizing how information should be provided in Test Guidelines.

35. The TWF discussed access to the methods used in Test Guidelines in relation to the situation described in paragraph 31 (“trade secret protocol”) of document TWP/9/4. The TWF agreed that further consideration would be required in case a molecular marker with restricted access would be proposed for inclusion in Test Guidelines.

36. The TWF discussed the use of molecular markers to assess characteristics developed using new breeding techniques. The TWF noted there was no experience reported on this matter and agreed to receive an update on experiences concerning the topic in future.

Reports on existing policies on confidentiality of molecular information

37. The TWF noted that UPOV members and observers were invited to report examples of policies on confidentiality and access to molecular data at the TWP sessions in 2025.

38. The TWF received a presentation on “Confidentiality of Molecular Information” from an expert from CropLife International, on behalf of the African Seed Trade Association (AFSTA), Asia and Pacific Seed Association (APSA), International Community of Breeders of Asexually Reproduced Horticultural Plants (CIOPORA), CropLife International, Euroseeds, International Seed Federation (ISF) and Seed Association of the Americas (SAA). The presentation is provided in document TWP/9/6.

EXPERIENCES WITH NEW TYPES AND SPECIES

39. The TWF noted that no new experiences with new types and species had been reported.

TEST GUIDELINES

Notification of Additional Characteristics and States of Expression

40. The TWF considered document TWP/9/3 and noted the invitation for UPOV members to notify the Office of the Union the additional characteristics or states of expression used in individual authorities’ test guidelines to retain internationally harmonized variety descriptions, as provided in document TGP/5, Section 10 “Notification of Additional Characteristics”.

Technical Questionnaire, section 4.2: “Method of propagating the variety”

41. The TWF considered document TWP/9/3 and the lists with options for information on method of propagating the variety that would be made available in UPOV PRISMA for the Technical Questionnaires of certain Test Guidelines where no structured information (open text box) was provided in Section 4.2 (“method of propagating the variety”).

42. The TWF considered the Test Guidelines for fruit crops in document TWP/9/3, Annex IV and agreed the options for the Test Guidelines for Mango, as presented below and in Annex IV to this report.

- ☒ Vegetatively propagated varieties
  - ☒ Cuttings
  - ☒ *In vitro* propagation
  - ☒ Budding or grafting
  - ☒ Air layering
  - ☒ Other (please specify):
- ☒ Other (please specify):

Measures to improve support for drafters of Test Guidelines

43. The TWF considered document TWP/9/3.

Measures on Test Guidelines (TGs) and online tool for drafting TGs

44. The TWF discussed options for improving the Test Guidelines structure, the tool for drafting Test Guidelines and the creation of national test guidelines, as set out in document TWP/9/3, Annex II presented by the leading expert of the TC Sub-group on Test Guidelines, Ms. Margaret Wallace (United Kingdom).

45. The summary report of discussions at the fifty-sixth session of the TWF provided by the leading expert of the TC Sub-group is provided in Annex III to this report.

Recording directly into the drafting tool the changes agreed during discussions of Test Guidelines

46. The TWF noted that a new version of the web-based TG Template had been released, including a new text editor and a tool to generate draft Test Guidelines for better user experience.

47. The TWF noted that the drafting tool was used during the discussions of Test Guidelines to record the changes agreed directly into the drafting tool. The TWF noted that the new procedure replaced the creation of lists of changes to be implemented in future, implementing them directly in the drafting tool during the meeting. The TWF noted that the drafters of Test Guidelines would use the document generated during the session as the starting point for further work.

48. The TWF noted that the drafts generated directly into the drafting tool as a result of discussions during the session were made available on the TWF/56 webpage and presented all changes in "revision mode" (available at the TWF/56 webpage: https://www.upov.int/meetings/en/details.jsp?meeting_id=85860)

Discussion on draft Test Guidelines

Full draft Test Guidelines

49. The TWF discussed the following draft Test Guidelines, presented by the relevant Leading Expert:

Species	Basic Document(s)	Leading expert(s)
*Argan (*Argania spinosa* (L.) Skeels)	TG/ARGAN(proj.7)	Ms. Ibtihaj Belmehdi (MA)
European Pear (*Pyrus communis* L.) (Revision)	TG/15/4(proj.1)	Mr. Erik Schulte (DE)
*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.5)	Ms. Chuanhong Zhang (CN)
*Hazelnut (*Corylus avellana* L.; *Corylus colurna* L., *Corylus americana* Marshall) (Revision)	TG/71/4(proj.6)	Mr. Flavio Roberto de Salvador (IT)
Japanese Pear (*Pyrus pyrifolia* (Burm. f.) Nakai; *Pyrus ussuriensis* Maxim. & Rupr.; Hybrids between *Pyrus pyrifolia* and *Pyrus ussuriensis*) (Revision)	TG/149/3(proj.2)	Mr. Koji Nakanishi (JP)
Japanese Plum (*Prunus salicina* Lindl. and interspecific hybrids) (Revision)	TG/84/5(proj.2)	Ms. Carole Dirwimmer (FR)
*Granadilla, Passion fruit (*Passiflora edulis* Sims) (Revision)	TG/256/2(proj.3)	Mr. Barkat Mustafa (AU)

50. The TWF noted that the draft Test Guidelines presenting the changes agreed during discussions were available on the TWF/56 webpage (see: https://www.upov.int/meetings/en/details.jsp?meeting_id=85860).

Recommendations on draft Test Guidelines

(a) Test Guidelines to be put forward for adoption by the Technical Committee

51. The TWF agreed that the following draft Test Guidelines should be submitted to the TC for adoption at its sixty-first session, to be held in Geneva on October 20 and 21, 2025, on the basis of the following documents:

Full draft Test Guidelines

Subject	Basic Document(s) (2025)
*Granadilla, Passion fruit (*Passiflora edulis* Sims) (Revision)	TG/256/2(proj.3)
*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.5)
*Hazelnut (*Corylus avellana* L.; *Corylus colurna* L., *Corylus americana* Marshall; Hybrids between *Corylus americana* and *Corylus avellana*) (Revision)	TG/71/4(proj.6)

(b) Test Guidelines to be discussed at the fifty-seventh session

52. The TWF agreed to discuss the following draft Test Guidelines at its fifty-seventh session:

Full draft Test Guidelines

Subject	Basic Document(s) (2025)
*Argan (*Argania spinosa* (L.) Skeels)	TG/ARGAN(proj.7)
Blueberry (Revision)	TG/137/5
*European Pear (*Pyrus communis* L.) (Revision)	TG/15/4(proj.1)
*Guava (*Psidium guajava* L.; *Psidium cattleyanum* Sabine var. *littorale* (Raddi) Fosberg) (Revision)	TG/110/4(proj.4)
*Japanese Pear (*Pyrus pyrifolia* (Burm. f.) Nakai; *Pyrus ussuriensis* Maxim. & Rupr.; Hybrids between *Pyrus pyrifolia* and *Pyrus ussuriensis*) (Revision)	TG/149/3(proj.2)
*Japanese Plum (*Prunus salicina* Lindl. and interspecific hybrids) (Revision)	TG/84/5(proj.2)

Partial revisions

Subject	Basic Document(s) (2025)
Lemon (Lemons and Limes (*Citrus* L. - Group 3)) - Coverage of the Test Guidelines	TG/203/1 Rev. Corr.
Mandarin (*Citrus* L. – Group 1) - Coverage of the Test Guidelines	TG/201/1 Rev. Corr.
Trifoliate Orange ((*Poncirus*) (Citrus L. - Group 5)) - Coverage of the Test Guidelines	TG/83/4 Rev. Corr.
Oranges (*Citrus* L. - Group 2) - Coverage of the Test Guidelines	TG/202/1 Rev. 2
Pummelo (Grapefruit and) (*Citrus* L. - Group 4) - Coverage of the Test Guidelines	TG/204/1 Rev. 2

53. The leading experts, interested experts and timetables for the development of the Test Guidelines are set out in Annex VI to this report.

(c) Possible Test Guidelines to be discussed in the future

54. The TWF agreed that it should consider the development of Test Guidelines for the following fruit crops at a future session:

Subject	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

(d) Support for drafting national test guidelines

55. The TWF discussed possible measures to support UPOV members drafting national test guidelines. The TWF agreed there were species or crops which, for the time being, were only of interest at a national or local level while noting that certain aspects of those test guidelines could be of interest to the wider community of TWF experts.

56. The TWF agreed to include an agenda item for its fifty-seventh session inviting UPOV members to present characteristics, approaches or challenges for DUS examination relevant for drafting national test guidelines.

MATTERS FOR INFORMATION

Reports on developments in plant variety protection from members and observers

57. The TWF noted the information on developments in plant variety protection from members and observers provided in document TWF/56/2 Prov. The TWF noted that reports submitted to the Office of the Union after June 6, 2025, and until June 26, 2025, would be included in the final version of document TWF/56/2.

Reports on developments in UPOV

58. The TWF noted the following matters for information, as set out in document TWP/9/1:

(i) Revision of TGP Documents in 2024
(ii) Revision of Information Documents in 2024
(iii) Revision of Explanatory Notes on Variety Denominations (new denomination class for *Prunus*)
(iv) Discussion on disease resistance characteristics in DUS examination
(v) Matters arising from the Technical Working Parties
(vi) Organization of the 2025 Seminar on cooperation with breeders in DUS examination
(vii) Measures to improve support provided for DUS examination
(viii) Revision of TGP Documents in 2024
(ix) Revision of Information Documents in 2024
(x) Revision of Explanatory Notes on Variety Denominations (new denomination class for Prunus)
(xi) Discussion on disease resistance characteristics in DUS examination
(xii) Matters arising from the Technical Working Parties
(xiii) Organization of the 2025 Seminar on cooperation with breeders in DUS examination
(xiv) Measures to improve support provided for DUS examination

CHAIR

59. The TWF agreed to propose to the TC that it recommend to the Council to elect Mr. Yosuke Abe (Japan) as the next chair of the TWF.

DATE AND PLACE OF THE NEXT SESSION

60. At the invitation of Germany, the TWF agreed to hold its fifty-seventh session in Leipzig, Germany, from September 7 to 10, 2026.

FUTURE PROGRAM

61. The TWF agreed that documents for its fifty-seventh session should be submitted to the Office of the Union by July 24, 2026. The TWF noted that items would be deleted from the agenda if the planned documents did not reach the Office of the Union by the agreed deadline.

62. The TWF proposed to discuss the following items at its next session:

1. Opening of the Session

Matters for discussion

2. Adoption of the agenda
3. Date and place of the next session
4. Procedures for DUS examination (presentations invited)
5. Methods of observation in fruit crops (MS/MG) (Germany to provide a document and presentations invited)
6. Number of growing cycles and concluding examination of fruit crops (documents invited)
7. Harmonization of content in Technical Questionnaires, Section 7 (document to be prepared by the European Union and presentations invited)
8. Variety collections (presentations invited)
9. Information databases (presentations invited)
10. Information on mutant varieties of apple useful for DUS examination (presentations invited)
11. Image analysis and new technologies in DUS examination (presentation by Hungary and presentations invited)
12. Molecular techniques in DUS examination (presentations invited)
13. Experiences with new types and species (oral reports invited)
14. Support for developing national test guidelines (presentations invited)
15. Discussion on draft Test Guidelines
16. Recommendations on draft Test Guidelines
17. Future program
18. Adoption of the Report on the session (if time permits)

Matters for information

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

VISIT

63. On Wednesday, June 25, 2025, the TWF visited the Atatürk Horticultural Central Research Institute, at Yalova. The Institute is one of the 49 Turkish research institutes. The TWF was welcomed by Mr. Yilmaz Boz, Director, and received a presentation on the activities of the institute by Mr. Emre Bilen, Researcher. A copy

of the presentation is provided in Annex V to this document. The TWF visited the variety collections and breeding programs of the following crops:

Genetic Research Garden	Ms. Aysegul Hannigan, Agricultural Engineer
Strawberry	Mr. Gokhan Erbas, Strawberry Breeder, Pomiculture Department
Cherry	Mr. Mehmet Bas, Fruit Breeder
Table Grapes	Ms. Gülhan Gülbasar Kandill, Head, Viticulture Department
Kiwifruit	Mr. Kemal Kahraman, Fruit Breeder

64. The TWF visited Yalova Seçkin Fide and was welcomed by Mr. Osman Nuri Nalbant, Sales Manager, who guided the group through the facilities, including the sowing station and green houses. The company is specialized in the production of young plants, with more than two million units produced per year.

65. The TWF adopted this report at the close of its session.

[Annexes follow]

ANNEX I

LIST OF PARTICIPANTS

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Carole DIRWIMMER (Ms.), Chair

V. OFFICE OF UPOV

Leontino TAVEIRA (Mr.), Director of Global Development and Technical Affairs
Romy OERTEL (Ms.), Associate Technical Officer
Jessica MAY (Ms.), Training and Cooperation Assistant

[Annex II follows]

ANNEX II

WELCOME REMARKS BY MR. IBRAHIM ACAR
BURSA PROVINCIAL DIRECTOR OF AGRICULTURE AND FORESTRY
MINISTRY OF AGRICULTURE AND FORESTRY, TÜRKIYE

Madam Chair, representatives of the UPOV secretariat, delegations of UPOV members, distinguished participants,

I would like to express our great pleasure and honor in welcoming you to Bursa, a fertile city where history and agriculture intertwine, on the occasion of the 56th Session of the UPOV Technical Working Party for Fruit Crops.

Bursa is not only an ancient city that served as the capital of the Ottoman Empire, but also one of Türkiye's most important agricultural production centers. With its climatic diversity, fertile plains, advanced irrigation infrastructure, and producer expertise, it ranks among the leading provinces in our country, particularly in fruit production.

Peaches, pears, black figs, strawberries, and many other product groups are cultivated in Bursa using both traditional and modern production methods; our province makes a significant contribution to both domestic consumption and exports. Behind this production power lies a conscious approach based on science-driven agricultural practices, the use of registered varieties, and the protection of breeders' rights.

Dear Participants,

Hosting this meeting in Bursa is not only a matter of hospitality for us, but also a meaningful opportunity to contribute to international knowledge exchange and establish a connection from the local to the global level. The fact that our work in areas such as agricultural R&D, variety development, plant health, and producer education gains value in such technical platforms motivates us to strive for even better results.

I sincerely believe that this technical group meeting held under the auspices of UPOV will lay the groundwork for the sharing of experiences among countries on the protection, testing and registration of varieties in fruit species. We are proud to contribute to this process as Bursa.

I would like to thank each and every one of you for your participation, wish the meeting to be productive and successful, and hope that you will have enjoyable and inspiring moments during your stay in our city.

Thank you

WELCOME REMARKS BY MR. SAKIR BERKTAS
DIRECTOR OF THE VARIETY REGISTRATION AND CERTIFICATION CENTER
ANKARA, TÜRKIYE

Madam Chair, distinguished representatives of the UPOV secretariat and UPOV members,

My name is Sakir Berktas, and I currently serve as the Director of the Variety Registration and Certification Center. I would like to extend my warmest greetings to you all - on behalf of both myself and my institution.

Following the 57th session of the UPOV Technical Working Party for Vegetables, held in Antalya in 2023, we are truly honored to welcome you this year in one of Türkiye's most distinguished cities - Bursa - for the 56th session of the Technical Working Party for Fruit Crops.

Our country is home to more than 9,000 plant species, of which nearly 30% are endemic. This exceptional biodiversity holds great national significance for us - but more importantly, it brings a shared responsibility toward the global community.

Our Center has been conducting variety registration procedures since 1963. In the fruit group, we have registered 1,709 varieties across 78 species, including major crops such as peach, grape, and olive. Among these, 622 varieties have been granted plant variety protection.

Dear participants, we sincerely hope that this four-day session of the Technical Working Party for Fruit Crops

will be fruitful and beneficial for all members of the UPOV family. Once again, I extend to each of you my deepest respect and warm regards.

Thank you.

OPENING REMARKS BY MR. SEZGIN KARADENIZ
HEAD OF THE SEED POLICIES DEPARTMENT AND PBR OFFICE, GENERAL DIRECTORATE OF PLANT PRODUCTION MINISTRY OF AGRICULTURE AND FORESTRY, TÜRKIYE

Madam Chair, Representatives of the UPOV Secretariat, Delegations of UPOV Member Countries, Distinguished Participants,

On behalf of my country and the Ministry of Agriculture and Forestry, I warmly welcome you all and would like to express our great pleasure in hosting you in Bursa for the 56th Session of the UPOV Technical Working Party for Fruit Crops.

Türkiye is a country with three different climate zones, rich agricultural production patterns and high biological diversity. The agricultural sector is not only a cornerstone of economic development but also of food security, rural employment, and environmental sustainability. Türkiye, one of Europe's leading countries in fruit production, offers a wide range of high-quality products to both the domestic market and global markets, from cherries to citrus fruits, grapes to figs.

The efforts of breeders and effective policies and practices for the protection of plant varieties have played an important role in this success. At this point, I would like to emphasize that the technical guidance and international cooperation environment provided by UPOV are indispensable in encouraging innovative breeding efforts and effectively protecting varieties.

Since 2007, Türkiye, as a member of UPOV, has been steadfastly fulfilling its obligations regarding the protection of plant breeders' rights and continuously improving its national legislation.

Distinguished Participants,

The sharing of scientific knowledge and technical harmonization at the international level are more important than ever for the future of agriculture. In this period when we are facing challenges such as climate change, efficient use of water resources and the establishment of sustainable agricultural systems, the development of new varieties and their registration under appropriate conditions is a vital necessity.

I sincerely believe that this meeting will serve to strengthen not only technical issues but also our common values and global solidarity. On this occasion, I would like to thank all the experts who contributed to the work of this important technical group, especially the UPOV Secretariat, and express my desire to continue increasing our country's contribution to this process.

I hope that our meeting will be productive, constructive and solution-oriented, and I greet you once again with respect and affection. Thank you.

[Annex III follows]

ANNEX III

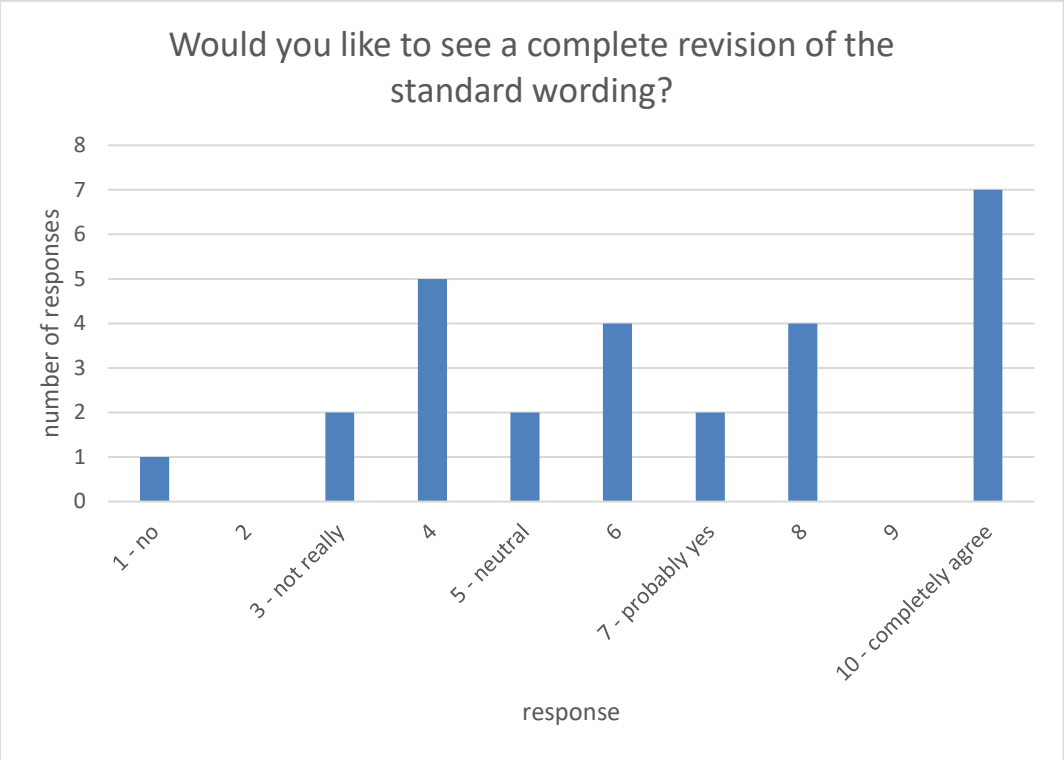
TC SUB-GROUP ON TEST GUIDELINES

Summary of the discussion at the 56th Session of the TWF.

The TWF received a presentation from the leading expert of the subgroup, Margaret Wallace (United Kingdom), a copy of which is provided in document TWP/9/3. The group also submitted responses to an online questionnaire. There was limited time for discussion so the opinions of the TWF are captured in the responses to the questionnaire only.

A summary of the responses follows:

The Group had a mixed views on the complete revision of the standard wording. The average rating was 6.61, so slightly more for than against.

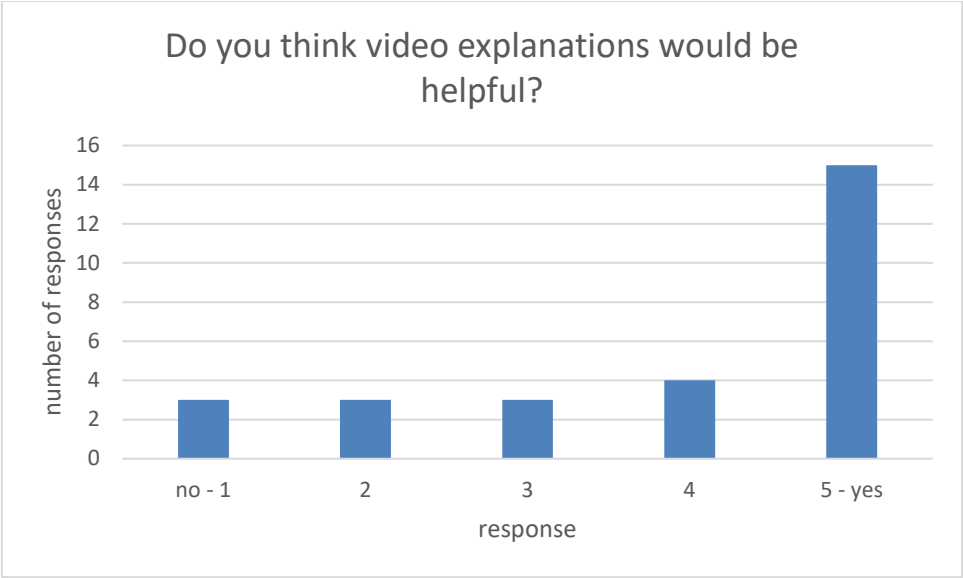


Of the 29 responses to the questionnaire, 22 said that they do print the Test Guidelines. Of those who print, 5 said they only print part(s) of the document, with the table of characteristics (section 7) and associated explanations (section 8) being the most printed section of the Test Guidelines.

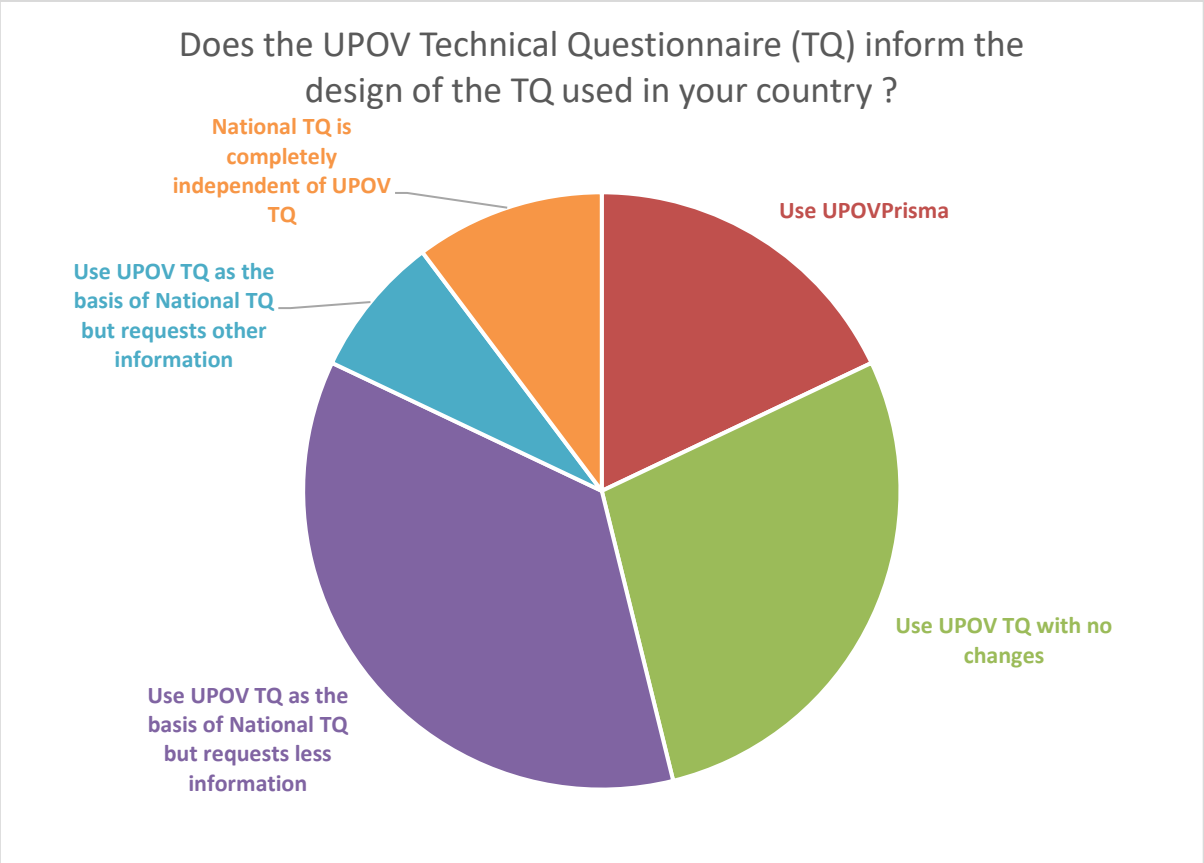
The Group was split on the need for the four languages in the table of characteristics (16 “for” versus 13 “against”).

The summary of the group responses to the questionnaire indicated that illustrations, diagrams, or photographs was the preferred method of harmonising observations; followed by text explanations, then example varieties in the order of those agreed across the UPOV membership, then regional sets, and then National.

There was a positive response to the inclusion of video explanations.



The questionnaire included questions related to the use of the UPOV Technical Questionnaires.



The group had mixed opinions on whether the TQ should remain part of the Test Guideline (48%) or form a separate document (34%). The remaining responses were unsure and would have to check (17%).

The TWF did not agree on whether guidance on methods being contained in a separate document. They were in favour of having a structured template for guidance on techniques to ensure consistent presentation.

Some responded to indicate that links within the document could help usability, or to put the explanation of characteristics beside the characteristics.

Follow-up actions:

This summary of the discussion and the results of the online questionnaire will be collated with those from discussions at the 2025 sessions of the TWO, TWV, and TWA, along with other comments made during the discussions and presented to the Technical Committee for consideration at its sixty-first session.

Margaret Wallace (Niab)
United Kingdom

[Annex IV follows]

ANNEX IV

TECHNICAL QUESTIONNAIRE, SECTION 4.2: “METHOD OF PROPAGATING THE VARIETY”

CODE	ENGLISH	FRANÇAIS	DEUTSCH	ESPAÑOL	LATIN
112	Mango	Manguier	Mango	Mango	Mangifera indica L.

4.2 Method of propagating the variety

Information on method of propagating the variety

☒ **Vegetatively propagated varieties**

- ☒ Cuttings
- ☒ *In vitro* propagation
- ☒ Budding or grafting
- ☒ Air layering
- ☒ Other (please specify):

☒ **Other (please specify):**

[Annex V follows]


Atatürk Horticultural
Central Research Institute
Yalova, TÜRKİYE

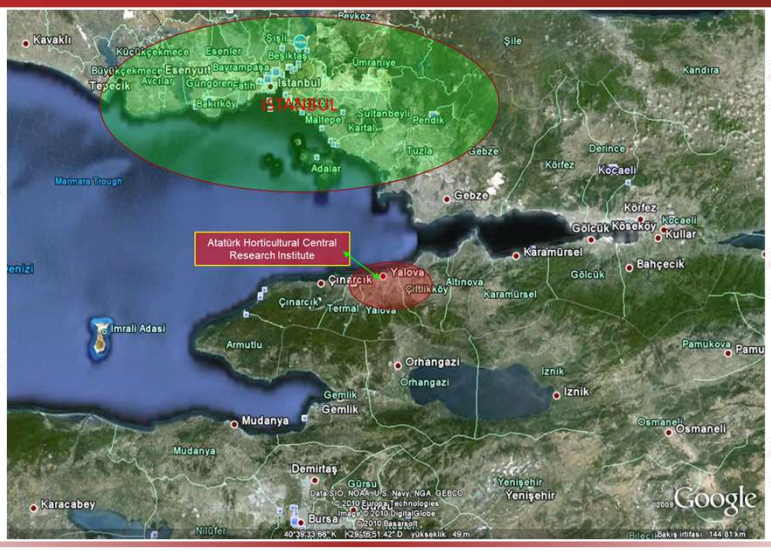
1


Founded in 1961; R&D activities since 1963
Operates on 100 hectare
under the Ministry of Agriculture and Forestry
Mission: “To lead research and innovation in horticultural crops, support sustainable production, and serve growers and industry.”

2

T.C. TARIM VE ORMAN BAKANLIĞI

TAGEM AR-GE & İNOVASYON



#ÜretiminÜreticininYüzyılı

3

T.C. TARIM VE ORMAN BAKANLIĞI

TAGEM AR-GE & İNOVASYON

Research Committee

DIRECTOR

Technical Coordinator

- Accounting Office
- Internal Audit Officer
- Quality Management Officer
- Civil Defense Expert

Deputy Director

- Human Resources
- Financial Services
- Support Services
- Maintenance and Repair Services

Departments (12 Departments + 1 R&D Center)

- Fruit Production
- Vegetable Production
- Viticulture
- Ornamental Plants
- Agricultural Economics
- Plant Protection
- Medicinal and Aromatic Plants
- Post-Harvest Physiology
- Food Technologies
- Soil & Water Resources
- Production & Operations
- Education & Extension
- Musroom Research Center (R&D and Innovation Hub)

#ÜretiminÜreticininYüzyılı

4

T.C. TARIM VE ORMAN BAKANLIĞI
TAGEM AR-GE & İNOVASYON

- Fruit Gene Bank
- National Geophyte Gene Bank
- Rose Gene Bank

- Mushroom Research Center

- BAHCE journal
  - ISSN: 1300-8943
  - e-ISSN: 2791-6375
  - Start: 1968
  - 2 Issues Per Year

Gene Bank | Advanced R&D Center | Training Center | Magazine

5

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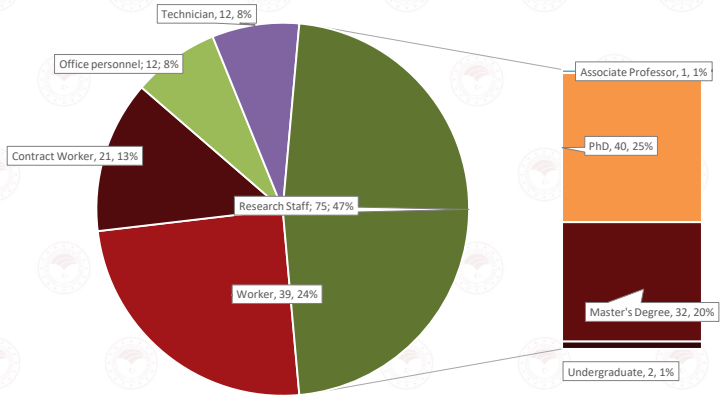
TAGEM AR-GE & İNOVASYON

PERSONNEL (181 People)



6

T.C. TARIM VE ORMAN BAKANLIĞI

TAGEM AR-GE & İNOVASYON

R&D INNOVATION

- With our history exceeding 60 years, our organization has completed research studies on 785 different subjects and currently
- We continue our work with 62 regional, national and international R&D projects, 44 of which are funded by TAGEM, 16 by TÜBİTAK and 2 by Republic of Korea.

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TAGEM AR-GE & İNOVASYON

In the 1960s Ornamental Plants

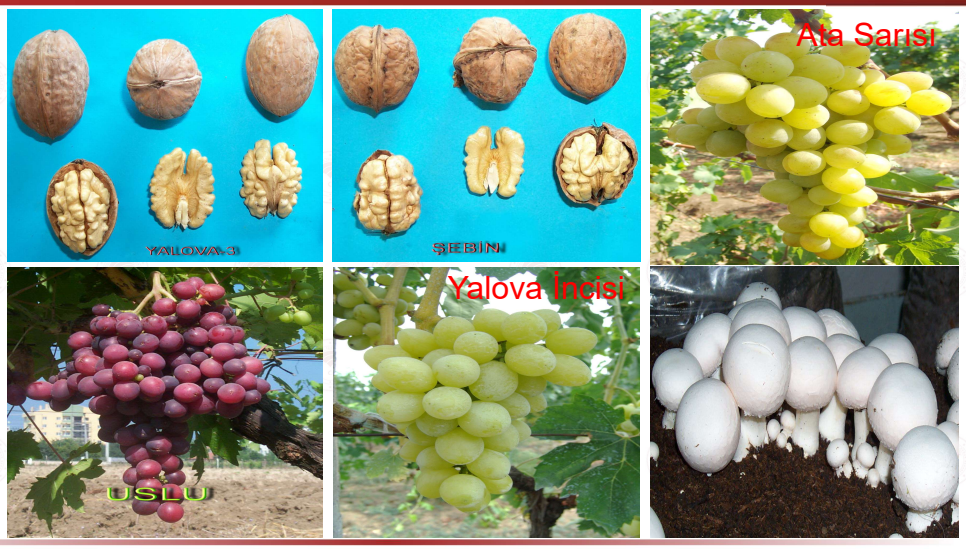
8

T.C. TARIM VE ORMAN BAKANLIĞI

TAGEM AR-GE & İNOVASYON

2025 AİLE YILI

In the 1970s
Walnuts, Grapes and Mushrooms



#ÜretiminÜreticininYüzyılı

9

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TAGEM AR-GE & İNOVASYON

2025 AİLE YILI

In the 1980s
Dwarf Fruit Cultivation

#ÜretiminÜreticininYüzyılı

10

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In the 1990s Kiwi Fruit

11

T.C. TARIM VE ORMAN BAKANLIĞI TAGEM AR-GE & İNOVASYON

In the 2000s Geophytes

12

T.C. TARIM VE ORMAN BAKANLIĞI TAGEM AR-GE & İNOVASYON

In the 2010s Aronia

13

T.C. TARIM VE ORMAN BAKANLIĞI TAGEM AR-GE & İNOVASYON

In the 2020s

Rose breeding and precision horticulture


Gonca 1961


Mis Gonca


Ramaela


Setenay


Yaban Gülü


Gülce


Gülsarı 1923


Banu


Fatih 1453


Solmaz 66


Yiğit


Bayrak 2023

14

T.C. TARIM VE ORMAN BAKANLIĞI TAGEM AR-GE & İNOVASYON

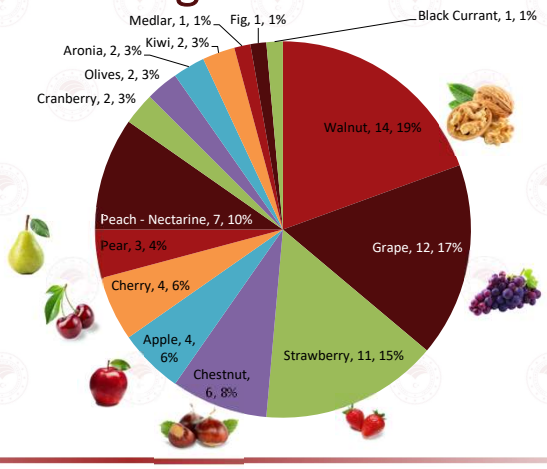
Plant Breeding Studies

15

T.C. TARIM VE ORMAN BAKANLIĞI TAGEM AR-GE & İNOVASYON

Fruit Breeding Studies

- 72 Fruit Cultivars are Developed using Hybridization and Selection Breeding methods and Registered



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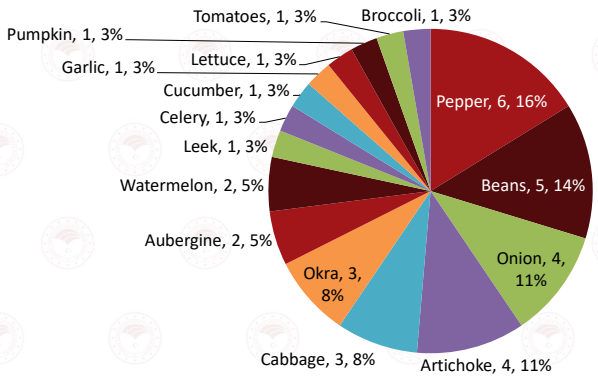
Vegetable Breeding Studies

- 37 Vegetable Cultivars are Developed using Hybridization and Selection Breeding methods and Registered



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Ornamental Plant Breeding Studies

There are:

- 16 roses
- 9 peonies
- 3 lilies
- 3 irises

Varieties obtained through hybridization or selection breeding and registered in the name of our Institute

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Medicinal and Aromatic Plants Breeding Studies

Three THYME (*Origanum vulgar* subsp . hirtum) variety: **"Tınmaz"**, **"Başer"** and **" Arımar 77"** and one **ROSEMARY variety** called ***" Eslem 77"*** registered on behalf of our institute

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Genetic Resources

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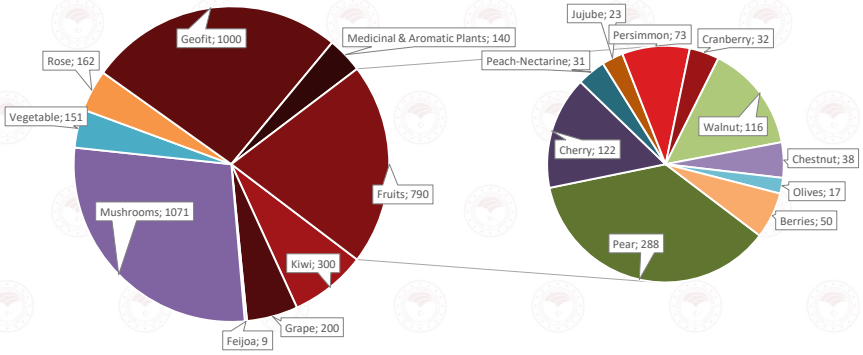
Genetic Resources

- 1,299 in fruits and vineyards , 1,222 in vegetables and mushrooms, 1,162 in ornamental plants, 140 medicinal and aromatic plants with a total of **3,823 genotypes** are preserved in our genetic resource banks.



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#ÜretiminÜreticininYüzyılı

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National Geophyte Gene Center

- Geophyte plant samples belonging to approximately 900 species [1300 taxa (1100 local, 200 foreign), (461 Endemic, 181 Rare Endemic)] have been collected.
- The Geofit Research Center, different ecologies are created and plants are preserved in conditions suitable for their natural ecology.

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#ÜretiminÜreticininYüzyılı

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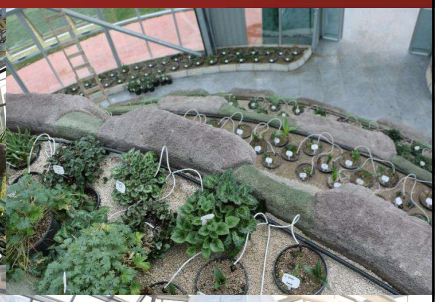

#ÜretiminÜreticininYüzyılı

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TAGEM AR-GE & İNOVASYON

Rose Gene Bank

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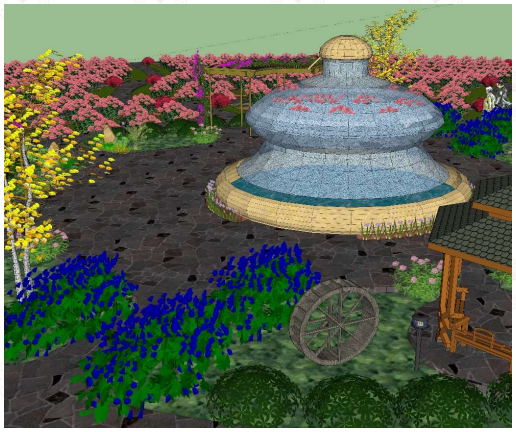
ROSE COLLECTION GARDEN (ROSARIUM)



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Important Innovations and Studies

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Mushroom Studies

- Within the scope of the project titled "*Transfer of Bottle Culture Technology in Exotic Mushroom Production and Mushroom Production Excellence Center",* which was completed with the support of the Eastern Marmara Development Agency (MARKA) **bottle culture** technology**,** which is widely used in Far Eastern countries such as China, Republic of Korea and Japan and which has provided a rapid increase in mushroom production in these countries has begun to be implemented in our country.

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Mushroom Research Center

ŞİŞE KÜLTÜRÜNDE

MANTAR YETİŞTİRİLİĞİ

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Kiwi Fruit

✓ The first studies on kiwi in Türkiye started in our organization.

✓ As a result of kiwi breeding studies carried out for more than ten years, **our first national kiwi variety, İLKALTIN,** has been registered.

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COMMERCIALIZED PRODUCTS

The production, cultivation and marketing rights of the yellow-fleshed kiwifruit variety candidates developed by our institute named **"HO-8"** and **"J-284"** were transferred to the Italian-based MAGEL SRL- Serroplast Group Company for 95,000 Euros.

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Jujube (*Zizyphus jujuba*)

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Aronia (*Aronia melanocarpa*)

✓ Aronia fruit is generally rich in anthocyanins, procyanidins and polyphenols. It has a stopping and shrinking effect on cancerous cells.

✓ In addition to being consumed as fresh and dried fruit, it can be used in the food industry in the production of cakes, jams, fruit juices, tea, ice cream, etc. It is also used as a food supplement and natural food coloring.

✓ ' NERO' and 'VIKING' Aronia varieties have been registered by our Institute.

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COMMERCIALIZED PRODUCTS

Onion varieties “Akgün 12”, “ Kantartopu 3” and “Beşirli 77” developed and registered by our institute The right to produce, market and sell seeds of onion varieties was transferred to private sector (Eymen Tohumculuk İth. İhr. San. Tic. Ltd. Şti.) for 10 years for a price of 350,000 TL.

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Saplings and Seeds

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Sapling Certification

- For the production of certified saplings, which is very important in fruit production, the mother plants in our organizations have been determined and tagged.

For this purpose, our Institute has mother plants for 124 different varieties and rootstocks.
(BASE MATERIAL)

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Vegetable Seed Production

- Original stage seed production is carried out for 33 vegetable varieties.
- Organic vegetable seeds (Tomato, Pepper, Eggplant, Cabbage, Spinach, Leek, Okra, Celery, Red Cabbage, Watermelon, Lettuce, Onion) were first produced in our organization in Turkey.

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PLANNED EDUCATION CENTER





#ÜretiminÜreticininYüzyılı

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Congresses and Symposiums

Congress / Symposium / Workshop	History
X. International Kiwi Symposium	September 27-30, 2021
II. Medicinal and Aromatic Plants Symposium	September 23-25, 2014
5th Ornamental Plants Congress	May 6-9, 2013
1st International Kiwi Workshop	November 26-27, 2012
Yalova Organic Agriculture Workshop	February 07, 2012
VII. Vegetable Farming Symposium	August 26-29, 2008
3rd Organic Agriculture Symposium	November 01-04, 2006
Allelopathy Workshop	June 13-15, 2006

Congress / Symposium / Workshop	History
IV. International Cherry-Sour Cherry Symposium	June 06-10, 2005
I. Stone Fruits Symposium	September 25-28, 2001
IV. Viticulture Symposium	October 20-23, 1998
1st Ornamental Plants Congress	October 06-09, 1998
Symposium on Preservation and Marketing of Horticultural Products	October 21-24, 1997
Pome Fruits Symposium	September 2-5, 1997
5th Edible Mushroom Congress	05-07 November 1996
IV. Edible Mushroom Congress	02-04 November 1992

#ÜretiminÜreticininYüzyılı

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Education & Extension Services

- Programmed In-Service Training
  - Agricultural Engineers
  - Agricultural Technicians
  - Manufacturers
- On-Site Training
  - Technical Staff
  - Producers
- Student Internship Training
  - High school and university students

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Future Research Directions

- Precision horticulture,
- Molecular breeding,
- Climate-smart varieties

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[Annex VI follows]

ANNEX VI

LIST OF LEADING EXPERTS

DRAFT TEST GUIDELINES TO BE SUBMITTED TO THE TECHNICAL COMMITTEE IN 2025

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

by August 8, 2025

Full draft Test Guidelines

Species	Basic Document(s)	Leading expert(s)
*Granadilla, Passion fruit (*Passiflora edulis* Sims) (Revision)	TG/256/2(proj.3)	Mr. Barkat Mustafa (AU)
*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.5)	Ms. Chuanhong Zhang (CN)
*Hazelnut (*Corylus avellana* L.; *Corylus colurna* L., *Corylus americana* Marshall; Hybrids between *Corylus americana* and *Corylus avellana*) (Revision)	TG/71/4(proj.6)	Mr. Flavio Roberto de Salvador (IT)

DRAFT TEST GUIDELINES TO BE DISCUSSED AT TWF/57
(* indicates possible final draft Test Guidelines)

(Guideline date for Subgroup draft to be circulated by Leading Expert: May 29, 2026
Guideline date for comments to Leading Expert by Subgroup: June 26, 2026)

New draft to be submitted to the Office of the Union
July 24, 2026

Full draft Test Guidelines

Species	Basic Document(s)	Leading expert(s)	Interested experts (States/Organizations) [1]
*Argan (*Argania spinosa* (L.) Skeels)	TG/ARGAN(proj.7)	Ms. Ibtihaj Belmehdi (MA)	IL, CIOPORA, Office
Blueberry (Revision)	TG/137/5	Ms. Nahida Bhuiyan (AU)	CA, CN, JP, KR, NZ, QZ, TR, ZA, CIOPORA, Office
*European Pear (*Pyrus communis* L.) (Revision)	TG/15/4(proj.1)	Mr. Erik Schulte (DE)	AU, CA, FR, IT, JP, NZ, QZ, ZA, CIOPORA, Office
*Guava (*Psidium guajava* L.; *Psidium cattleyanum* Sabine var. *littorale* (Raddi) Fosberg) (Revision)	TG/110/4(proj.4)	Ms. Ling Gao (CN)	BR, KE, KR, MX, MY, QZ, CIOPORA, Office
*Japanese Pear (*Pyrus pyrifolia* (Burm. f.) Nakai; *Pyrus ussuriensis* Maxim. & Rupr.; Hybrids between *Pyrus pyrifolia* and *Pyrus ussuriensis*) (Revision)	TG/149/3(proj.2)	Mr. Koji Nakanishi (JP)	AU, CA, CZ, FR, GE, HU, KR, NZ, QZ, CIOPORA, Office
*Japanese Plum (*Prunus salicina* Lindl. and interspecific hybrids) (Revision)	TG/84/5(proj.2)	Ms. Carole Dirwimmer (FR)	AU, CA, CZ, GE, HU, IT, JP, KR, NZ, QZ, ZA, CIOPORA, Office

Partial revisions

Species	Basic Document(s)	Leading expert(s)	Interested experts (States/Organizations) [1]
Lemon (Lemons and Limes (*Citrus* L. - Group 3)) - Coverage of the Test Guidelines	TG/203/1 Rev. Corr.	Ms. Gema Ancillo Antón (ES)	CA, JP, KR, NZ, QZ, TR, ZA, CIOPORA, Office
Mandarin (*Citrus* L. – Group 1) - Coverage of the Test Guidelines	TG/201/1 Rev. Corr.	Ms. Gema Ancillo Antón (ES)	CA, JP, KR, NZ, QZ, TR, ZA, CIOPORA, Office
Trifoliate Orange ((*Poncirus*) (Citrus L. - Group 5)) - Coverage of the Test Guidelines	TG/83/4 Rev. Corr.	Ms. Gema Ancillo Antón (ES)	CA, JP, KR, NZ, QZ, TR, ZA, CIOPORA, Office
Oranges (*Citrus* L. - Group 2) - Coverage of the Test Guidelines	TG/202/1 Rev. 2	Ms. Gema Ancillo Antón (ES)	CA, JP, KR, NZ, QZ, TR, ZA, CIOPORA, Office
Pummelo (Grapefruit and) (*Citrus* L. - Group 4) - Coverage of the Test Guidelines	TG/204/1 Rev. 2	Ms. Gema Ancillo Antón (ES)	CA, JP, KR, NZ, QZ, TR, ZA, CIOPORA, Office

[1] for name of experts, see List of Participants

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 VI and of document]