

Technical Committee

TC/54/9

**Fifty-Fourth Session
Geneva, October 29 and 30, 2018**

Original: English
Date: October 9, 2018

VARIETY DESCRIPTION DATABASES

Document prepared by the Office of the Union

Disclaimer: this document does not represent UPOV policies or guidance

EXECUTIVE SUMMARY

1. The purpose of this document is to report on developments concerning variety description databases since the 2017 session of the Technical Committee (TC).
2. The TC is invited to:
 - (a) note the reports by Austria (Durum wheat), European Union (Potato), France (Peach) and the Netherlands (Rose) on databases containing morphological and/or molecular data;
 - (b) consider the type of information that should be collected on existing databases containing morphological and/or molecular data for inclusion in the GENIE database, according to available resources for the modification of the GENIE database; and
 - (c) note the information presented at the BMT, at its seventeenth session, as presented in this document and in document TC/54/11 Add.

3. The structure of this document is as follows:

BACKGROUND	1
DEVELOPMENTS IN 2017	2
Technical Working Party for Fruit Crops.....	2
Working Group on Biochemical and Molecular Techniques and DNA-Profiling in Particular.....	2
DEVELOPMENTS IN 2018	2
Technical Working Party on Automation and Computer Programs.....	2
Working Group on Biochemical and Molecular Techniques and DNA-Profiling in Particular.....	3

4. The following abbreviations are used in this document:

- TC: Technical Committee
- TC-EDC: Enlarged Editorial Committee
- TWA: Technical Working Party for Agricultural Crops
- TWC: Technical Working Party on Automation and Computer Programs
- TWF: Technical Working Party for Fruit Crops
- TWO: Technical Working Party for Ornamental Plants and Forest Trees
- TWV: Technical Working Party for Vegetables
- TWPs: Technical Working Parties

BACKGROUND

5. Developments prior to 2017 are presented in document TC/53/9 “Variety description databases”.

DEVELOPMENTS IN 2017

Technical Committee

6. The TC, at its fifty-third session, held in Geneva from April 3 to 5, 2017, agreed to request the Office of the Union to collect data on existing databases with morphological and/or molecular data. The TC agreed that the information collected should be included in the GENIE database and requested the Office of the Union to plan for the modification of the GENIE database according to available resources (see document TC/53/31 "Report", paragraphs 175 to 181).

7. On May 16, 2017, the Office of the Union issued UPOV Circular E-17/082 inviting members to provide information and/or make presentations to the TWPs, at their sessions in 2017, on variety description databases and on existing databases containing morphological and/or molecular data. Information collected on existing databases containing morphological and/or molecular data could be included in the GENIE database, according to available resources for the modification of the GENIE database.

8. UPOV Circular E-17/082, issued on May 16, 2017, also invited members to present their experiences on the application of databases, development of new ideas regarding the management of information and guidance on the management of databases.

Technical Working Party for Fruit Crops

9. The TWF, at its forty-eight session, held in Kelowna, Canada, from September 18 to 22, 2017, noted the work done by France for the GEMMA Database for Peach and agreed that the initial step before building any database should be to agree on the information to be shared, and the format to exchange and store the information (see document TWF/48/13 "Report", paragraph 139).

Working Group on Biochemical and Molecular Techniques and DNA-Profiling in Particular

10. The BMT, at its sixteenth session, held in La Rochelle, France, from November 7 to 10, 2017, considered document BMT/16/21 "Integration of molecular data into DUS testing in Durum Wheat: Use of a standardized method for the efficient management of reference collections" and received a presentation by Ms. Alexandra Ribarits (Austria) (see document BMT/16/29 "Report", paragraph 34).

Technical Working Party on Automation and Computer Programs

11. The TWC, at its thirty-fifth session, held in Buenos Aires, Argentina, from November 14 to 17, 2017, received a presentation by the Office of the Union on "Standards for databases containing molecular information", a copy of which would be provided as document TWC/35/20. The TWC noted the offer for interested members to participate in the test campaigns to develop the ST-26 standard for the presentation of nucleotide and amino acid sequence listings using XML (see document TWC/35/21 "Report", paragraph 127).

DEVELOPMENTS IN 2018

Technical Working Party on Automation and Computer Programs

12. The TWA, TWC and TWV, at their sessions in 2018, considered document TWP/2/2 "Variety description databases" (see documents TWA/47/7 "Report", paragraphs 90 and 91; TWC/36/15 "Report", paragraphs 70 to 73; and TWV/52/20 "Report", paragraphs 98 and 99).

13. The TWC noted the report on discussions at the TWF about the work conducted by France for the establishment of a database for Peach varieties using the GEMMA database and agreed to clarify that data for any crop or species could be stored using GEMMA.

14. The TWC noted the report by the European Union that a GEMMA database for potato varieties containing molecular information was being currently developed with the support of information technology experts from France and the participation of several PVP offices.

15. The TWV received a presentation on databases in the European Union by an expert from the European Union. A copy of the presentation is provided in document [TWV/52/16](#) "European Union databases."

Working Group on Biochemical and Molecular Techniques and DNA-Profiling in Particular

16. The BMT, at its seventeenth session, held in Montevideo, Uruguay, from September 10 to 13, 2018, considered document BMT/17/11 "Construction of a European Potato database with varieties of common knowledge and its implementation in the potato DUS testing system Part I: Construction, maintenance and use of the common database" and received a presentation by Ms. Beate Rücker (Germany), a copy of which would be provided as document BMT/17/11 Add. (see document BMT/14/25 "Report", paragraphs 51 to 53 and 80).

17. The BMT considered document BMT/17/12 "Construction of a European Potato database with varieties of common knowledge and its implementation in the potato DUS testing system Part II: Generation of molecular data" and received a presentation by Mr. Alex Reid (United Kingdom), a copy of which would be provided as document BMT/17/12 Add.

18. The BMT considered document BMT/17/15 "A DNA database for Rose: Development and validation of a SNP marker set" and received a presentation by Ms. Hedwich Teunissen (Netherlands), a copy of which would be provided as document BMT/17/15 Add.

19. At its eighteenth session, to be held in 2019, the BMT planned to discuss variety description databases including databases containing molecular data. The BMT also planned to discuss how to overcome ownership matters, confidentiality, access to data and material, authorization for work to be performed and availability of results and information to partners, as reported in document TC/54/11 Add. "Addendum to Molecular Techniques".

20. *The TC is invited to:*

(a) note the reports by Austria (Durum wheat), European Union (Potato), France (Peach) and the Netherlands (Rose) on databases containing morphological and/or molecular data;

(b) consider the type of information that should be collected on existing databases containing morphological and/or molecular data for inclusion in the GENIE database, according to available resources for the modification of the GENIE database; and

(c) note the information presented at the BMT, at its seventeenth session, as presented in this document and in document TC/54/11 Add.

[End of document]