TWP/4/2

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International Union for the Protection of New Varieties of Plants

**Technical Working Party for Vegetables** 

Fifty-Fourth Session

Brasilia, Brazil, May 11 to 15, 2020

**Technical Working Party for Ornamental Plants and Forest Trees** 

Fifty-Second Session

Roelofarendsveen, Netherlands, June 8 to 12, 2020

**Technical Working Party for Agricultural Crops** 

Forty-Ninth Session

Saskatoon, Canada, June 22 to 26, 2020

**Technical Working Party for Fruit Crops** 

Fifty-First Session

Nîmes, France, July 6 to 10, 2020

**Technical Working Party on Automation and Computer Programs** 

Thirty-Eighth Session

Alexandria, United States of America, September 21 to 23, 2020

#### **VARIETY DESCRIPTION DATABASES**

Document prepared by the Office of the Union

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# **EXECUTIVE SUMMARY**

- 1. The purpose of this document is to report on developments concerning variety description databases and to invite members of the Union to report on work concerning the development of databases containing morphological and/or molecular data.
- 2. Members of the Union are invited to report to the TWPs on work concerning the development of databases containing morphological and/or molecular data.
- 3. The TWPs are invited to note the reports made at the BMT meeting on databases containing morphological and/or molecular data.
- 4. The following abbreviations are used in this document:

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

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

5. The structure of this document is as follows:

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#### **BACKGROUND**

- 6. At its forty-fifth session, held in Geneva from March 30 to April 1, 2009, the TC noted from the developments reported in document TC/45/9 "Publication of Variety Descriptions" that members of the Union were developing databases containing morphological and/or molecular data and, where considered appropriate, were collaborating in the development of databases for the management of variety collections, particularly on a regional basis. The TC agreed that it could be beneficial to offer the possibility for members of the Union to report on that work in a coherent way to the TC, the TWPs and the BMT. On that basis, the TC agreed to replace the agenda item "Publication of variety descriptions" with an item for "Variety description databases" on the agendas of the forthcoming sessions of the TC, TWPs and the BMT. In that respect, it recalled the importance of the list of criteria for consideration for the use of descriptions obtained from different locations and sources as set out in document TC/45/9, paragraph 3. The TC also agreed that the information presented would not need to be related to the publication of descriptions (see document TC/45/16 "Report", paragraph 173).
- 7. Following the decision by the TC, at its forty-fifth session, it is recalled that members of the Union are invited to report to TC, TWPs and BMT on work concerning the development of databases containing morphological and/or molecular data.
  - 8. Members of the Union are invited to report to the TWPs on work concerning the development of databases containing morphological and/or molecular data.

### **DEVELOPMENTS IN 2019**

Developments prior to 2019 are presented in document TWP/3/2 "Variety description databases".

#### **Technical Working Parties**

- 10. At their sessions in 2019, the TWO, TWV, TWF, TWA and TWC considered document TWP/3/2 "Variety description databases" (see documents TWO/51/12 "Report", paragraphs 90 to 92; TWV/53/14 Rev. "Revised Report", paragraphs 110 to 112; TWF/50/13 "Report", paragraphs 116 to 118; TWA/48/9 "Report", paragraphs 101 to 103; and TWC/37/12 "Report", paragraphs 101 to 106).
- 11. The TWO, TWV, TWF, TWA and TWC noted that the TC, at its fifty-fourth session, had agreed with the TWF 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.
- 12. The TWO, TWV, TWF, TWA and TWC noted that the TC, at its fifty-fourth session, had agreed with the proposal by the BMT that, as a first step, discussions on databases should address the issues of 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.

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

13. The BMT, at its eighteenth session, held in Hangzhou, China, from October 16 to 18, 2019, received the following presentations relating to variety description databases:

Advances in the construction and application of DNA fingerprint database in maize

14. The BMT received a presentation "Use of SSR and SNP markers in maize variety identification" by Ms. Rui Wang (China), a copy of which was provided as document BMT/18/6 Rev. (see document BMT/18/21 "Report", paragraph 8).

A simple SSR based identification system for sweet potato

15. The BMT considered document BMT/18/16 and received a presentation by Mr. Alex Reid (United Kingdom), a copy of which was provided as an addendum to document BMT/18/16 (see document BMT/18/21 "Report", paragraph 17).

Use of molecular markers for protection and varietal identification: state of the art in Argentina

16. The BMT considered document BMT/18/17 and received a presentation by Mr. Mariano Mangieri (Argentina), a copy of which was provided as an addendum to document BMT/18/17 (see document BMT/18/21 "Report", paragraph 18).

Association Analysis of SSR Markers and Agronomic Traits in Soybean

17. The BMT received a presentation by Ms. Dongmei Li (China), a copy of which was provided in document BMT/18/19 Rev. (see document BMT/18/21 "Report", paragraph 12).

#### **Technical Committee**

- 18. The TC, at its fifty-fifth session, held in Geneva on October 28 and 29, 2019, noted that, along with the decision by the Council to organize only one annual session of the UPOV bodies meeting in Geneva, a set of measures had been adopted to make the sessions as efficient as possible, including the separation of documents into two types: documents containing matters on which a decision by the body concerned is needed ('decision documents'); and documents for information only (see document TC/55/25 "Report", paragraphs 255 to 257).
- 19. The TC noted that documents for information only were posted on a separate section of the website of the body concerned ('information section') and not considered individually.
- 20. The TC noted that document TC/55/INF/3 "Variety description databases" had been posted as a document for information on the TC/55 webpage.
  - 21. The TWPs are invited to note the reports made at the BMT meeting on databases containing morphological and/or molecular data.

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