

Administrative and Legal Committee

CAJ/74/8

**Seventy-Fourth Session
Geneva, October 23 and 24, 2017**

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MOLECULAR TECHNIQUES

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EXECUTIVE SUMMARY

1. The purpose of this document is to report developments concerning molecular techniques in relation to the Technical Committee, and on a question and answer concerning the information on the situation in UPOV with regard to the use of molecular techniques for a wider audience, including the public in general.

2. The CAJ is invited to note that:

(a) a question and answer concerning the information on the situation in UPOV with regard to the use of molecular techniques for a wider audience, including the public in general, as set out in paragraph 7, was adopted by the Council, at its fiftieth ordinary session;

(b) the TC, at its fifty-third session, agreed that possible future collaboration between UPOV, OECD and ISTA might include the harmonization of terms and methodologies used for different crops and the possible development of standards, after agreement by those organizations;

(c) the TC agreed that UPOV and OECD should consider making progress in collaboration if ISTA was unable to participate in the near future;

(d) the TC agreed to propose that the meetings of the BMT be held on an annual basis and that consideration be given to organizing the sessions of the TWC and BMT back-to-back in the same location to facilitate exchange of information; and

(e) practical workshops on “DNA Techniques and Variety Identification” were held in Roelofarendsveen, Netherlands, from May 8 to 10, 2017 and from September 20 to 22, 2017.

3. The following abbreviations are used in this document:

- BMT: Working Group on Biochemical and Molecular Techniques, and DNA-Profiling in Particular
- CAJ: Administrative and Legal Committee
- TC: Technical Committee
- TWC: Technical Working Party on Automation and Computer Programs
- OECD: Organization for Economic Co-operation and Development
- AOSA: Association of Official Seed Analysts
- ISTA: International Seed Testing Association

4. The structure of this document is as follows:

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PRESENTATION OF INFORMATION ON THE SITUATION IN UPOV WITH REGARD TO THE USE OF MOLECULAR TECHNIQUES

5. The background of this matter is provided in document CAJ/73/9 “Molecular Techniques”.
6. The CAJ, at its seventy-third session,¹ agreed the draft question and answer concerning the information on the situation in UPOV with regard to the use of molecular techniques for a wider audience, including the public in general, as agreed by the TC, at its fifty-second session.²
7. The Council, at its fiftieth ordinary session, adopted the following FAQ concerning information on the situation in UPOV with regard to the use of molecular techniques for a wider audience (“FAQ on molecular techniques”), including the public in general:³

“Is it possible to obtain protection of a variety on the basis of its DNA-profile?”

“For a variety to be protected, it needs to be clearly distinguishable from all existing varieties on the basis of characteristics that are physically expressed, e.g. plant height, time of flowering, fruit color, disease resistance etc. The DNA-profile is not the basis for obtaining the protection of a variety, although this information may be used as supporting information.

“A more detailed explanation is provided in the FAQ ‘Does UPOV allow molecular techniques (DNA profiles) in the examination of Distinctness, Uniformity and Stability (“DUS”)?’

“See also:

“What are the requirements for protecting a new plant variety?”

DEVELOPMENTS AT THE FIFTY-THIRD SESSION OF THE TC

8. The TC, at its fifty-third session, noted the report on developments in the TWPs and BMT, as set out in document TC/53/11, paragraphs 5 to 24.⁴
9. The TC noted that the development of a joint document explaining the principal features of the systems of the OECD, UPOV and ISTA could only start after agreement by OECD and ISTA.
10. The TC noted that the development of a joint OECD/UPOV/ISTA document containing an inventory of molecular marker techniques used by crop could only start after agreement by OECD and ISTA.
11. The TC agreed that possible future collaboration between UPOV, OECD and ISTA might include the harmonization of terms and methodologies used for different crops and the possible development of standards, after agreement by those organizations.
12. The TC considered whether to explore circumstances in which the same techniques and information could be used by OECD, ISTA and UPOV, taking into account the different objectives of the organizations, and agreed that the organization by Naktuinbouw of a practical workshop in 2017, in Roelofarendsveen, Netherlands, from May 8 to 10, 2017, could explore such possibilities on the basis of real situations.⁵
13. The TC, at its fifty-third session, agreed that UPOV and OECD should consider making progress in the matters above if ISTA was unable to participate in the near future.
14. The TC noted the offer by the Netherlands to report on projects on the use of molecular techniques in DUS examination to the TWC.
15. The TC noted the offer by China to report its experience on the use of DNA databases of maize, rice and wheat when selecting similar varieties for the examination of distinctness to the TWC.

¹ Held in Geneva, on October 25, 2016.

² See document [CAJ/73/10](#) “Report on the Conclusions”, paragraph 57.

³ See document [C/50/19](#) “Report on the Decisions”, paragraph 11. FAQ available at: <http://www.upov.int/about/en/faq.html#QG121>.

⁴ See document [TC/53/31](#), paragraphs 198 to 211.

⁵ Practical workshops on “DNA Techniques and Variety Identification” were organized by Naktuinbouw in Roelofarendsveen, Netherlands, from May 8 to 10, 2017 and September 20 to 22, 2017.

16. The TC noted that the TWC had agreed to invite presentations from members on the statistical aspects of using molecular markers in DUS examination, including the selection of similar varieties and organization of growing trials.

17. The TC noted the offer by France to make a presentation on current work with databases that included molecular information with computation of molecular distances using the GAIA software, to the TWC at its thirty-fifth session.

18. The TC noted that the TWC had agreed that software and databases as well as associated statistical methods were important elements of DUS examination and of increasing relevance to plant variety protection, and the Chairperson of the TWC should report on these particular elements of the work of the TWC to the TC.

19. The TC noted that a Joint OECD/UPOV/ISTA/AOSA Workshop on Biochemical and Molecular Methods had been held in Paris on June 8, 2016, and that the recommendations of the Joint OECD/UPOV/ISTA/AOSA Workshop as reproduced in document TC/53/11, paragraph 25, had been approved by the Annual Meeting of the OECD Seed Schemes, held in Paris on June 9 and 10, 2016.

20. The TC noted that a question and answer concerning the information on the situation in UPOV with regard to the use of molecular techniques for a wider audience, including the public in general, had been adopted by the Council, at its fiftieth ordinary session.

21. The TC agreed to propose that the meetings of the BMT be held on an annual basis and that consideration be given to organizing the sessions of the TWC and BMT back-to-back in the same location to facilitate exchange of information.

22. *The CAJ is invited to note that:*

(a) a question and answer concerning the information on the situation in UPOV with regard to the use of molecular techniques for a wider audience, including the public in general, as set out in paragraph 7 of this document, was adopted by the Council, at its fiftieth ordinary session;

(b) the TC, at its fifty-third session, agreed that possible future collaboration between UPOV, OECD and ISTA might include the harmonization of terms and methodologies used for different crops and the possible development of standards, after agreement by those organizations;

(c) the TC agreed that UPOV and OECD should consider making progress in collaboration if ISTA is unable to participate in the near future;

(d) the TC agreed to propose that the meetings of the BMT be held on an annual basis and that consideration be given to organizing the sessions of the TWC and BMT back-to-back in the same location to facilitate exchange of information; and

(e) practical workshops on "DNA Techniques and Variety Identification" were held in Roelofarendsveen, Netherlands, from May 8 to 10, 2017 and from September 20 to 22, 2017.

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