



TWF/47/2 Add.
ORIGINAL: English
DATE: November 9, 2016

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS
Geneva

TECHNICAL WORKING PARTY FOR FRUIT CROPS

Forty-Seventh Session
Angers, France, November 14 to 18, 2016

ADDENDUM TO
MOLECULAR TECHNIQUES

Document prepared by the Office of the Union

Disclaimer: this document does not represent UPOV policies or guidance




This document contains presentations to be made at the forty-seventh session of the Technical Working Party for Fruit Crops (TWF), as follows:

- Annex I: “Reports on developments concerning molecular techniques within UPOV”, by the Office of the Union;
- Annex II: “The use of molecular techniques in DUS Examination for fruit species in France”, by an expert from France.


[Annexes follow]

ANNEX I

REPORTS ON DEVELOPMENTS CONCERNING MOLECULAR TECHNIQUES WITHIN UPOV
BY THE OFFICE OF THE UNION




OECD/UPOV/ISTA JOINT WORKSHOP ON MOLECULAR TECHNIQUES

WORKSHOP 1 

(UPOV BMT/14 - Seoul, Republic of Korea, November 12, 2014)

Agreed:




1. would be useful to develop a **joint document explaining the principal features** (e.g. DUS, variety identification, variety purity, etc.) **of the systems of OECD, UPOV and ISTA.**


WORKSHOP 2 

(OECD Seed Schemes- Paris, June 8, 2016)

OECD Annual Meeting approved:


1. develop a joint document explaining the principal features (e.g. DUS, variety identification, variety purity, etc.) of the systems of OECD, UPOV, **AOSA** and ISTA



WORKSHOP 1 

Agreed:

2. to propose an **inventory by UPOV, OECD and ISTA of the use of molecular marker techniques**, by crop, with a view to developing a **document containing that information**, in a similar format to UPOV document UPOV/INF/16 “Exchangeable Software”.

WORKSHOP 2 

OECD Annual Meeting approved:

2. to carry out a joint inventory by UPOV, OECD, AOSA and ISTA of the use of molecular marker techniques, by crop, with a view to developing a document containing that information. The OECD will contribute to the document by sharing the ongoing list of molecular techniques used by NDAs and continuously collected by the Secretariat.



WORKSHOP 1

Agreed:

3. to propose to **invite UPOV, OECD and ISTA to develop lists of possible joint initiatives** in relation to molecular techniques. It was noted that, in the case of UPOV, the **list could be drafted by the BMT at its fifteenth session**, subject to approval by the Technical Committee.
 - The UPOV TC, at its fifty-second session, agreed that the BMT should include the **development of a list of terminology (definitions) used by OECD, UPOV and ISTA** in the list of joint initiatives
 - The UPOV BMT, at its fifteenth 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 these organizations.



WORKSHOP 2

OECD Annual Meeting approved:

3. To develop a list of terms and their definitions as used by OECD, UPOV, AOSA and ISTA and to make an attempt to harmonise these.



WORKSHOP 1

Agreed:

4. would be useful for mutual understanding, to repeat the joint workshop at relevant meetings of the OECD and ISTA

WORKSHOP 2


OECD Annual Meeting approved:


4. to consider organising another similar workshop [in OECD] in three years time



UPOV BMT/15


- OECD, ISTA and UPOV had different objectives and cooperation between the organizations in the use of molecular techniques would need to reflect that. However, the BMT agreed that it would be important to explore circumstances in which the same techniques and information could be used. In the first instance, it agreed that it would be more effective to explore such possibilities on the basis of real situations rather than at a theoretical and institutional level.
- welcomed the proposal by the Netherlands to organize a practical workshop in 2017, with support from UPOV, OECD and ISTA, to explore how molecular techniques might be applied in an efficient way for UPOV, OECD and ISTA purposes.




WORKSHOP 2 

OECD Annual Meeting approved:

- endorsed the proposal of the Netherlands to organise a practical workshop in 2017, with support of the OECD, UPOV and ISTA, to explore how molecular techniques might be applied in an efficient way for UPOV, OECD and ISTA purposes.

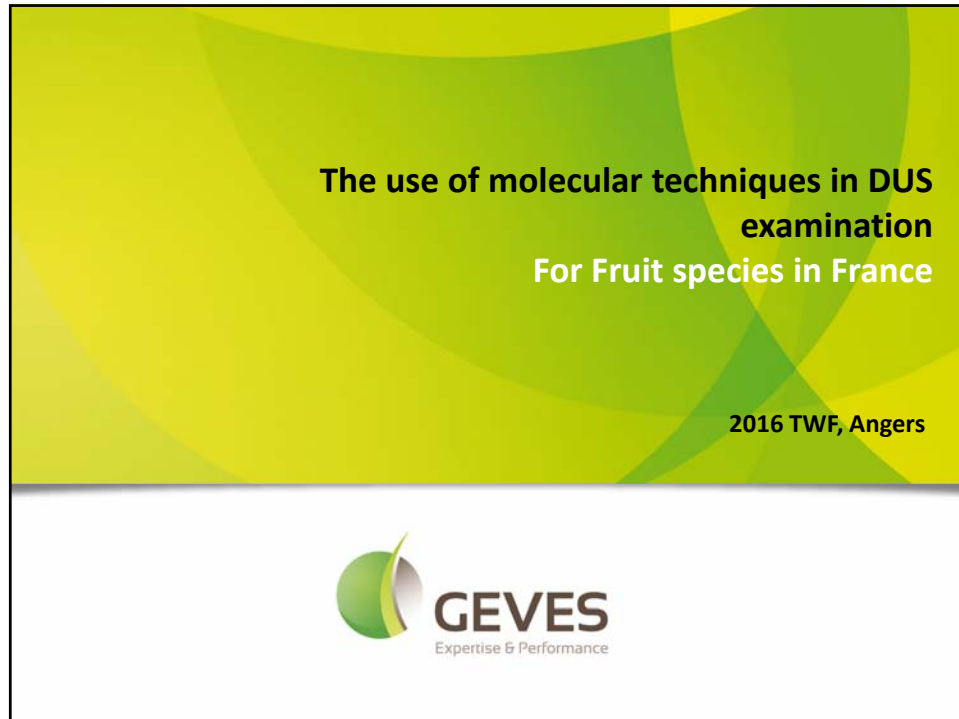


 for consideration

- Organize OECD/UPOV/ISTA JOINT WORKSHOP ON MOLECULAR TECHNIQUES (proposal 4)
- Proposals 1, 2 and 3
- Support for Netherlands to organise a practical workshop in 2017, with support of the OECD, UPOV and ISTA, to explore how molecular techniques might be applied in an efficient way for UPOV, OECD and ISTA purposes


ANNEX II

THE USE OF MOLECULAR TECHNIQUES IN DUS EXAMINATION FOR FRUIT SPECIES IN FRANCE
BY AN EXPERT FROM FRANCE

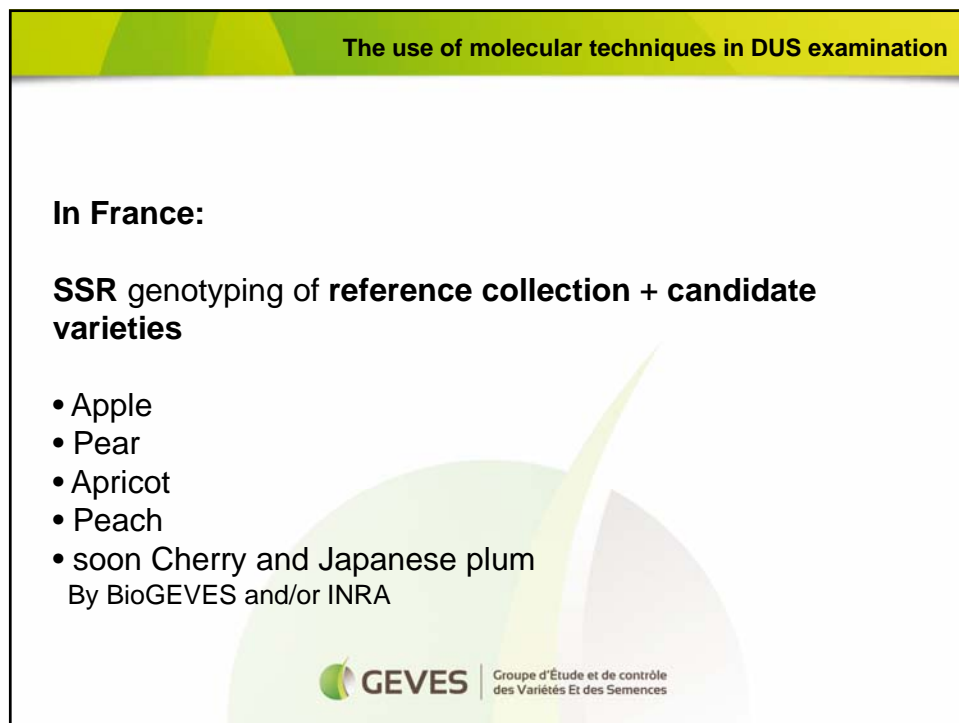


The use of molecular techniques in DUS examination
For Fruit species in France

2016 TWF, Angers



GEVES
Expertise & Performance




The use of molecular techniques in DUS examination

In France:

SSR genotyping of reference collection + candidate varieties

- Apple
- Pear
- Apricot
- Peach
- soon Cherry and Japanese plum

By BioGEVES and/or INRA



GEVES | Groupe d'Étude et de contrôle
des Variétés Et des Semences

The use of molecular techniques in DUS examination

In France:

We systematically:

- compare the datas from candidate varieties with reference collection varieties: if the genetic **distance is zero**, this is an alert for the examiner (except in the case of mutants)
- sample leaves in case of Uniformity or Distinctness doubt: it can helps us to **confirm the results of the observations**

[End of Annex II and of document]