

Technical Working Party for Fruit Crops**TWF/48/9 Add.****Forty-Eighth Session****Original:** English**Kelowna, British Columbia, Canada, September 18 to 22, 2017****Date:** November 14, 2018


**ADDENDUM TO
DUS EXAMINATION OF MUTANT VARIETIES OF APPLE***Document prepared by the European Union**Disclaimer: this document does not represent UPOV policies or guidance*

The Annex to this document contains a copy of a presentation on “DUS Examination of mutant varieties of Apple” presented by an expert from the European Union, at the forty-eighth session of the Technical Working Party for Fruit crops (TWF), held in Kelowna, Canada, from September 18 to 22, 2017.

[Annex follows]

ANNEX

DUS EXAMINATION OF MUTANT VARIETIES OF APPLE
Presentation prepared by an expert from the European Union




DUS examination of mutant varieties of apple


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TWF Kelowna, 18-22 September 2017

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DUS examination of mutant varieties of apple

- Apple varieties mutate easily
- Breeders and growers looking for mutants with the same objective
 - Eg 'Gala' varieties with washed red colour and colouring earlier
 - They find similar or the same mutants
 - They apply – worldwide
 - ⇒ Apple is probably among species with the most important number of overseas applications



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DUS examination of mutant varieties of apple

- Challenge to identify the closest varieties for the DUS trial
 - Fruit colour strongly affected by the environment (night temperature)
 - Candidates potentially grown in a different environment
 - ⇒ Technical information in the questionnaire & photo not so easy to compare
 - ⇒ Descriptions of other varieties of common knowledge made in other UPOV countries difficult to interpret



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DUS examination of mutant varieties of apple

- Challenge to identify the closest varieties for the DUS trial
 - Concrete example
 - ✓ Serie of 'Gala' varieties with washed red colour applied for Community Plant Variety Rights, first one 'Devil Gala' in 2012
 - ✓ DUS trials started subsequently. Every year, new applications
 - ✓ In 2016, application for 2 varieties of the same type applied earlier:
 - 'Gala Fult', applied in UY in 2007
 - 'Bigbucks' applied in ZA in 2011
 - ⇒ Should have been included in the DUS testing of 'Devil Gala' and all other varieties of this type
 - ⇒ All these trials (4 years long) to restart
 - ⇒ Unhappy breeders, necessary to improve communication in the UPOV world



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DUS examination of mutant varieties of apple

- Conclusions of the 2016 UPOV TWF
 - As a pilot proposal that information is exchanged focusing on the 'Gala' apple mutation group.
 - Excel sheet designed to collect administrative and technical data
 - Sent out to TWF participants and TC representatives from UPOV members having practical experience for apple DUS testing



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DUS examination of mutant varieties of apple

- Outcome of the survey
 - 11 UPOV Members participated
 - 140 records communicated, out of which 85 different varieties
 - 75% of the varieties (63 out of 85) are only known by a single Authority.
 - ⇒ Authorities potentially need to make efforts to complement their collection
 - ✓ Existence of an application for a Gala mutant
 - ✓ Descriptive elements: TQ or variety Description
 - ✓ Plant material



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- Possible follow up
 - Existence of an application for a Gala mutant, which information?
 - ✓ Is the information included in the excel sheet a good basis?
 - ✓ Information about the name of a contact person from the breeder useful?



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DUS examination of mutant varieties of apple

- Possible follow up
 - Descriptive elements
 - ✓ TQ information, sufficient?
 - ✓ Variety description



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DUS examination of mutant varieties of apple

- Possible follow up
 - Plant material
 - ✓ Approach the breeder: Information about the availability of the variety on the territory of the authority: quarantine procedures initiated?
 - ✓ If not: initiate such procedures with the breeder? Support from National authorities which carried out the DUS test?
 - ✓ How to make sure that the material provided by the breeder is true to type?



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DUS examination of mutant varieties of apple

- Conclusion: how to exchange that information
 - How specific - link to particular species - is it?
 - Is there confidential information / information subject to personal data protection procedures?
 - ⇒ General system, PLUTO
 - ⇒ Ad hoc system:
 - ✓ Restricted area on a website
 - ✓ Simple exchange of excel sheets via email
 - Timing: try to implement the agreed procedure?



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