



The Organization for Economic Cooperation and Development *New Plant Breeding Techniques*

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BRS Stakeholder Meeting
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**Biotechnology Regulatory Services
Animal and Plant Health Inspection Service**

OECD Working Group

- Organization for Economic Cooperation and Development (OECD)
 - Includes 34 industrialized countries
 - Coordinates and harmonizes policies
 - Responds to international issues
- OECD's Working Group (WG) on the Harmonization of Regulatory Oversight in Biotechnology
 - Develops technical documents that facilitate environmental risk/safety assessment of transgenic organisms, especially plants



New Plant Breeding Techniques*

- Agro-infiltration
- Cisgenesis/intragenesis
- Grafting on GM rootstock
- Oligonucleotide directed mutagenesis (ODM)
- Reverse breeding
- Site-directed nucleases (e.g. zinc finger nucleases)
- RNA-dependent DNA methylation

*Lusser *et al.* (2012), “Deployment of New Biotechnologies in Plant Breeding”, *Nature Biotechnology*, 30, pp. 231-239.



Goals of Workshop and Questionnaire



- Understand how countries identify, address and assess new plants
- What NPBTs are being used to develop plants
- Look at NPBT plant products and whether and how evaluated for any environmental risk or safety
- Consider a potential project



21 Responses to Questionnaire

- Argentina
- Austria
- Australia
- Bangladesh
- Belgium
- Canada
- Czech Republic
- Finland
- Germany
- Ireland
- Japan
- Mexico
- Netherlands
- Norway
- South Africa
- Switzerland
- Turkey
- United Kingdom
- United States
- European Commission
- Business Industry Advisory Committee



NPBT Workshop Participation

February 10, 2014

- 115 registered participants
- OECD Member Countries
 - Enhanced engagement countries
 - Other observer countries
 - International organizations



Risk Assessment of “New” Plant Varieties



- Risk assessment principles apply to any new plant variety, regardless of techniques used in development
- Product is the focus; expressed phenotype(s)
 - Not regulatory trigger
 - Not technique
- Technique may be useful in product characterization
- No new safety issues identified for new breeding techniques



Issues

- What are the criteria for “new”?
 - Are all of the seven techniques “new”?
 - Are they similar or equivalent in being “new”?
- What is conventional?



Issues

- Is it distinguishable from conventional?
- Plant Breeding
 - Combination of techniques used to develop
 - Combination of traits incorporated

Next Steps

- What can the Working Group do related to their charge?
- Information sharing



Questions?

