The Organization for Economic Cooperation and Development

New Plant Breeding Techniques

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BRS Stakeholder Meeting
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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

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?