



# THE OECD SEED SCHEMES

International Seed Certification Standards

## The Use of Molecular Techniques

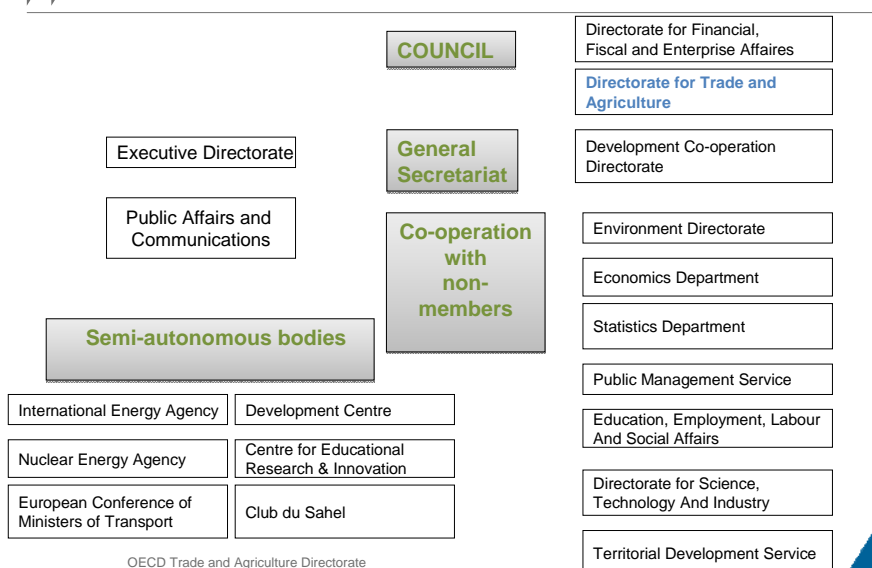
UPOV Technical Committee

18-20 March 2013

MICHAEL RYAN



## Structure of OECD





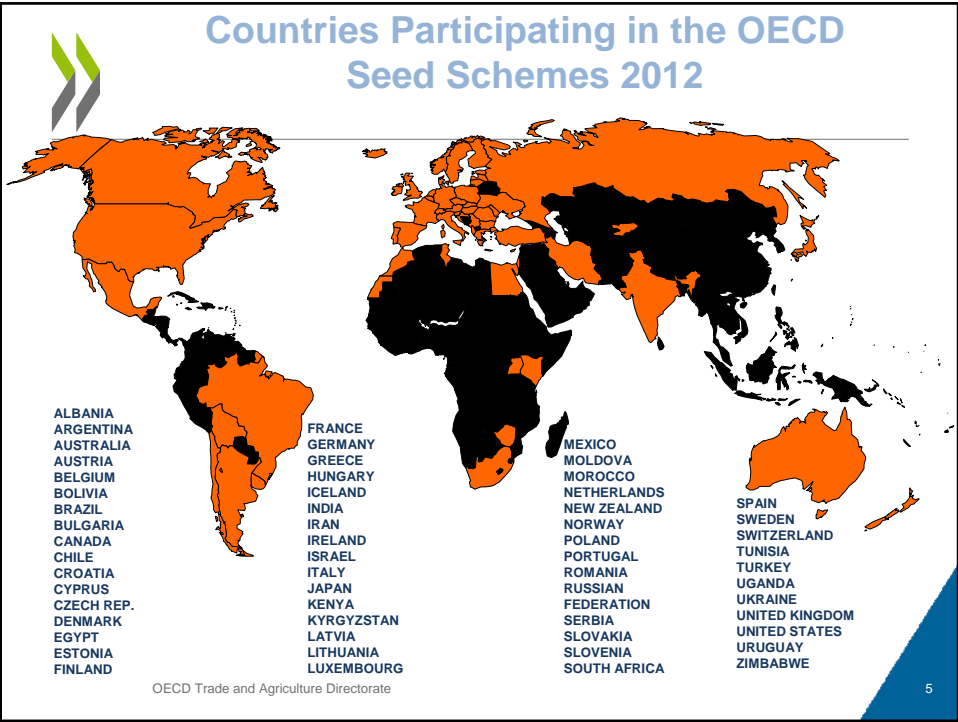
## 7 OECD Seed Schemes

- Grasses & Legumes (53)
- Crucifers & Other Oil or Fibre Species (52)
- Cereals (56)
- Beet (30)
- Subterranean Clover & Similar Species (6)
- Maize & Sorghum (45)
- Vegetables (32)



## OECD Seed Schemes

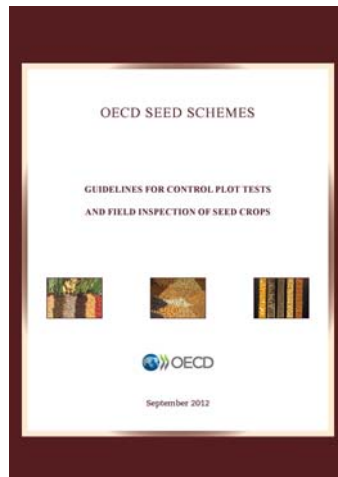
- **Objectives of the OECD Schemes**
  - To provide an international framework for the certification of high quality seed :
    - to facilitate trade
    - to encourage the use of consistently high quality seed in participating countries
  - To enhance co-operation and understanding between:
    - importing and exporting countries
    - public & private sector
    - other international organisations
- **Why certified seed?**
  - Higher crop productivity / yield (quantity & quality)
  - Higher overall production ---- food security, exports, etc.





## GUIDELINES

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## SWG on Biochemical & Molecular Techniques

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- Established about 4 years ago to explore the use of lab tests officially
- Current members: United Kingdom (Chair), Canada, France, UPOV, ISTA, OECD (CC)
- Background paper 2009 ... “The Role of Biochemical & Molecular Techniques in Describing and/or Identifying Varieties”

**Conclusion:** NDAs could use techniques **already** in existence

Use only tests that have been validated (preferably by an IO)

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## SWG (contd)

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- **Survey** – all 58 NDAs in member countries
  - Which molecular/Biochemical tests are used?
  - What are they used for; identity, purity or hybridization?
  - Re trhe test validated; and by whom?
- **Replies: 26 countries**
  - 6 countries do not use any form of lab tests
  - Mixture of tests used
  - Validation /no validation
- **AM agreed that** : Internationally validated electrophoresis methods can be used as lab tests



## On-going issues under discussion

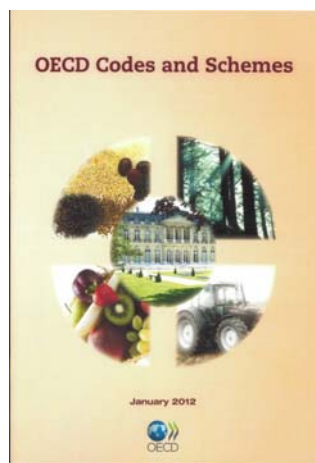
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- To recommend adding additional laboratory tests
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- Further guidance on the conditions under which these tests can be used
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- The SWG is considering recommending that one of the preconditions for using these tests should be that the tests can only be used where there is an agreement between the exporting NDA, importing NDA and breeder of the variety in question, but these proposals have not been recognised as yet by the Annual Meeting
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- If each test is suitable for varietal identity or purity or both:
  - 
  - 
  -



## On-going issues under discussion

- Where a test is designed to be used for varietal identity, its interpretation is clear yes/no. However, if the test is to be used for varietal purity, how the result is interpreted against the appropriate OECD purity standard: Should these be a compulsory use of reject values, for example
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- Recommend to the Annual Meeting an update to the Rules, if appropriate:
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- Given that the OECD is a consensus organisation, it is likely that progress in adopting laboratory testing will be “slow and steady” in order to convince all member countries to adopt the propos



[www.oecd.org/tad/seed](http://www.oecd.org/tad/seed)



For more information

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• **THANK YOU**

- Visit our website: [www.oecd.org/tad/seed](http://www.oecd.org/tad/seed)



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