

**ANNEX XI TO THE DECISION
OECD SCHEME FOR THE VARIETAL CERTIFICATION OF
MAIZE SEED**

Specific Rules and Regulations

1 General

- 1.1 The OECD Maize Scheme shall cover seed of varieties of maize produced, processed, sampled, labelled and fastened in accordance with the Common Rules and Regulations above, and those which form the subject of the following paragraphs and which are regarded as minimum requirements.
- 1.2 The list of species eligible for certification according to the Scheme is given in Appendix 2 of this Scheme. This list can be increased by common agreement of the National Designated Authorities.
- 1.3 The Scheme shall be implemented in the participating countries under the responsibility of the national governments that will designate Authorities for this purpose.
- 1.4 The OECD Maize Seed Scheme is not intended to interfere in any way with the trade in seed which is produced and traded entirely under the responsibility of its sellers, subject to national laws and regulations.
- 1.5 Post-control of Basic Seed is only required when the Basic Seed is to be used for the production of Certified Seed outside the country of origin of the variety. However, breeders should, whenever possible, themselves plant post-control plots of all Basic Seed lots. This is particularly useful when the possibility exists of growing them out of season, before the use of the Basic Seed.

2 Lot size

- 2.1 One seed lot shall not exceed 40 000 kg. For seeds to be fastened as not finally certified seed, these maximum seed lot sizes do not apply.
- 2.2 A tolerance of five per cent on these maxima is permissible.

Appendix 1

Minimum Requirements for the Production of Basic and Certified Seed under the Scheme

A) Minimum Requirements for all Varieties

1. Previous cropping

The National Designated Authority shall require the grower to provide particulars concerning the previous cropping in each seed field and reject fields when the previous cropping history is not in accordance with regulations published by the National Designated Authority.

2. Isolation

- 2.1 Crops to produce Basic Seed or Certified Seed must be not less than 200 m from any source of contaminating pollen.
- 2.2 This distance may be disregarded if there is sufficient protection from any source of contaminating pollen.

3. Field inspection

- 3.1 Inspectors shall be specially trained. In their field inspection they shall be responsible only to the National Designated Authority. Additional conditions apply to authorised inspectors as indicated in Common Appendix 5.
- 3.2 For crops to produce Basic Seed and Certified Seed at least one inspection must be made when varietal purity can be determined.
- 3.3 When the seed crop follows another crop of *Zea mays* in either the preceding year or the current year, at least one additional inspection must be made to determine the freedom of the seed crop from volunteer plants.

4. Varietal identity

Crop inspection must confirm that the plants are true to the description of the variety furnished to the National Designated Authority in accordance with the requirements of Rule 2.

5. Varietal purity

- 5.1 At field inspection, in crops to produce Basic Seed, the minimum varietal purity will be 99.5 per cent.
- 5.2 At field inspection, in crops to produce Certified Seed, the minimum varietal purity will be 99.0 per cent.

B) Additional Minimal Requirements for Hybrid Varieties

6. Field inspection

- 6.1 For crops to produce Basic Seed of parental lines a minimum of two inspections must be made. The first inspection is to be made before flowering, the second inspection during flowering.
- 6.2 For crops to produce Basic seed of a hybrid, a minimum of three inspections must be made. The first inspection must be made before flowering to check isolation and roguing. The second and third inspections must be made at the beginning and end of flowering respectively to check roguing and male sterility.
- 6.3 For crops to produce Certified seed of hybrid varieties, the following inspections must be made.
 - 6.3.1 For crops to produce Certified seed of hybrid varieties, a minimum of three inspections must be made when the silks of the seed-bearing parent are receptive, to determine whether the published requirements referred to under Rule 7.2 have been carried out and there is a sufficient supply of pollen from the pollen-parent plants.
 - 6.3.2 Sucker tassels, portions of tassels or tassels on the main plant will be counted as shedding pollen when 50 mm or more of the tassels' central stem, side branches or a combination of the two, have anthers extended from the glumes and are shedding pollen.
 - 6.3.3 Where the crop follows a maize crop in either the preceding year or the current year, at least one additional inspection must be made to determine the freedom of the seed crop from volunteer plants.

7. Varietal purity

7.1 *At field inspection in crops to produce Basic seed of parental lines*

- 7.1.1 In crops to produce Basic seed of parental lines, the minimum varietal purity will be 99.9 per cent.
- 7.1.2 In crops to produce Basic seed of single cross hybrids, the minimum varietal purity of each parent will be 99.9 per cent.
- 7.1.3 Crops inspected at a stage when 5 per cent or more of female parent plants have receptive silks will be rejected if:
 - the number of female parent plants which have either shed pollen or are shedding pollen exceeds 0.5 per cent at any one inspection;

or

 - the total number of female parent plants which have either shed pollen or are shedding pollen exceeds one per cent for the three inspections carried out on different dates.

7.2 *At field inspection in crops to produce Certified seed of hybrid varieties*

- 7.2.1 In crops to produce Certified seed, the minimum varietal purity of plants of the seed-bearing parent will be 99.8 per cent.

The minimal varietal purity of plants of the pollen parent that are shedding pollen will be 99.8 per cent.

7.2.2 Crops inspected at a stage when 5 per cent or more of female parent plants have receptive silks will be rejected if:

- the number of female parent plants which have either shed pollen or are shedding pollen exceeds one per cent at any one inspection,

or

- the total number of female parent plants exceeds two per cent at three inspections carried out on different dates.

8. Varietal identity

The hybrid variety must be satisfactory for trueness to variety and the plants must conform to the characteristics of the variety when listed by the National Designated Authority.

9. Production involving a male sterile seed parent

A male sterile seed parent can be used to produce Certified seed by either of the two methods:

- i) by blending seed (containing a high level of male sterility) produced by a male sterile seed parent with a male fertile seed parent. The ratio of male sterile parent seed to male fertile parent seed shall not exceed two to one.
- ii) by using a pollen parent which contains a specific restorer line or lines so that not fewer than one-third of the plants grown from the resulting hybrid will produce pollen which appears normal in all respects.

10. Plots post-controlling seed lots of hybrid varieties

In post-control plots established for certified seed lots of hybrid varieties, the minimum varietal purity standard shall be 97 per cent for single cross hybrids and 95 per cent for other types of hybrids.

Appendix 2

Maize Species Eligible for the Scheme

Botanical Name	French Name	English Name
ZEA MAYS (L.)	MAÏS	MAIZE

Appendix 3

Countries Eligible for Certification of Maize Seed

ALBANIA	C(2005)170	21/12/05
ARGENTINA	C(82)15	02/03/82
AUSTRALIA	C(89)166/Final	07/11/89
AUSTRIA	C(79)6	26/01/79
BELGIUM	C(83)59	20/04/83
BOLIVIA	C(96)169/Final	16/12/96
BRAZIL	C(99)174/Final	10/12/99
BULGARIA	C(81)55	22/12/81
CANADA	C(77)191	22/11/77
CHILE	C(79)151	17/08/79
CROATIA	C(94)205/Final	12/01/95
CZECH REPUBLIC	C(94)25/Final	02/06/94
DENMARK	C(82)165	25/10/82
EGYPT	C(98)178/final	01/12/98
ESTONIA	C(2014)154	19/12/14
FINLAND	C(89)164	07/11/89
FRANCE	C(78)58	27/04/78
GERMANY	C(80)57	28/03/80
GREECE	C(85)151	05/06/85
HUNGARY	C(78)198	11/01/79
INDIA	C(2008)150	23/10/08
IRAN	C(2015)171	23/12/15
ISRAEL	C(78)199	11/01/79
ITALY	C(79)191	15/10/79
JAPAN	TAD/CA(2009)5	10/09/09
KENYA	C(83)22	29/03/83
MEXICO	C(2001)288	22/01/02
MOLDOVA	C(2008)151	23/10/08
MOROCCO	C(88)196/Final	26/01/89
NETHERLANDS	C(78)37	23/03/78
NEW ZEALAND	C(91)189/Final	04/02/92
POLAND	AGR/CA/S(97)4	28/05/97
PORTUGAL	C(79)224	07/12/79
ROMANIA	C(78)200	11/01/79
RUSSIAN FEDERATION	C(2001)266	29/11/01
SENEGAL	C(2015)171	23/12/15
SERBIA	C(2001)265	29/11/01
SLOVAKIA	C(94)26/Final	02/06/94
SLOVENIA	C(94)206/Final	12/01/95

SOUTH AFRICA	C(95)196/Final	06/12/95
SPAIN	C(79)29	26/02/79
SWITZERLAND	C(79)5	16/01/79
TANZANIA	C(2016)177	23/12/16
TURKEY	C(88)47/Final	20/10/88
UGANDA	C(2004)210	24/01/05
UKRAINE	C(2009)155	16/11/09
UNITED KINGDOM	TAD/CA(2013)11	31/07/13
UNITED STATES	C(78)112	19/06/78
URUGUAY	C(88)197/Final	26/01/89
ZAMBIA	C(2017)143	22/12/17
ZIMBABWE	C(92)54/Final	30/04/92

Appendix 4

Minimum Requirements for the Certification of Varietal Associations of Hybrid Maize Seed Under the Scheme

1. Varieties eligible for varietal association

Only maize varieties included in the List of varieties eligible for seed certification according to the OECD Schemes may be included in a certified varietal association of hybrid maize seed.

2. Registration of the varietal association

For the purposes of certification, the name of the varietal association shall be registered with the National Designated Authority. The percentage breakdown by weight or by number of seeds of component varieties shall also be registered with the National Designated Authority by the person responsible for their maintenance.

3. Constituent seed lots eligible for inclusion in a certified varietal association of hybrid maize seed

Only lots of maize seed previously certified under the rules of the OECD Maize Scheme shall be eligible for inclusion in a certified varietal association of hybrid maize seed.

4. Control of the mixing and packaging operation

4.1 All organisations producing varietal associations of hybrid maize seed must be approved by the National Designated Authority.

4.2 The seed of the pollinator dependent hybrid and the seed of the pollinator shall be mechanically combined in proportions jointly determined by the persons responsible for the maintenance of these component varieties. The seed of the female and male components shall be coated with different colours.

4.3 The mixing and packing operation must be carried out under the supervision of an official or authorised seed sampler, who is responsible to the National Designated Authority.

4.4 The mixing itself must be carried out so as to ensure that only lots intended for inclusion are used and that the resulting varietal association is as homogeneous as possible.

5. Inspection of the production of varietal associations

5.1 The inspection of production of varietal associations must be carried out by the National Designated Authority or their authorized representative.

5.2 The inspection must be carried out through:

- a) controls of the identity and total percentages by weight or by number of each component, at least by random checks of the official labels identifying the percentages of seed; and,
- b) a random check of the mixing operations, including the finished varietal association.

6. Labelling and sealing of the varietal association

- 6.1 The appropriate varietal association labels must be fixed to each container. The labels shall be blue with a diagonal green line.
- 6.2 The labelling specifications and information requirements set out in Common Appendix 3 for Certified seed shall apply, except for the label colour (see 6.1 above) and for the name of the variety to be replaced with the name of the varietal association. In addition, the percentage breakdown by weight or by number of seeds of the component varieties shall be given; it shall be sufficient to give the name of the varietal association if the percentage breakdown has been officially recorded.

7. Records of varietal associations

- 7.1 Records must be kept, by the producers, for all varietal associations as follows:
 - 7.1.1 Name of the varietal association;
 - 7.1.2 Reference number of the varietal association seed lot;
 - 7.1.3 Details of the component varieties of the varietal association seed lot, including names and percentage by weight or by number of seeds;
 - 7.1.4 Seed lot reference numbers of the constituent seed lots;
 - 7.1.5 Weight of each constituent seed lot;
 - 7.1.6 Total weight of the varietal association seed lot.
- 7.2 A copy of the seed test certificate for each constituent seed lot included in the varietal association must be kept by the producer of the varietal association.
- 7.3 These records must be kept in such form that it is possible to identify and verify the authenticity of the constituents of each varietal association seed lot. They must be made available to the National Designated Authority on request.
- 7.4 The National Designated Authority shall make regular checks of all the records kept by the producers in respect of varietal associations of hybrid maize seed.

8. Analysing varietal associations of hybrid maize seed

The National Designated Authority shall proceed to official check-sampling and official check-testing on a proportion of the varietal association seed lots produced in its territory to ensure compliance with the rules for certification.

9. Specimen Certificate

Certificates must contain all the information outlined below but the exact arrangement of the text is at the discretion of the National Designated Authority.

**Certificate Issued for a Varietal Association of Hybrid Maize Seed,
under the OECD Scheme for the
Varietal Certification of Maize Seed
Moving in International Trade**

Name of the National Designated Authority issuing the Certificate:

Reference Number:

Constituents of the lot:

Variety	Seed Lot Reference Number	Percentage by weight or number of seeds of varietal association
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1.

2.

3.

(...)

Number of containers and declared weight of lot:

The seed lot bearing this Reference number has been produced in accordance with the OECD Maize Seed Scheme and is approved.

Signature (or an equivalent electronic authorisation):

Place and Date:

