

**ANNEX XII TO THE DECISION
OECD SCHEME FOR THE VARIETAL CERTIFICATION OF
SORGHUM SEED**

Specific Rules and Regulations

1. General

- 1.1 The OECD Sorghum Scheme shall cover seed of varieties of sorghum 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 Sorghum 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 10 000 kg. For seeds to be fastened as not finally certified seed, these maximum seed lot sizes do not apply.
- 2.2 The maximum lot size of the following species shall be raised to 30 000 kg:
 - *Sorghum x alnum* Parodi
 - *Sorghum bicolor* (L.) Moench
 - *Sorghum bicolor* (L.) Moench x *S. sudanense* (Piper) Stapf
- 2.3 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 *All Sorghum spp. covered by the Scheme, including their Hybrids*

2.1.1 Basic Seed

Crops to produce Basic Seed must be not less than 400 m from any source of contaminating pollen.

In areas where *S. halepense* or *S. sudanense* is a particular cross-pollination issue, crops to produce Basic Seed of *Sorghum bicolor* or its hybrids must be isolated not less than 800 m from any source of such contaminating pollen.

2.1.2 Certified Seed

Crops to produce Certified Seed must be not less than 200 m from any source of contaminating pollen.

In areas where *S. halepense* or *S. sudanense* is a particular cross-pollination issue, crops to produce Certified Seed of *Sorghum bicolor* or its hybrids must be isolated not less than 400 m from any source of such contaminating pollen.

2.2 *Sufficient protection*

These distances 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 *Sorghum bicolor and Sorghum sudanense*

For crops to produce Basic Seed and Certified Seed at least one inspection must be made when varietal purity can be determined.

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 *Sorghum bicolor and Sorghum sudanense*

5.1.1 At field inspection, in crops to produce Basic seed, the crop shall be rejected if there is more than one off-type plant per 30 square metres.

5.1.2 At field inspection, in crops to produce Certified seed, the crop shall be rejected if there is more than one off-type plant per 10 square metres.

6. Species purity of *Sorghum bicolor* and *Sorghum sudanense*

Crops to produce Basic seed shall contain not more than one plant in 30 m² and for Certified seed not more than one plant in 10 m² of another species of sorghum, the seeds of which are difficult to distinguish in a laboratory test or which will readily cross-pollinate with the crop being grown for seed.

B) Additional Minimal Requirements for Hybrid Varieties of *Sorghum* spp.

These distances may be disregarded if there is sufficient protection from any source of contaminating pollen.

7. Field inspection

7.1 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.

7.2 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.

7.3 For crops to produce Certified seed of hybrid varieties, 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.

8. Varietal purity

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

8.1.1 In crops to produce Basic seed of parental lines, the minimum varietal purity will be 99.9 per cent.

8.1.2 In crops to produce Basic seed of single cross hybrids, the minimum varietal purity of each parent will be 99.9 per cent.

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

In crops to produce Certified seed, the minimum varietal purity of plants of the seed-bearing parent will be 99.7 per cent.

9. Species purity

9.1 Crops to produce Basic seed shall contain not more than one plant in 30 m² of plants of another Sorghum spp, if its seeds are difficult to distinguish from the crop seeds in a laboratory test or if it will readily cross-pollinate with the crop being grown for seed.

9.2 Crops to produce Certified seed shall contain not more than one plant in 10 m² of plants of another Sorghum spp., if its seeds are difficult to distinguish from the crop seeds in a laboratory test or if it will readily cross-pollinate with the crop being grown for seed.

10. 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.

11. 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.

12. 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

Sorghum Species Eligible for the Scheme

Botanical Name	French Name	English Name
SORGHUM BICOLOR (L.) Moench	SORGHO GRAIN, SORGHO FOURRAGER	ALMUM SORGHUM, COLUMBUS GRASS
SORGHUM BICOLOR X S. SUDANESE	SORGHO HYBRIDE	HYBRID SORGHUM
SORGHUM SSP. HYBRID	SORGHO HYBRIDE	SORGHUM HYBRID
SORGHUM SUDANESE Stapf	SORGHO DU SOUDAN, SOUDANGRASS	SUDAN GRASS
SORGHUM X ALMUM Parodi	SORGHO D'ARGENTINE	ALMUM SORGHUM, COLUMBUS GRASS

Appendix 3

Countries Eligible for Certification of Sorghum 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
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
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