

HYBRID SORGHUM SEED **CERTIFICATION STANDARDS (1988)**

I. Application and Amplification of General Certification Standards

- A. The General Seed Certification Standards, as adopted by the association are basic and together with the following specific standards constitute the standards for certification of seed stock and commercial hybrid sorghum seed.

- B. The General Standards are amplified to apply specifically to hybrid sorghum seed
 - 1. Section III. Eligibility Requirements for Certification of Crop Varieties
 - a. The name under which hybrid shall be certified shall be the same as the designation given by the originator or the originating agency and must represent a specific combination that has been tested by a state or governmental agricultural experiment station or certifying agency.
 - b. A commercial hybrid is one to be planted for any use except seed.
 - c. Foundation seed stocks shall consist of male steriles, inbred lines, and/or hybrids to be used in the production of seed for commercial hybrids.

 - 2. Section IV. Restrictions on number of Varieties

If seed of more than one hybrid or seed stock is produced mechanical mixing and crossing must be avoided.

 - 3. Section V. Classes and Sources of Certified Seed
 - a. Only the class “certified” is recognized in seed of commercial sorghum hybrids.
 - b. A commercial hybrid to be certified must be produced from foundation seed stocks approved by the agricultural experiment station and / or certifying agency.

II. Land Requirements

No sorghum shall have been grown on the land the previous year or the requirement is waived if the previous crop was of the same variety and of a certified class equal or superior to that of the crop seeded.

III. Field Inspections

Fields or parts of fields producing certified seed of commercial hybrids or foundation seed stocks shall be given at least two field inspections.

- A. One field inspection shall be made during bloom, preferably in full bloom.
- B. One field inspection shall be made before harvest but after the seed begins to assume mature color.

IV. Field Standards

A. General

1. Unit of Certification

The entire field of any commercial hybrid grown by and / or belonging to an applicant and used for seed must be eligible and must be inspected.

2. Isolation

a. Foundation Seed Stocks

Fields or parts of fields acceptable for the production of seed stocks to be used for the production of seed of commercial hybrids must be so located that the seed parent is not less than 990 feet from fields of any other variety or fields of the same variety that do not meet the varietal purity requirements for certification. In no case shall the isolation distance be less than that required for commercial hybrids.

b. Commercial hybrids

- (1) For the production of certified seed of commercial hybrids the seed parent shall not be less than:
 - a. 660 feet from any other variety of the same genetic height as the pollinator parent or from sorghum with a different chromosome number.*
 - b. 990 feet from any forage variety or from varieties with a different genetic constitution for height but the same chromosome number.*
 - c. 1,320 feet from grass sorghum or broomcorn with the same chromosome number.*
- (2) Modification of Isolation Requirements
 - a. The modification of isolation distance by the planting of additional pollinator** rows shall be allowed only in cases in which the hybrids produced by the contaminating pollen would not differ greatly in color, maturity, height, type or any other important characteristic from the hybrid being produced. Modification from the standard isolation distance of 660 feet down to a minimum of 330 feet is permitted in such cases when two additional border rows of the pollinator are planted for each 66 feet or reduction in isolation distance. The requirements for additional pollinator rows applies to all sides of seed field exposed to the contaminating pollen whether located directly opposite or diagonally from the contaminating field.

* This includes off-type plants in this classification that may occur within the distance specified.

**To be considered a pollinator row the pollinator line must be producing pollen during the entire time five percent or more of the female flowers are receptive.

b. Differential blooming dates are permitted for modifying isolation distances provided that the sum of the percentages of plants in bloom in the seed rows and in the contaminating field shall not exceed five percent when more than one percent of the plants in either field are in bloom.

c. Pollen shedding by Seed Parent

Maximum permitted at any one field inspection:

Foundation 1 : 3,000; Commercial Hybrids
1 : 1,500

B. Specific Requirements

Both the seed parent and the pollinator shall be required to meet the following standards:

<u>Factor</u>	<u>Maximum permitted at any field inspection</u>		
	<u>Foundation Seed Stocks</u>	<u>Commercial Hybrid</u>	<u>Seed</u>
	<u>Blooming</u>	<u>Final</u>	
*Other Varieties (definite)	1 : 50,000	1 : 50,000	0.005% (1 head in 20,000)
**Other Varieties (doubtful)	1 : 20,000	1 : 20,000	0.1% (1 head in 1,000)
Inseparable Objectionable			
Weeds	-----	None	None***
Kernel Smut	-----	None	0.04% (1 head in 2,500)

* Other Varieties shall be considered to include off-type plants that can be differentiated from the variety that is being inspected.

** To be designated by the certifying agency.

***None which give evidence that they might produce seed which would be viable and gathered with the cultivated sorghum at harvest time.

V. **Seed Standards**

<u>Factor</u>	<u>Foundation</u>	<u>Certified</u>
Pure Seed (Min.)	98.0%	98.0%
*Inert Matter	2.0%	2.0%
Weed Seeds (Max.)	0.10%	0.10%
**Objectionable	6 per lb.	6 per lb.
***Noxious Weed Seed (Max.)	None	None
Other Crop Seeds	0.01%	0.08%
****Other Kinds (Max.)	0.01%	0.07%
*****Other Varieties (Max.)	None	0.01%
Germination (Min.)	80.0%	80.0%

* Inert Matter shall not include more than 0.5% of materials other than seed fragments of the variety under consideration.

** Objectionable Weeds – coffee weed.

*** Noxious Weed Seed – See General Standards for list

**** Other kinds shall not exceed 2 per lb. For foundation; 10 per lb. For certified.

***** Other varieties shall not exceed 2 per lb. in the certified class.

SWEET SORGHUM CERTIFICATION STANDARDS (1988)

I. Application and Amplification of General Certification Standards

A. The General Seed Certification Standards, as adopted by the association are basic and together with the following specific standards constitute the standards for certification of sorghum seed.

B. The General Standards are amplified to apply specifically to sorghum seed

1. Section III. Eligibility Requirements for Certification of Crop Varieties

The name under which any variety or hybrid shall be certified shall be the same as the designation given by the originating agency.

2. Section IV. Restrictions on number of Varieties

If more than one variety is grown, mechanical mixing and crossing must be avoided.

II. Land Requirements

No other cultivated variety of annual sorghum, including sudangrass and broomcorn shall have been grown the previous year except a crop of the same variety grown from an equal or higher certified seed class.

III. Field Inspections

A. Fields or parts of fields producing foundation and registered seed shall be given two inspections

1. The first field inspection shall be made during bloom, preferably in full bloom.

2. The second field inspection shall be made before harvest but after the seed begins to assume mature color.

IV. Field Standards

A. General

1. Unit of Certification

A portion of a field may be accepted for certification.

2. Isolation

Fields or parts of fields acceptable for the production of foundation, registered or certified seed must have the minimum isolation distance from fields of any other variety or fields of the same variety that do not meet the varietal purity requirements for certification, as given in the following table:

<u>Class</u>	<u>Distance (Feet)</u>
Foundation	990
Registered	990
Certified	660 *

- * The following exceptions are made to the minimum isolation distance required for certified seed fields of sorghum and sudangrass.
1. For sudangrass the minimum isolation distance shall be 990 feet from any other variety of sudangrass.
 2. Minimum isolation distance for sorghum shall be 990 feet from any sudangrass.
 3. The minimum isolation from grain sorghum or broomcorn with the same chromosome should be 1,320 ft. this includes off-type plants in this classification that may occur within the isolation distance specified.

B. Specific Requirements

<u>Factor</u>	<u>Maximum permitted at any field inspection</u>		
	<u>Foundation</u>	<u>Registered</u>	<u>Certified</u>
*Other Varieties (definite)	None	0.002% 1 head in 50,000	0.005% 1 head in 20,000
**Other Varieties (doubtful)	None	0.01% 1 head in 10,000	0.1% 1 head in 1,000
Inseparable Objectionable Weeds	None	***None	***None
Head Smut	None	None	0.01%
Kernel Smut	None	None	0.04% 1 head in 2,500

- *Other Varieties shall be considered to include off-type plants that can be differentiated from the variety that is being inspected.
 **To be designated by the certifying agency.
 ***None which give evidence that they might produce seed which would be viable and gathered with the cultivated sorghum at harvest time.

V. **Seed Standards**

<u>Factor</u>	<u>Standards for each class</u>		
	<u>Foundation</u>	<u>Registered</u>	<u>Certified</u>
Pure Seed (Min.)	98.0%	98.0%	98.0%
*Inert Matter (Max.)	2.0%	2.0%	2.0%
Weed Seeds (Max.)	0.10%	0.10%	0.10%
**Objectionable Weed Seed	None	None	None
***Noxious Weed Seed (Max.)	None	None	None
Other Crop Seeds	0.01%	0.03%	0.08%
****Other Kinds (Max.)	0.01%	0.03%	0.07%
*****Other Varieties (Max.)	None	None	0.01%
Germination (Min.)	80.0%	80.0%	80.0%

* Inert Matter shall not include more than 0.5% of materials other than seed fragments of the variety under consideration.

** Objectionable Weed Seed shall be designated by the Certifying Agency.

*** Noxious Weed Seed – See General Standards for list

**** Other kinds shall not exceed 2 per lb. For foundation; 6 per lb. for registered and 10 per pound for certified.

***** Other varieties shall not exceed 2 per lb. in the certified class.

INSTRUCTIONS AND PROCEDURES

1. **Cleaning**

All grain sorghum grown for certification should be cleaned immediately after combining or threshing.

2. **Fumigating**

All grain sorghum for certification should be fumigated immediately after recleaning to control weevil damage.