

## Seeds (Certification Scheme) (Amendment) Notice, 2016 (No. 4)

IT is hereby notified that the Minister of Agriculture, Mechanisation and Irrigation Development has, in terms of section 50 of the Seeds Act [*Chapter 19:13*], made the following regulations:—

1. This notice may be cited as the Seeds (Certification Scheme) (Amendment) Notice, 2016 (No. 4).

2. Section 10 of the Seeds (Certification Scheme) Notice, 2000, published in Statutory Instrument 213 of 2000 (hereinafter called the principal notice), is repealed and the following is substituted—

*“Recognition of eligible varieties*

10. (1) If any association, board, authority or person considers that the provisions of this Scheme should apply to seed of a kind or variety which is not specified in the Second Schedule, he or she may apply in Form S.C.S.2 to the certifying authority for recognition of the kind or variety concerned and shall send together with the application a sample of seed of the variety referred to in the application.

(2) The weight of the sample referred to in subsection (1) shall not be less than—

- (a) in the case of seed the size of sorghum seed or larger, 2 000 grams; or
- (b) in the case of seed smaller than sorghum seed, 20 grams;

and such sample shall be stored by the certifying authority as a reference seed sample for that kind or variety.

(3) On receipt of an application in terms of subsection (1), the certifying authority shall, in order to determine the uniformity, stability and distinctiveness of the variety concerned and to confirm the veracity of any claim made in the application form, examine or cause to be examined—

- (a) the detailed written specification of the variety, including such information as to its parentage as the certifying authority may require; and

- (b) plants of the variety referred to in the application form; and
- (c) any parents of the variety referred to in the application form as may be necessary to establish any claim made in that form or in accordance with the guidelines set out by any international or regional agreement which Zimbabwe is a party to:

Provided that it shall not be necessary for the certifying authority to make or require any examination in terms of this subsection if the certifying authority is satisfied as to the uniformity, stability and distinctiveness of the variety concerned without any necessity for examination.

(4) The certifying authority shall provide guidelines and requirements for applications regarding variety recognition in accordance with the provisions of this Scheme.

(5) The certifying authority shall refer each application referred to in subsection (1), to the Variety Release Panel, appointed by the Minister, for—

- (a) verification of the uniformity, stability and distinctiveness of a variety proposed for recognition;
- (b) the interpretation of Form S.C.S.2;
- (c) recommendation or rejection of a variety for recognition.

(6) The panel referred to in subsection (5), may co-opt additional members, who may be officers of the Civil Service or employed by any association or any person or body recognised by the Minister for the purposes of this Scheme.

(7) For the purposes of informing farmers about the merits of a variety, such variety shall be subjected to tests for 2 years to determine its performance and adaptability in the agro-ecological zone for which it is developed at a minimum of five different sites:

Provided that such tests shall be conducted by the applicant or by an independent and competent agricultural organisation that may be private or public.

PART IV  
COMESA SEED TESTING CERTIFICATE

Name of applicant									
Species, variety, class, weight of lot									
Testing and Issuing laboratory									
Sampling by									
Marks of lot (label numbers)									
Seal of lot									
Number of containers	Date of sampling	Date sample received	Date tests concluded	Test Number					
ANALYSIS RESULTS									
Species									
Pure Seed	Inert matter	Other seeds	Number of days	Normal seedlings	Hard seeds	Fresh	Abnormal seedlings	Dead Seeds	Moisture content
Kind of inert matter									
Other seeds									
Other determinations									
Place			Date			Signature			

<i>Globodera rostochiensis</i> (golden nematode)	0	0
<i>Clavibacter michiganensis</i> (ring rot)	0	0
<b>Tuber Size</b>		
Small 28–35 mm	5 tubers/25kg bag	5 tubers/25kg bag
Medium 36–45 mm	5 tubers/25kg bag	5 tubers/25kg bag
Large 46–55 mm	5 tubers/25kg bag	5 tubers/25kg bag
<b>Standards during storage</b>		
<i>Streptomyces scabiei</i> , Common potato scab Maximum scab % of tubers per 50 kg bag	0.05	0.1
<i>Spongospora subterranea</i> , Powdery scab Maximum scab % of tubers per 50 kg bag	0.2	0.1
<i>Rhizoctonia solani</i> , black scurf (%)	0.1	1
<i>Phytophthora erythroseptica</i> , pink rot (%)	0	0.01
<i>Erwinia carotovora</i> , soft rot (%)	0	0
Tuber infested with live tuber moth larvae (%)	0.01	0.05
Misshaped and damaged tubers (%)	0	0.02
Surface of tuber with presence of soil and inert matter (% by weight)	1	1

\*Minimum distance between seed field and commercial fields to be determined by the NSA.

(8) If, in the opinion of the panel referred to in subsection (5), the variety of a seed to which the application relates—

- (a) is, by reason of uniformity, stability and distinctiveness, eligible to be recognised as a variety to which this Scheme shall apply, it shall recommend to the certifying authority that the Second Schedule be amended so as to include the variety concerned; or
- (b) is not eligible to be recognised as a variety to which this Scheme shall apply to by reason of—
  - (i) lack of uniformity, stability or distinctiveness; or
  - (ii) it not being suitable for cultivation in Zimbabwe; or
  - (iii) it not being accepted by farmers as a result of specific, well-known variety characteristics; or
  - (iv) it being a health risk to other varieties, humans or the environment;

it shall notify the certifying authority the grounds on which the application has been refused, and the certifying authority shall notify the applicant of such refusal and the grounds thereof.

(9) The certifying authority may at any time delete a variety from the Second Schedule if, after an inquiry or investigation, it finds that the variety concerned no longer complies with the requirements of this section.

(10) Any kind or variety recognised under the provisions of this scheme shall be identified by a name or number or a combination of the latter and listed in the Second Schedule, which may be amended from time to time.

(11) Any person who is aggrieved by the decision of a panel or the certifying authority made in terms of subsection (8) (b) or (9) may appeal to the Minister.”.

3. The principal Notice is amended by the insertion after section 10 of the following section—

*“COMESA seed certification and variety release*

10A. (1) In this section—

“COMESA” means the Common Market for Eastern and Southern Africa established in 1994 by Article 1 of the Common Market for Eastern and Southern Africa Treaty;

“COMESA Catalogue” means a catalogue created by the Unit that includes all varieties submitted for regional release;

“member states” means states that are members of COMESA;

“national seed authority” means an authority responsible for seed quality control, seed certification, variety release;

“Unit” means the Seed Coordination Unit established in terms of the COMESA Seed Trade Regulations, 2014.

(2) An application, by any person, for registration and recognition of an eligible variety within the COMESA region shall be submitted to the certifying authority in terms of the COMESA Form/VR/06/1 set out in Part I of the Fourteenth Schedule and shall be accompanied by—

- (a) the results of DUS and VCU tests;
- (b) proof of national release in Zimbabwe and of another member state;
- (c) a reference sample;
- (d) a prescribed fee which shall not exceed the administrative costs of receiving and forwarding the application;
- (e) an assurance that, to the best of the applicant’s knowledge, no further persons have been involved in the breeding, or discovery and development, of the variety:

<b><i>Stem cutting quality standards</i></b>		
Stem cutting quality standards minimum length	30 cm	30cm
Minimum number of live nodes	5	5
Minimum diameter	3cm	3cm
Skin injury/scar/damage (Maximum %)	15%	15%
<b><i>Diseases</i></b>		
Cassava mosaic disease (% by number of plants) African cassava mosaic	0	0
<i>Xanthomonas axonopodis</i> pv. <i>manihotis</i> (Bondar) Vauterin et al Cassava Bacterial Blight (% by number of plants)	0	0
Cassava brown streak virus Cassava brown streak disease	0	0

**Irish potato, *Solanum tuberosum***

<b><i>Field Standards</i></b>	<b>Basic Seed</b>	<b>Certified 1<sup>st</sup></b>
Minimum previous cropping season	5	3
Isolation (m) *	10	5
Maximum off-types (m <sup>2</sup> )	1/100	2/100
Minimum number of inspections	3	3
<b><i>Diseases</i></b>		
<i>Ralstonia solanacearum</i> , Bacterial wilt of potato	0	0
<i>Erwinia carotovora</i> , Black leg %	0	0
Potato virus Y	0.1	1
Fusarium wilt	0	2/1000
Verticillium wilt	0	0.5
Potato virus X	0.3	2

**Cassava, *Manihot esculenta***

<b>Field Standards</b>	<b>Basic Seed</b>	<b>Certified 1<sup>st</sup></b>
Minimum previous cropping season	2	2
Isolation (m)	5	5
Maximum off-types (%)	0.5	1
Maximum permitted ratoons (Number)	0	1
Minimum number of inspections	3	3
<b>Stem cutting quality standards</b>		
Stem cutting quality standards minimum length	30 cm	30cm
Minimum number of live nodes	5	5
Minimum diameter	3cm	3cm
Skin injury/sca damage (Maximum %)	15%	15%
<b>Diseases</b>		
Cassava mosaic disease (% by number of plants) African cassava mosaic	0	0
<i>Xanthomonas axonopodis</i> pv. <i>manihotis</i> (Bondar) Vauterin et al Cassava Bacterial Blight (% by number of plants)	0	0
Cassava brown streak virus Cassava brown streak disease	0	0
<b>Field Standards</b>		
Minimum previous cropping season	2	2
Isolation (m)	5	5
Maximum off-types (%)	0.5	1
Maximum permitted ratoons (Number)	0	1
Minimum number of inspections	3	3

Provided that if the applicant is not the breeder or the only breeder, he or she shall provide the relevant documentary evidence as to how the entitlement to the variety came into his or her possession;

and

- (f) a written summary outlining—
- (i) the proposed denomination for the variety or provisional designation; and
  - (ii) the technical description of the variety; and
  - (iii) the geographic origin of the variety; and
  - (iv) the genetically modified organism status of the variety; and
  - (v) any other information that may be required by the certifying authority.

(3) The applicant referred to in subsection (2) shall submit a similar application to the national seed authority of another member state, and the certifying authority and the national seed authority of that other member state shall conduct tests during the same time for two seasons prior to such application for recognition within the COMESA region has been made, to ensure that the national requirements of the two countries are met.

(4) Once the certifying authority has released the variety at national level it shall ensure that the application for release within the COMESA region, together with any attachment attached to it, is forwarded to the Unit within two weeks after filing, for certification of the seed.

Provided that an omission to forward an application to the Unit shall not affect the validity of such an application if the application is received by the Unit within one month after the application was submitted to the certifying authority.

(5) Once the UNIT has certified any seed in terms of subsection (4), a seed certification inspector or sampler shall seal all the labels attached to the containers of seed referred to in the

certificate with a seal that cannot be removed and reattached or mark the labels with a seed certification stamp which has been approved by the certifying authority:

Provided that such seed certification inspector or sampler has been authorised, accredited or registered as a field inspector or sampler, and has been issued a qualified seed inspectors and sampler's certificate and identity card by the Unit.

(6) The format for COMESA seals and labels shall be provided by the national seed authority to authorised, accredited or registered field inspectors or samplers.

(7) A variety that is approved and released by the Unit may not be permitted into Zimbabwe where the certifying authority is of the opinion that the variety is—

- (a) not suitable for cultivation in Zimbabwe; or
- (b) not accepted by farmers as a result of specific, well-known variety characteristics; or
- (c) a health risk to other varieties, humans or the environment.

(8) If any person is aggrieved by any decision of or action taken by a national seed authority of any member state with respect to an application made in terms of subsections (2) and (4), he or she may appeal in writing to the Unit in accordance with the prescribed rules and procedures set out in the relevant COMESA Treaties, Protocols and Agreements.”

4. The Twelfth Schedule to the principal notice is repealed and the following is substituted—

“TWELFTH SCHEDULE (*Section 15*)  
SEED SERVICES PRICE CHARGES

1	Seed testing (for both local and export samples)	Non treated seed per sample	Chemically treated per sample
		US\$	US\$
	Purity	10,00	15,00
	Germination	10,00	15,00

<i>Diseases</i>		
Soybean mosaic virus SMV %	0	0.02
<i>Cercospora kikuchii</i> Purple stain %	2.5	2.5
<i>Xanthomonas axonopodis</i> Bacterial pustule	0	0
<i>Pseudomonas savastanoi</i>	0	
<i>Laboratory Standards</i>		
Minimum germination (%)	75	75
Minimum pure seed (%)	99	99
Maximum moisture (%)	12	12

**Pearl Millet, *Pennisetum glaucum* L.**

<i>Field Standards</i>	Basic Seed	Certified 1 <sup>st</sup>
Minimum previous cropping season	1	1
Isolation (m)	400	200
Maximum off-types (%)	0.2	0.5
Minimum number of inspections	3	3
<i>Laboratory Standards</i>		
Minimum germination (%)	75	80
Minimum pure seed (%)	98	98
Maximum moisture (%)	12	12

**Sorghum hybrid, *Sorghum bicolor* L. Moench**

<i>Field Standards</i>	<b>Basic Seed</b>	<b>Certified 1<sup>st</sup></b>
Minimum previous cropping season	1	1
Isolation (m)	400	200
Maximum off-types (%)	0.2	0.4
Minimum number of inspections	3	3
<b><i>Diseases</i></b>		
<i>Sporisorium sorghi</i> covered kernel smut (%)	0.1	0.2
<i>Peronosclerospora sorghi</i> Mildew (%)	0.1	0.2
<b><i>Laboratory Standards</i></b>		
Minimum germination (%)	80	80
Minimum pure seed (%)	99	98
Maximum moisture (%)	12	12

**Soybean, *Glycine max* L. Merrill**

<i>Field Standards</i>	<b>Basic Seed</b>	<b>Certified 1<sup>st</sup></b>
Minimum previous cropping season	1	1
Isolation (m)	10	5
Maximum off-types (m <sup>2</sup> )	1/30	1/10
Minimum number of inspections	3	3

	Purity and G3 ermination	20,00	25,00
	Moisture testing	10,00	18,00
	Local certificate duplicate/replacement	10,00	10,00
	ISTA Samples	40,00	50,00
	<i>NOTE: URGENT TESTING IS DOUBLE THE PRICE</i>		
<b>2</b>	<b>ISTA FEES INTERNATIONAL CERTIFICATES (each)</b>		
			US\$
	Replacement		40,00
	Lot samples for OIC issuance		40,00
	Sampling visit/hour		40,00
	Blue		30,00
	Green		30,00
	Duplicate		30,00
	Warehouse Re-inspection		250,00
<b>3</b>	<b>Sealing</b>		
			US\$
	Seal maximum 50kg bag		2,00
	Bulk sealing/tonne		40,00
<b>4</b>	<b>Seed crop inspection fees</b>		
			US\$
	Registration for Se10.00ed Crops/Ha (excluding Tobacco and cotton)		10,00
	Cotton Seed Registration/Ha		5,00
	Tobacco Registration/plot		150,00
<b>5</b>	<b>Re-inspection/lot</b>		
			US\$

	Tuber inspection per LOT	10,00
	Re-inspection/lot	20,00
	Tuber inspection/Field/Ha	20,00
	Penalty fee for a lost field inspection report	15,00
	Re-inspection/Ha	15,00
<b>6</b>	<b>Recognition of eligible varieties</b>	
		US\$
	Application fee/variety	350,00
	Annual renewal fee/variety	12,00
	OECD Certification/variety	55,00
	OECD label	55,00
<b>7</b>	<b>Seed seller's licence</b>	
		US\$
	Certifying Agency Registration	1,200,00
	Certifying Agency Annual Renewal Fee	350,00
	Class 'A' licence registration	1,000,00
	Class 'A' licence renewal fee	350,00
	Class 'B' registration fee /OUTLET	350,00
	Class 'B' licence renewal fee/OUTLET	150,00
	Class 'C' licence registration fee/OUTLET (Chain stores/Supermarket)	125,00
	Class 'C' licence renewal fee/OUTLET (Chain Stores)	65,00
	Import and Export Application fee/variety	10,00
	SME shops (General Dealers) annual fee	20,00
<b>8</b>	<b>Plant breeders right fees</b>	
		US\$
	Application fee/variety	1,000,00

<i>Botryotinia fuckeliana</i> Grey mould of sunflower (%)	0.5	1
<b>Laboratory Standards</b>		
Minimum germination (%)	80	85
Minimum pure seed (%)	99	99
Maximum moisture (%)	10	10

**Sorghum OPV, *Sorghum bicolor* L. Moench**

<b>Field Standards</b>	<b>Basic Seed</b>	<b>Certified 1<sup>st</sup></b>
Minimum previous cropping season	1	1
Isolation (m)	400	200
Maximum off-types (%)	0.2	0.5
Minimum number of inspections	3	3
<b>Diseases</b>		
<i>Sporisorium sorghi</i> Covered kernel smut (%)	0.1	0.2
<i>Peronosclerospora sorghi</i> Mildew (%)	0.1	0.2
<b>Laboratory Standards</b>		
Minimum germination (%)	80	80
Minimum pure seed (%)	98	98
Maximum moisture (%)	12	12



<i>Diseases</i>		
<i>Sclerotinia sclerotiorum</i> Color rot (At final inspection)	0	0
<i>Verticillium dahliae</i> Verticillium wilt	0	0
<i>Plasmopara halstedii</i> Downy mildew %	0	0.2
<i>Alternaria helianthi</i> Leaf blight of sunflower (%)	0	0.2
<i>Botryotinia fuckeliana</i> Grey mould of sunflower (%)	0.5	1
<i>Laboratory Standards</i>		
Minimum germination (%)	80	85
Minimum pure seed (%)	99	99
Maximum moisture (%)	10	10

**Sunflower Hybrid, *Helianthus annuus* L.**

<i>Field Standards</i>	<b>Basic Seed</b>	<b>Certified 1<sup>st</sup></b>
Minimum previous cropping season	1	1
Isolation (m)	2 500	1 500
Maximum off-types (%)	0.1	0.1
Minimum number of inspections	3	3
<i>Diseases</i>		
<i>Sclerotinia sclerotiorum</i> Color rot (At final inspection)	0	0
<i>Verticillium dahliae</i> Verticillium wilt	0	0
<i>Plasmopara halstedii</i> Downy mildew (%)	0	0.2
<i>Alternaria helianthi</i> Leaf blight of sunflower (%)	0	0.2

	Gazetting fee/application	75,00
	Inspection of register/variety	35,00
	Certificate copy of an entry in register/variety	35,00
<b>9</b>	<b>Training</b>	
	Training	US\$
	Training and Examination Fees	45,00
	Gazetting fee	150,00
		75,00".

5. The principal notice is amended by the insertion of the following Schedule after the Thirteenth Schedule—

“FOURTEENTH SCHEDULE (*Section 10(A)*)

**PART I**

APPLICATION FOR VARIETY REGISTRATION AND RELEASE

**Release System: Application form**

COMESA Form/VR/06/1

Species name (1):.....

Variety name (2): .....

Synonym (3): .....

Commercial contact (4): .....

Agroecological zones (5):.....

Date:.....

Applicant (6) (7) Name: .....

Company: .....

.....

Address: .....

Phone No:.....

Email address: .....

Status of the applicant: .....

**Breeder's company**

Name: .....  
 Address: .....  
 .....  
 Registration No.: .....  
 Contact name: .....  
 Phone No.: .....  
 Fax No.: .....  
 Email address: .....

**Maintainer's company**

Name: .....  
 Address: .....  
 .....  
 Registration No.: .....  
 Contact name: .....  
 Phone No.: .....  
 Fax No.: .....  
 Email address: .....

**First country of registration**

Country: .....  
 Registration date: .....  
 Registration No.: .....

**Second country of registration**

Country: .....  
 Registration date: .....  
 Registration No.: .....

*If the variety has been registered in only one country before June, 30th 2015.*

Date of application: .....  
 Application No.: .....

A picture is joined with the application form (8).

- (1) The species name can be the English or Latin name.
- (2) The variety name has to be different from names already used in Species from the same class according to UPOV rules.
- (3) If synonyms are used, please indicate in which countries they are used, and the reasons for that. Please note that COMESA Seed Committee can reject the use of synonyms if there is no valid reason for it.
- (4) Please indicate where and how a potential user of the variety can have access to it.
- (5) Agro-ecological zones will be defined for COMESA countries later on. Please indicate according to your knowledge which zones the variety is adapted to.
- (6) The applicant has to be located in one of the COMESA countries. He/she can be the Breeder or a representative of the Breeder.

**Wheat, *Triticum aestivum* L. emend**

<b>Field Standards</b>	<b>Basic Seed</b>	<b>Certified 1<sup>st</sup></b>
Minimum previous cropping season	1	1
Isolation (m)	10	5
Maximum off-types (m <sup>2</sup> )	1/100m <sup>2</sup>	3/100m <sup>2</sup>
Minimum number of inspections	2	2
<b>Diseases</b>		
<i>Tilletia barclayana</i> Kernel bunt	0	1/100m <sup>2</sup>
<i>Ustilago nuda</i> Loose smut	1/100m <sup>2</sup>	1/100m <sup>2</sup>
<b>Laboratory Standards</b>		
Minimum germination (%)	85	85
Minimum pure seed (%)	99	99
Maximum moisture (%)	13	13

**Sunflower OPV, *Helianthus annuus* L.**

<b>Field Standards</b>	<b>Basic Seed</b>	<b>Certified 1<sup>st</sup></b>
Minimum previous cropping season	1	1
Isolation (m)	2 500	1 500
Maximum off-types (%)	0.1	0.1
Minimum number of inspections	3	3

**Cotton OPV, *Gossypium hirsutum* L.**

<i>Field Standards</i>	<b>Basic Seed</b>	<b>Certified 1<sup>st</sup></b>
Minimum previous cropping season	2	2
Isolation (m)	100	100
Maximum off-types (%)	0.2	0.3
Minimum number of inspections	3	3
<b>Laboratory Standards</b>		
Minimum germination (%)	70	75
Minimum pure seed (%)	99	99
Maximum moisture (%)	10	10

**Cotton Hybrid, *Gossypium hirsutum* L.**

<i>Field Standards</i>	<b>Basic Seed</b>	<b>Certified 1<sup>st</sup></b>
Minimum previous cropping season	2	2
Isolation (m)	800	800
Maximum off-types (%)	0.3	0.5
Minimum number of inspections	3	3
<b>Laboratory Standards</b>		
Minimum germination (%)	70	75
Minimum pure seed (%)	99	99
Maximum moisture (%)	10	10

- (7) Please note that the COMESA Seed Office will need a headed letter from the company attesting that the applicant is untrusted to apply for the registration of the company's varieties.
- (8) A picture of the variety is not mandatory but strongly recommended.  
Please join to this application form a headed letter from the company attesting that the applicant is untrusted to apply for the registration of the company's varieties, and eventually a picture of the variety.
- Please return this application form completed, signed, and accompanying documents to COMESA Seed Office, Ben Bella Road, LUSAKA, ZAMBIA.


**PART II****COMESA SEED CERTIFICATION AND QUALITY ASSURANCE AND QUALITY SYSTEM:  
SEED CLASSES**

<b>Seed Class</b>	<b>Label colours</b>
Pre-basic seed	Violet band on white
Basic seed	White
Certified seed (1st Generation)	Blue
Certified seed (2nd Generation)	Red

**COMESA SEED CERTIFICATION AND QUALITY ASSURANCE AND QUALITY  
SYSTEM: COMESA LABEL CONTENT**

<b>Front of Label</b>	<b>Back of Label</b>
Species (Latin name)	COMESA Logo and National Logo
Variety	Name and Address of Certifying Authority
Lot Number	Seed Class
Test Certificate Number	COMESA Declaration
Date of Test	Statement of Re-packing and Re-labelling
Net Weight	Country of Production
Seed Treatment Declaration	

COMESA SEED CERTIFICATION AND QUALITY ASSURANCE AND QUALITY SYSTEM: COMESA SEED CERTIFICATE

	<div style="border: 1px solid black; width: 80px; height: 80px; margin: 0 auto;"></div> <p>Authority logo</p>
<p><b>COMESA REGIONAL CERTIFICATION</b></p> <p style="margin-top: 20px;">Date: .....</p> <p style="margin-top: 20px;">This is to certify that seed lot number .....                  produced in COMESA Member State of .....                  has satisfied the requirements of the COMESA Seed Certification System as provided by the COMESA Seed Trade Harmonisation Regulations of 2014.</p>	

<i><b>Diseases</b></i>		
<i>Magnaporthe grisea</i> Rice blast (piricularia) %	0.1	0.5
<i>Aphelenchoides besseyi</i> White tip nematode	0	0
<i><b>Laboratory Standards</b></i>		
Minimum germination (%)	70	80
Minimum pure seed (%)	99	98
Maximum moisture (%)	13	13

\* May be replaced by time isolation.

**Groundnut, *Arachis hypogaea* L.**

<i><b>Field Standards</b></i>	<b>Basic Seed</b>	<b>Certified 1<sup>st</sup></b>
Minimum previous cropping season	1	1
Isolation (m)	10	5
Maximum off-types (%)	0.1	0.2
Minimum number of inspections	3	2
<i><b>Diseases</b></i>		
<i>Ralstonia solanacearum</i>	0 (at final inspection)	0 (at final inspection)
Rosette virus	1/1000 plants	5/1000 plants
<i><b>Laboratory Standards</b></i>		
Minimum germination (%)	75	75
Minimum pure seed (%)	98	98
Maximum moisture (%)	10	10

**Rice, *Oryza sativa* L. (varieties)**

<i>Field Standards</i>	<b>Basic Seed</b>	<b>Certified 1<sup>st</sup></b>
Minimum previous cropping season	1	1
Isolation (m)	5	5
Maximum off-types (%)	0.01	0.2
Minimum number of inspections	2	2
<b><i>Diseases</i></b>		
<i>Magnaporthe grisea</i> Rice blast (piricularia) %	0.1	0.5
<i>Aphelenchoides besseyi</i> White tip nematode	0	0
<b><i>Laboratory Standards</i></b>		
Minimum germination (%)	80	80
Minimum pure seed (%)	98	98
Maximum moisture (%)	13	13

**Rice, *Oryza sativa* L. (hybrid)**

<i>Field Standards</i>	<b>Basic Seed</b>	<b>Certified 1<sup>st</sup></b>
Minimum previous cropping season	2	2
Isolation (m)	200 <sup>*</sup>	100 <sup>*</sup>
Maximum off-types (%)	0.01	0.1
Minimum number of inspections	3	3

## PART III

## COMESA SEED CERTIFICATION STANDARDS

**Beans, *Phaseolus vulgaris* L.**

<i>Field Standards</i>	<b>Basic Seed</b>	<b>Certified 1<sup>st</sup></b>
Minimum previous cropping season	1	1
Isolation (m)	10	5
Maximum off-types (m <sup>2</sup> )	1/30 m <sup>2</sup>	1/10 m <sup>2</sup>
Minimum number of inspections	3	3
<b><i>Diseases</i></b>		
Bean common mosaic virus %	0	0.1
<i>Collectotrichum lindethianum</i> Anthracnose of bean %	0.02	0.02
<i>Pseudomonas phaseolicola</i> Halo blight %	0	0.05
<i>Pseudomonas syringae</i> pv. <i>syringae</i> Bacterial canker	0	0.05
<i>Phaeoisariopsis griseola</i> Angular bean leaf spot	0.02	0.05
<i>Xanthomonas phaseoli</i> Bacterial blight of bean	0	0.05
<b><i>Laboratory Standards</i></b>		
Minimum germination (%)	75	80
Minimum pure seed (%)	99	99
Maximum moisture (%)	14	14

**Maize OPV, *Zea mays* L.**

<i>Field Standards</i>	<b>Basic Seed</b>	<b>Certified 1<sup>st</sup></b>
Minimum previous cropping season	1 *	1 *
Isolation (m)	400 **	200 **
Maximum off-types (%)	0.1	0.5
Minimum number of inspections	3	3
<b><i>Diseases</i></b>		
<i>Sphacelotheca reiliana</i> Head smut (at final inspection)	0	0
<i>Ustilago zae</i> Common smut (at final inspection)	0	0
<i>Sporisorium cruentum</i> Loose smut (at final inspection)	0	0
<b><i>Laboratory Standards</i></b>		
Minimum germination (%)	90	90
Minimum pure seed (%)	99	99
Maximum moisture (%)	13	13

\* Not required if volunteer plants are removed through irrigation/rainfall.

\*\* Time isolation may replace distance isolation. Rows of male plants can reduce distance isolation.

**Maize Hybrid, *Zea mays* L.**

<i>Field Standards</i>	<b>Basic Seed</b>	<b>Certified 1<sup>st</sup></b>
Minimum previous cropping season	1 *	1 *
Isolation (m)	400 **	200 **
Maximum off-types (%)	0.1 ***	0.2 ****
Minimum number of inspections	3	3
<b><i>Diseases</i></b>		
<i>Sphacelotheca reiliana</i> Head smut (at final inspection)	0	0
<i>Ustilago zae</i> Common smut (at final inspection)	0	0
<i>Sporisorium cruentum</i> Loose smut (at final inspection)	0	0
<b><i>Laboratory Standards</i></b>		
Minimum germination (%)	80	90
Minimum pure seed (%)	99	99
Maximum moisture (%)	13	13

\* Not required if volunteer plants are removed through irrigation/rainfall.

\*\* Time isolation may replace distance isolation. Rows of male plants can reduce distance isolation.

\*\*\* The number of female parent plants that 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 that have either shed pollen or are shedding pollen exceeds 1 per cent for the three inspections carried out on different dates.

\*\*\*\* The number of female parent plants that have either shed pollen or are shedding pollen exceeds 1 per cent at any one inspection, or the total number of female parent plants exceeds 2 per cent at three inspections carried out on different dates.