COMESA
SEED TRADE
HARMONIZATION REGULATIONS
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COMESA SEED TRADE HARMONIZATION REGULATIONS, 2014
IT IS HEREBY NOTIFIED that the Council, at its 32nd Meeting held from 27th to 28th February 2014 at Kinshasa, Democratic Republic of Congo issued the following Legal Notice:

ANNEX VII TO COMESA GAZETTE VOLUME 19 No. 1

HAVING REGARD to Article 10 (1) of the Treaty providing that Council may make Regulations;

The Council hereby makes the following Regulations:

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COMESA SEED TRADE HARMONIZATION REGULATIONS, 2014

CHAPTER 1
PRELIMINARY

1. Citation

These Regulations may be cited as the COMESA Seed Trade Harmonization Regulations, 2014.

2. Interpretation

(1) In these Regulations, unless the context otherwise requires:

“accredit” means formal recognition of the technical competence to carry out seed certification procedures;

“additional declaration” means a statement that is required by an importing country to be entered on a Phytosanitary Certificate and which provides specific additional information on a consignment;

“agro-ecological zone” or “AEZ” means environments where crop varieties can be favourably produced;

“Authority” means the National Seed Authority;

“basic seed” means seed that has been produced from pre-basic seed;

“breeder” means the person who bred or discovered and developed a variety;

“certified seed” means seed that is of direct descent from either the basic seed or the certified seed of a variety;

“COMESA Certificate” means a document issued by the Authority stating that a seed lot has satisfied the certification standards as provided for in these Regulations;

“COMESA Label” means the label added to packaged seed that attests that the seed has undergone the relevant COMESA seed certification process and has met the required quality standards;

“Committee” means the COMESA Seed Committee;

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

“Council” means the Council of Ministers of the Common Market established by Article 7 of the Treaty;

“denomination” means the name assigned to a variety;

“Distinctness” in relation to a variety means being clearly distinguishable from any other variety whose existence
is a matter of common knowledge at the time of the filing of the application;

“field” means a portion or unit of a farm that is registered to produce certified seed under the COMESA Seed Certification System;

“first generation certified seed” means seed derived from basic seed in the COMESA Seed Certification System;

“Genetically Modified Organism” or “GMO” means any living organism that possesses a novel combination of genetic material obtained through the use of modern biotechnology;

“germination” means germination of a seed in a laboratory test based on the emergence and development of the seedling to a stage where the aspect of its essential structures indicate whether or not it is able to develop further into a satisfactory plant under favourable conditions in soil;

“germination percentage (%))” means the proportion by number of seeds that have produced seedlings classified as normal under the conditions and within the period specified in ISTA Rules;

“inert matter” includes seed units and all other matter and structures not defined as pure seed;

“isolation” means distances that apply to seed production fields, plants and field of species in order to maintain genetic purity;

“ISTA Rules” means the international rules for seed testing published by the International Seed Testing Association which include standardized definitions, methods, and principles to be used when evaluating seed for transactions in international trade;

“Member State” means a Member State of the Common Market;

“off-type” means a plant which does not exhibit the recognized and accepted habits and characteristics of the variety being grown;

“Organization” means the National Plant Protection Organization;

“owner” means the individual or institution that created a variety or that was the source of a variety;

“person” means a natural or legal person;

“pre-basic seed” means seed of generations preceding basic seed;
“phytosanitary measure” means any legislation, regulation or official procedure having the purpose of preventing the introduction or spread of quarantine pests, or limiting the economic impact of regulated non-quarantine pests;

“point of entry” means an airport, seaport or land border point officially designated for the importation of consignments or entrance of passengers;

“previous cropping” means intervals defined in terms of crop seasons and years;

“pure seed” refers to a species stated by an applicant, or found to predominate in a test, and must include all botanical varieties and cultivars of that species, including intact seeds and pieces of seed units larger than one-half their original size;

“quarantine” means the official confinement of regulated articles for observation and research or for further inspection, testing or treatment;

“quarantine pest” means a pest of potential economic importance to the area endangered thereby and not yet present there, or present but not widely distributed and being officially controlled;

“second generation certified seed” means seed derived from first generation certified seed in the COMESA Seed Certification System;

“Secretary-General” means the Secretary-General of the Common Market provided for by Article 17 of the Treaty;

“seed” means a botanical structure that contains at least one ripened ovule with or without accessory parts and may also include any plant or plant part used as propagation material under the System;

“seed certification” means the process of ensuring that seed offered for sale meets minimum requirements of field and laboratory regulatory standards set out in these Regulations;

“seed lot” means homogenous seed quantity, physically identifiable by a unique reference code;

“seed sampler” means a person authorized to take seed samples following ISTA Rules;

“special attributes or characteristics” means major strengths or weaknesses of a variety;

“Stability” in relation to a variety means that its relevant characteristics remain unchanged after repeated propagation, or in a case of a cycle of propagation, at the end of each such cycle;

“System” means the COMESA Variety Release, Seed Certification and Phytosanitary Measures;
“treatment” means an official procedure for the killing, inactivation or removal of pests, or for rendering pests infertile or for devitalization;

“Treaty” means the Treaty establishing COMESA;

“Uniformity” in relation to a variety means being sufficiently uniform in its relevant characteristics, subject to the variation that may be expected from the particular features of its propagation;

“Unit” means the Seed Coordination Unit;

“Value for Cultivation or Use” or “VCU” means the performance data that is typically established through multi-location testing to show that a new variety has value to be released for cultivation;

“variety” means an assemblage of cultivated plants that is clearly distinguished by any characters such as morphological, physiological, cytological, chemical, or others and that, when reproduced sexually or asexually, retains its distinguishing characteristics;

“yield potential” means yield of the useful part of plant in optimal conditions of production.

(2) In these Regulations, a reference to a law or regulations shall be construed as reference to the law or regulations and as may be amended from time to time.

3. **Objectives**

The objectives of these Regulations are to:

(a) harmonize phytosanitary measures for seed in the region in order to facilitate the safe movement of seed within Member States, in a transparent manner and without dissemination of any pest of quarantine importance;

(b) ensure that varieties listed in the COMESA Variety Catalogue and traded among Member States are of high and known quality and that movement of seed is more efficient;

(c) encourage investment in seed business in the Member States;

(d) increase access to existing varieties in the Member States; and

(e) stimulate the breeding and availability of improved seed varieties resulting in increased variety choices for all farmers.
Part I - Seed Coordination Unit

4. Establishment of the Seed Coordination Unit

There is hereby established a Unit within the COMESA Secretariat to be known as the Seed Coordination Unit.

5. Composition of the Unit

(a) The officers of the Unit shall be appointed by the Secretary-General and shall comprise a Unit Manager and such other relevant officers as may be deemed necessary for the performance of the functions of the Unit.

(b) The Unit Manager shall be responsible for implementation of Regulation 6.

6. Functions of the Unit

The Unit shall:

(a) coordinate all activities related to the administration and operation of the System;

(b) maintain records of all activities under the System including field inspections, sampling and laboratory seed testing, variety testing, and seed health testing;

(c) assist in monitoring and technical backstopping of the System;

(d) facilitate capacity building to the Authority and the Organization based on established needs;

(e) assist in solving technical problems arising from the System;

(f) provide suggestions and guidelines on future improvement of the System;

(g) facilitate the exchange of information among Member States;

(h) set up and maintain the Variety Catalogue and Variety Database;

(i) document, support, and coordinate the work of Authorities with regard to the COMESA Variety Release System;

(j) collaborate with national institutions in the execution of the System;

(k) assess the capacity of national institutions and develop proposals for capacity strengthening as required;

(l) manage a system of variety registration fees to fund the operation of the System; and

(m) perform any other functions as may be assigned by the Secretary-General.
Part II - National Plant Protection Organization

7. Establishment of the National Plant Protection Organization

There shall be an Organization in each Member State for purposes of implementing the provisions of Chapter 5.

8. Functions of the Organization

The Organization shall:

(a) facilitate the movement of seed within the region;
(b) facilitate the implementation of the system in the respective Member State;
(c) ensure that the rules, directions and standards of the System are observed;
(d) provide capacity building to the seed sector in all technical areas;
(e) facilitate the organization of technical reviews of phytosanitary measures and their impact on the seed movement within the region;
(f) provide technical support to the implementation and improvement of the System;
(g) consider and authorize changes for improvement to the rules, directions, and standards of the System; based on International Plant Protection Convention (IPPC) and World Trade Organization (WTO) Agreement on Sanitary and Phytosanitary (SPS); and
(h) perform any other relevant functions the Organization may deem necessary.

Part III - National Seed Authority

9. Establishment of the National Seed Authority

There shall be an Authority in each Member State for purposes of implementing the provisions of Chapters 3 and 4.

10. Functions of the Authority

The Authority shall:

(a) facilitate the movement of seed within the region;
(b) facilitate the implementation of the System in the respective Member States;
(c) provide technical support to the implementation and improvement of the System;
(d) consider and authorize changes and improvements in the rules, directions, and standards of the System;
(e) ensure that the rules, directions, and standards of the System are observed;
(f) provide capacity building for the private and public seed sector in all technical areas;

(g) encourage the private and public seed sector to establish their internal quality control mechanism;

(h) accredit laboratories, license and register seed inspectors, samplers and analysts;

(i) issue a certificate of competence and identity card to qualified seed inspectors and samplers and inform the Unit accordingly;

(j) advise breeders, seed companies and other stakeholders on procedures for variety testing, registration and release;

(k) organize testing, registration and release of varieties at the national level;

(l) verify the quantity and quality of data available for a variety for which regional release is being applied;

(m) submit the applications for regional release to the Unit;

(n) assess the merits of varieties that are being introduced for marketing in the respective Member States under the System and taking action as appropriate;

(o) assist the Unit with documentation on the performance of the System and engage actively in communication concerning any critical issues at the Member State level;

(p) inform the Unit when personnel or laboratories are no longer qualified to perform or operate in accordance with the System in the respective Member State;

(q) register fields and keep records of inspection reports issued in accordance with the System;

(r) provide regional seals and labels or their formats for companies that produce seed in accordance with the System;

(s) issue certificates for each seed lot that has been certified in accordance with the System;

(t) carry out post-control tests to ascertain that the System operates satisfactorily;

(u) maintain databases of released varieties and seed;

(v) submit to the Unit annual reports concerning seed activities and the performance of the System; and
(c) perform any other relevant functions the Authority may deem necessary.

Part IV - COMESA Seed Committee

11. Establishment of the COMESA Seed Committee

There is hereby established a Committee consisting of representatives of Member States from the Authority, the Organization, private seed sector and other relevant stakeholders.

12. Functions of the Committee

(1) The Committee shall provide technical support for the implementation and improvement of the System.

(2) In performing the functions in sub-regulation (1), the Committee shall, in consultation with the Authority:
   
   (a) formulate the necessary technical guidelines and procedures for the operation of the System, including developing crop-specific requirements;
   
   (b) consider and recommend amendments to the rules, directives, and standards of the System;
   
   (c) provide auditing guidelines for the implementation and improvement of the System;
   
   (d) deal with disputes referred to it relating to the implementation of the System;
   
   (e) determine and periodically review the appropriate fee structure for the System; and
   
   (f) perform any other relevant functions the Committee may deem necessary.
CHAPTER 3

COMESA SEED CERTIFICATION SYSTEM

13. Seed Certification Rules

The Council shall adopt Seed Certification Rules to implement the System relating to:

(a) eligible varieties registered in the COMESA Variety Catalogue;

(b) seed classes;

(c) field and laboratory Seed Certification Standards;

(d) seed testing methodologies based on ISTA Rules;

(e) the COMESA Label issued by the Authority;

(f) the COMESA Certificate issued by the Authority in the form set out in Schedule A;

(g) post-control tests carried out by the Authority in conformity with international standards;

(h) accreditation of laboratories, licensing and registration of seed inspectors, samplers, and analysts; and

(i) any other matters the Council may deem necessary.

14. COMESA Seed Classes

Member States shall categorize seed as follows:

(a) pre-basic seed;

(b) basic seed;

(c) first generation certified seed; and

(d) second generation certified seed.

15. COMESA Label Colour

In accordance with the standards set out in Schedule D, Member States shall use the following COMESA label colours for the various seed classes as set out in Schedule B:

(a) pre-basic seed labelled violet band on white;

(b) basic seed labelled white;

(c) first generation certified seed labelled blue; and

(d) second generation certified seed labelled red.
16. **COMESA Label Content**

The COMESA Label shall contain the following information in the form set out in Schedule C:

(a) species (latin name);
(b) variety;
(c) lot number;
(d) Seed testing Certificate number;
(e) date of test;
(f) net weight;
(g) seed treatment declaration;
(h) COMESA logo and national logo;
(i) name and address of certifying Authority or Organization;
(j) seed class;
(k) COMESA declaration;
(l) statement of re-packing and re-labelling; and
(m) Member State of production.

17. **COMESA Field Parameters and Laboratory Methodologies**

Member States shall use the following COMESA field parameters and laboratory methodologies during seed certification:

(a) minimum previous cropping season;
(b) isolation distance (m);
(c) maximum off-types (%) or (m²);
(d) minimum number of inspections;
(e) minimum germination (%);
(f) minimum pure seed (%);
(g) maximum moisture (%); and

(h) diseases.

18. **COMESA Seed Certification Standards**

Member States shall adopt the seed certification standards as set out in Schedule D during certification of basic and certified seed.
CHAPTER 4

COMESA VARIETY RELEASE SYSTEM

19. COMESA Variety Release System

Member States shall adopt the COMESA Variety Release System for the release of new and existing varieties.

20. Variety Tests

(1) The Unit shall ensure that a variety satisfies the test requirements set out in sub-Regulation (2) before it is introduced into the COMESA Variety Catalogue and Database.

(2) Varieties shall be released subject to the following tests:

(a) Distinctness, Uniformity, Stability (DUS) test carried out in accordance with the International Union for the Protection of New Varieties (UPOV) guidelines; and

(b) Value for Cultivation or Use (VCU) or National Performance Tests (NPT).

(3) The national variety release system shall, for any variety that is intended to be released into the COMESA Variety Release System, ensure the variety satisfies the requirements set out in sub-regulation (2).

21. Denomination of Varieties

(1) Member States shall designate each variety by a denomination that will be its generic designation.

(2) A denomination shall not mislead or cause confusion concerning the characteristics, value, or identity of the variety or the breeder.

(3) A variety shall bear the same name in all Member States unless the denomination is considered unsuitable by the Authority, in which case a synonym may be used.

22. Reference Sample

(1) The owner of a variety shall submit a reference sample to each of the two Authorities of the Member States releasing the variety.

(2) The applicant shall state the required quality parameters in an application form when submitting a reference sample.

(3) The seed submitted in the reference sample shall satisfy the minimum requirements for germination, species and analytical purity, health, and moisture content as specified by the Authority.

(4) Subject to sub-regulation (3), the seed submitted in the reference sample shall:

(a) be visibly healthy;

(b) have vigour; and
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(c) be free from quarantine pest or disease.

(5) The seed submitted in the reference sample shall not have undergone any treatment that would affect the expression of the characteristics of the variety but where the Authority allows or requests such treatment, details of the treatment shall be supplied.

23. Maintainer

The maintainer shall:

(a) be responsible for the maintenance of the genetic purity of the variety; and

(b) provide the seed material to the Authority at any time during the period of registration.

24. Payment of Fees

Member States shall pay:

(a) an initial application fee for the inclusion of varieties in the COMESA Variety Catalogue; and

(b) an annual fee upon successful registration for as long as the variety remains on the COMESA Variety Catalogue.

25. Variety Catalogue Content

The COMESA Variety Catalogue shall contain the following information:

(a) species, botanical or common name;

(b) variety name, synonyms, code and type;

(c) countries and years of release;

(d) date of regional registration;

(e) owner;

(f) maintainer or seed source;

(g) recommended agro-ecological zone;

(h) duration to maturity;

(i) yield potential; and

(j) special attributes or characteristics.

26. COMESA Variety Database

The COMESA Variety Database shall:
(a) cover all varieties for which data is available;

(b) be accessible to all Authorities; and

(c) contain such details as may be determined by the Committee.

27. **Registration of a New Variety**

In accordance with Regulation 23 an application for registration of a new variety in the COMESA Variety Release System shall include:

(a) results of two seasons of DUS and VCU tests;

(b) suggested denomination;

(c) proof of release in two Member States; and

(d) reference sample provided to the Authorities.

28. **Registration of an Existing Variety**

(1) Varieties already released in one Member State before the establishment of the COMESA Variety Catalogue shall be entered in the Catalogue where:

(a) an application is submitted with the necessary information on DUS and VCU data of the first Member State; and

(b) the variety has undergone one season of VCU testing and has been released in the second Member State.

(2) Varieties already released in two Member States before the establishment of the COMESA Variety Catalogue, shall be entered in the Catalogue where an application is submitted with the necessary information on DUS and VCU data.

29. **Prohibition of Access to a Market**

A Member State may apply to the Unit to prohibit the use of a variety in its territory based on technical issues, such as unsuitability for cultivation, or risk to other seed varieties, human health, animal health and the environment.

30. **Genetically Modified Variety**

A genetically modified variety may only be released at the national level and in compliance with national bio-safety regulations.

31. **Withdrawal of Variety**

The Unit shall withdraw a variety from the Catalogue where:

(a) the information on the variety is incorrect;

(b) the annual fees are unpaid;

(c) a variety no longer conforms to its original characteristics;
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(d) the maintainer cannot provide the original material; or

(e) the applicant requests for its withdrawal with pre-notice.
CHAPTER 5
QUARANTINE AND PHYTOSANITARY MEASURES FOR SEED

Part I - Phytosanitary and Seed Documentation for Import and Export

32. Plant Import Permit

(1) The Organization of an importing Member State shall issue a Plant Import Permit to a seed importer authorizing the importation of seeds in accordance with the existing phytosanitary regulations in the System.

(2) The Plant Import Permit shall accompany the seed lot and be presented to inspectors at exit and entry points.

(3) A Plant Import Permit shall be in the form set out in Schedule E.

33. Phytosanitary Certificate

(1) The Organization of an exporting Member State shall issue Phytosanitary Certificate to certify that the requirements specified on the Plant Import Permit have been satisfied.

(2) The Phytosanitary Certificate shall be presented to the inspectors at exit and entry points.

(3) A Phytosanitary Certificate shall be in the form set out in Schedule E.

34. Non-compliance Notification

(1) The Organization of an importing Member State shall issue a Non-compliance Notification to the Organization of an exporting Member State where:

(a) consignments of seeds or the accompanying Phytosanitary Certificates do not comply with the conditions set out in the Plant Import Permit; or

(b) a quarantine pest has been intercepted.

(2) A Non-compliance Notification shall be in the form set out in Schedule G.

35. Re-export Phytosanitary Certificate

(1) The Organization of a Member State, where seeds are in transit, shall issue a Re-export Phytosanitary Certificate where:

(a) a consignment of seeds, arriving from an exporting Member State is being stored or repacked under circumstances which may expose the consignment to infestation or infection before re-export to a third Member State; or

(b) the consignment has stayed in the transit Member State longer than determined by the Organization.

(2) The Re-export Phytosanitary Certificate issued under sub-regulation (1) shall be attached to the Phytosanitary Certificate issued by the exporting Member State.
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(3) A Re-export Phytosanitary Certificate shall be in the form set out in Schedule H.

36. **Seed Testing Certificate**

(1) The Authority of the exporting Member State shall issue the Seed Testing Certificate in accordance with the seed certification System.

(2) The Seed Testing Certificate shall accompany a seed lot and be presented to inspectors at exit and entry points.

(3) A Seed Testing Certificate shall be in the form set out in Schedule I.

37. **Genetically Modified Organism (GMO) Declaration**

The Authority shall issue a declaration to certify the GMO status of a seed consignment.

**Part II – COMESA Quarantine Pest List for seed movement within Member States**

38. **COMESA Quarantine Pest List**

Member States shall adopt the COMESA Quarantine Pest List for seeds set out in Schedule J.

39. **Movement of seeds within Member States**

(1) Member states shall not move seed within the Common Market without the necessary documents prescribed in Part I of this Chapter.

(2) Member States shall, in implementing the COMESA Quarantine Pest List, apply phytosanitary measures for seed only in respect of pests which are not common to all Member States or not present in the importing Member State.

(3) Seed consignments may be re-tested on arrival in the importing Member State where there are justifiable reasons to assume that a quarantine pest may be introduced.

(4) Member States shall not be required to test seed consignments that are in transit.

(5) Member States may re-test or re-export seed consignment that has:

   (a) stayed in the transit Member State for a period longer than determined by the Organization; or

   (b) been exposed to infestation or infection before re-export to a third Member State.

(6) A national quarantine pest list of an importing Member State shall be considered where a quarantine pest is on the exception list of a Member State of the COMESA Quarantine Pest List.

40. **Equivalency**

Member States shall recognize alternative methods of controlling quarantine pests, provided that the method used:

   (a) has been declared;

   (b) is technically and economically feasible for use; and

   (c) provides the same level of protection against pests.
CHAPTER 6
FINAL PROVISIONS

41. Amendment

These Regulations may be amended by the Council.

42. Entry into Force

These Regulations shall enter into force on the date of their publication in the Official Gazette of the Common Market in accordance with Article 12 of the Treaty.
COMESA REGIONAL SEED CERTIFICATE

Date: ........................................

This is to certify that this 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.

Official stamp of Authority

Signed: .................................

Head of National Seed Authority
**SCHEDULE B**

**COMESA LABEL COLOUR**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-basic seed</td>
<td>(Violet band on white)</td>
</tr>
<tr>
<td>Basic seed</td>
<td>(White)</td>
</tr>
<tr>
<td>First generation Certified</td>
<td>(Blue)</td>
</tr>
<tr>
<td>Second generation certified</td>
<td>(Red)</td>
</tr>
</tbody>
</table>

Note: For the actual color codes, see inside back cover

**SCHEDULE C**

**COMESA LABEL CONTENT**

**FRONT OF LABEL**
- Species (Latin name)
- Variety
- Lot Number
- Test Certificate Number
- Date of Test
- Net Weight
- Seed Treatment Declaration

**BACK OF LABEL**
- COMESA Logo and National Logo
- Name and Address of Certifying Authority
- Seed Class
- COMESA Declaration
- Statement of Re-packing and Re-labelling
- Country of Production
<table>
<thead>
<tr>
<th>Field Standards</th>
<th>Basic Seed</th>
<th>Certified 1st</th>
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</thead>
<tbody>
<tr>
<td>Minimum previous cropping season</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Isolation (m)</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Maximum off-types (m²)</td>
<td>1/30 m²</td>
<td>1/10 m²</td>
</tr>
<tr>
<td>Minimum number of inspections</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Diseases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bean common mosaic virus %</td>
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<td>0.1</td>
</tr>
<tr>
<td><em>Collectotrichum lindeuthianum</em> Anthracnose of bean %</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td><em>Pseudomonas phaseolicola</em> Halo blight %</td>
<td>0</td>
<td>0.05</td>
</tr>
<tr>
<td><em>Pseudomonas syringae</em> pv.syringae Bacterial canker</td>
<td>0</td>
<td>0.05</td>
</tr>
<tr>
<td><em>Phaeoisariopsis griseola</em> Angular bean leaf spot</td>
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<td>0.05</td>
</tr>
<tr>
<td>Xanthomonas phaseoli Bacterial blight of bean</td>
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<td>0.05</td>
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<td>Laboratory Standards</td>
<td></td>
<td></td>
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<tr>
<td>Minimum germination (%)</td>
<td>75</td>
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</tr>
<tr>
<td>Minimum pure seed (%)</td>
<td>99</td>
<td>99</td>
</tr>
<tr>
<td>Maximum moisture (%)</td>
<td>14</td>
<td>14</td>
</tr>
</tbody>
</table>
Maize OPV, *Zea mays L*

<table>
<thead>
<tr>
<th>Field Standards</th>
<th>Basic Seed</th>
<th>Certified 1st</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum previous cropping season</td>
<td>1*</td>
<td>1*</td>
</tr>
<tr>
<td>Isolation (m)</td>
<td>400**</td>
<td>200**</td>
</tr>
<tr>
<td>Maximum off-types (%)</td>
<td>0.1</td>
<td>0.5</td>
</tr>
<tr>
<td>Minimum number of inspections</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Diseases</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Sphacelotheca reiliana</em> Head smut (at final inspection)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><em>Ustilago zeae</em> Common smut (at final inspection)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><em>Sporisorium cruentum</em> Loose smut (at final inspection)</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Laboratory Standards**

| 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*

<table>
<thead>
<tr>
<th>Field Standards</th>
<th>Basic Seed</th>
<th>Certified 1st</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum previous cropping season</td>
<td>1*</td>
<td>1*</td>
</tr>
<tr>
<td>Isolation (m)</td>
<td>400**</td>
<td>200**</td>
</tr>
<tr>
<td>Maximum off-types (%)</td>
<td>0.1***</td>
<td>0.2****</td>
</tr>
<tr>
<td>Minimum number of inspections</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Diseases</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Sphacelotheca reiliana</em> Head smut (at final inspection)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><em>Ustilago zeae</em> Common smut (at final inspection)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><em>Sporisorium cruentum</em> Loose smut (at final inspection)</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Laboratory Standards**

| Minimum germination (%)                           | 80         | 90           |
| Minimum pure seed (%)                             | 99         | 99           |
| Maximum moisture (%)                              | 13         | 13           |
COMESA SEED TRADE HARMONIZATION REGULATIONS, 2014

*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 percent 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 percent at any one inspection, or the total number of female parent plants exceeds 2 per cent at three inspections carried out on different dates.

Rice, Oryza sativa L (varieties)

<table>
<thead>
<tr>
<th>Field Standards</th>
<th>Basic Seed</th>
<th>Certified 1st</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum previous cropping season</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Isolation (m)</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Maximum off-types (%)</td>
<td>0.01</td>
<td>0.2</td>
</tr>
<tr>
<td>Minimum number of inspections</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

**Diseases**

*Magnaporthe grisea* Rice blast (piricularia) %

<table>
<thead>
<tr>
<th></th>
<th>Basic Seed</th>
<th>Certified 1st</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.1</td>
<td>0.5</td>
</tr>
</tbody>
</table>

*Aphelenchoides besseyi* White tip nematode

<table>
<thead>
<tr>
<th></th>
<th>Basic Seed</th>
<th>Certified 1st</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Laboratory Standards

<table>
<thead>
<tr>
<th></th>
<th>Basic Seed</th>
<th>Certified 1st</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum germination (%)</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>Minimum pure seed (%)</td>
<td>98</td>
<td>98</td>
</tr>
<tr>
<td>Maximum moisture (%)</td>
<td>13</td>
<td>13</td>
</tr>
</tbody>
</table>

Rice, Oryza sativa L (hybrid)

<table>
<thead>
<tr>
<th>Field Standards</th>
<th>Basic Seed</th>
<th>Certified 1st</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum previous cropping season</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Isolation (m)</td>
<td>200*</td>
<td>100*</td>
</tr>
<tr>
<td>Maximum off-types (%)</td>
<td>0.01</td>
<td>0.1</td>
</tr>
<tr>
<td>Minimum number of inspections</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

**Diseases**

*Magnaporthe grisea* Rice blast (piricularia) %

<table>
<thead>
<tr>
<th></th>
<th>Basic Seed</th>
<th>Certified 1st</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.1</td>
<td>0.5</td>
</tr>
</tbody>
</table>

*Aphelenchoides besseyi* White tip nematode

<table>
<thead>
<tr>
<th></th>
<th>Basic Seed</th>
<th>Certified 1st</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Laboratory Standards

<table>
<thead>
<tr>
<th></th>
<th>Basic Seed</th>
<th>Certified 1st</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum germination (%)</td>
<td>70</td>
<td>80</td>
</tr>
<tr>
<td>Minimum pure seed (%)</td>
<td>99</td>
<td>98</td>
</tr>
<tr>
<td>Maximum moisture (%)</td>
<td>13</td>
<td>13</td>
</tr>
</tbody>
</table>

*May be replaced by time isolation
**Groundnut, *Arachis hypogaea* L**

<table>
<thead>
<tr>
<th>Field Standards</th>
<th>Basic Seed</th>
<th>Certified 1st</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum previous cropping season</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Isolation (m)</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Maximum off-types (%)</td>
<td>0.1</td>
<td>0.2</td>
</tr>
<tr>
<td>Minimum number of inspections</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

**Diseases**

*Ralstonia solanacearum*  
0 (at final inspection)  
0 (at final inspection)

**Laboratory Standards**

<table>
<thead>
<tr>
<th></th>
<th>Basic Seed</th>
<th>Certified 1st</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum germination (%)</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>Minimum pure seed (%)</td>
<td>98</td>
<td>99</td>
</tr>
<tr>
<td>Maximum moisture (%)</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Field Standards</th>
<th>Basic Seed</th>
<th>Certified 1st</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum previous cropping season</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Isolation (m)</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Maximum off-types (%)</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Minimum number of inspections</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

**Laboratory Standards**

<table>
<thead>
<tr>
<th></th>
<th>Basic Seed</th>
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</thead>
<tbody>
<tr>
<td>Minimum germination (%)</td>
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<td>75</td>
</tr>
<tr>
<td>Minimum pure seed (%)</td>
<td>99</td>
<td>99</td>
</tr>
<tr>
<td>Maximum moisture (%)</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>
### COMESA SEED TRADE HARMONIZATION REGULATIONS, 2014

**Cotton Hybrid, Gossypium hirsutum L**

<table>
<thead>
<tr>
<th>Field Standards</th>
<th>Basic Seed</th>
<th>Certified 1&lt;sup&gt;st&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum previous cropping season</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Isolation (m)</td>
<td>800</td>
<td>800</td>
</tr>
<tr>
<td>Maximum off-types (%)</td>
<td>0.3</td>
<td>0.5</td>
</tr>
<tr>
<td>Minimum number of inspections</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

**Laboratory Standards**

<table>
<thead>
<tr>
<th>Field Standards</th>
<th>Basic Seed</th>
<th>Certified 1&lt;sup&gt;st&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum germination (%)</td>
<td>70</td>
<td>75</td>
</tr>
<tr>
<td>Minimum pure seed (%)</td>
<td>99</td>
<td>99</td>
</tr>
<tr>
<td>Maximum moisture (%)</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

**Wheat, Triticum aestivum L. emend**

<table>
<thead>
<tr>
<th>Field Standards</th>
<th>Basic Seed</th>
<th>Certified 1&lt;sup&gt;st&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum previous cropping season</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Isolation (m)</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Maximum off-types (m&lt;sup&gt;2&lt;/sup&gt;)</td>
<td>1/100m&lt;sup&gt;2&lt;/sup&gt;</td>
<td>3/100m&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>Minimum number of inspections</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

**Diseases**

- *Tilletia barclayana* Kernel bunt  
  - Isolation (m<sup>2</sup>)  
  - Minimum number of inspections

- *Ustilago nuda* Loose smut  
  - Isolation (m<sup>2</sup>)  
  - Minimum number of inspections

**Laboratory Standards**

<table>
<thead>
<tr>
<th>Field Standards</th>
<th>Basic Seed</th>
<th>Certified 1&lt;sup&gt;st&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum germination (%)</td>
<td>85</td>
<td>85</td>
</tr>
<tr>
<td>Minimum pure seed (%)</td>
<td>99</td>
<td>99</td>
</tr>
<tr>
<td>Maximum moisture (%)</td>
<td>13</td>
<td>13</td>
</tr>
</tbody>
</table>
# Sunflower OPV, *Helianthus annuus* L

<table>
<thead>
<tr>
<th>Field Standards</th>
<th>Basic Seed</th>
<th>Certified 1&lt;sup&gt;st&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum previous cropping season</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Isolation (m)</td>
<td>2500</td>
<td>1500</td>
</tr>
<tr>
<td>Maximum off-types (%)</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Minimum number of inspections</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Diseases</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Sclerotinia sclerotiorum</em> Color rot (At final inspection)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><em>Verticillium dahliae</em> Verticillium wilt</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><em>Plasmopara halstedii</em> Downy mildew (%)</td>
<td>0</td>
<td>0.2</td>
</tr>
<tr>
<td><em>Alternaria helianthi</em> Leaf blight of sunflower (%)</td>
<td>0</td>
<td>0.2</td>
</tr>
<tr>
<td><em>Botryotinia fuckeliana</em> Grey mould of sunflower (%)</td>
<td>0.5</td>
<td>1</td>
</tr>
<tr>
<td><strong>Laboratory Standards</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum germination (%)</td>
<td>80</td>
<td>85</td>
</tr>
<tr>
<td>Minimum pure seed (%)</td>
<td>99</td>
<td>99</td>
</tr>
<tr>
<td>Maximum moisture (%)</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

# Sunflower Hybrid, *Helianthus annuus* L

<table>
<thead>
<tr>
<th>Field Standards</th>
<th>Basic Seed</th>
<th>Certified 1&lt;sup&gt;st&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum previous cropping season</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Isolation (m)</td>
<td>2500</td>
<td>1500</td>
</tr>
<tr>
<td>Maximum off-types (%)</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Minimum number of inspections</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Diseases</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Sclerotinia sclerotiorum</em> Color rot (At final inspection)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><em>Verticillium dahliae</em> Verticillium wilt</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><em>Plasmopara halstedii</em> Downy mildew (%)</td>
<td>0</td>
<td>0.2</td>
</tr>
<tr>
<td><em>Alternaria helianthi</em> Leaf blight of sunflower (%)</td>
<td>0</td>
<td>0.2</td>
</tr>
</tbody>
</table>
### Botryotinia fuckeliana Grey mould of sunflower (%)

<table>
<thead>
<tr>
<th>Laboratory Standards</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Minimum germination (%)</td>
<td>80</td>
</tr>
<tr>
<td>Minimum pure seed (%)</td>
<td>99</td>
</tr>
<tr>
<td>Maximum moisture (%)</td>
<td>10</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Field Standards</th>
<th>Basic Seed</th>
<th>Certified 1st</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum previous cropping season</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Isolation (m)</td>
<td>400</td>
<td>200</td>
</tr>
<tr>
<td>Maximum off-types (%)</td>
<td>0.2</td>
<td>0.5</td>
</tr>
<tr>
<td>Minimum number of inspections</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

**Diseases**

- *Sporisorium sorghi* Covered kernel smut (%): 0.1, 0.2
- *Peronosclerospora sorghi* Mildew (%): 0.1, 0.2

<table>
<thead>
<tr>
<th>Laboratory Standards</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum germination (%)</td>
<td>80</td>
</tr>
<tr>
<td>Minimum pure seed (%)</td>
<td>98</td>
</tr>
<tr>
<td>Maximum moisture (%)</td>
<td>12</td>
</tr>
</tbody>
</table>
**Sorghum hybrid, *Sorghum bicolor* L. Moench**

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

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

<table>
<thead>
<tr>
<th>Field Standards</th>
<th>Basic Seed</th>
<th>Certified 1st</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum previous cropping season</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Isolation (m)</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Maximum off-types (m²)</td>
<td>1/30</td>
<td>1/10</td>
</tr>
<tr>
<td>Minimum number of inspections</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Diseases</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soybean mosaic virus SMV %</td>
<td>0</td>
<td>0.02</td>
</tr>
<tr>
<td><em>Cercospora kikuchii</em> Purple stain %</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td><em>Xanthomonas axonopodis</em> Bacterial pustule</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Pseudomonas savastanoi</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>Laboratory Standards</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum germination (%)</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>Minimum pure seed (%)</td>
<td>99</td>
<td>99</td>
</tr>
<tr>
<td>Maximum moisture (%)</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>
COMESA SEED TRADE HARMONIZATION REGULATIONS, 2014

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

<table>
<thead>
<tr>
<th>Field Standards</th>
<th>Basic Seed</th>
<th>Certified 1&lt;sup&gt;st&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum previous cropping season</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Isolation (m)</td>
<td>400</td>
<td>200</td>
</tr>
<tr>
<td>Maximum off-types (%)</td>
<td>0.2</td>
<td>0.5</td>
</tr>
<tr>
<td>Minimum number of inspections</td>
<td>3</td>
<td>3</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Laboratory Standards</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum germination (%)</td>
<td>75</td>
<td>80</td>
</tr>
<tr>
<td>Minimum pure seed (%)</td>
<td>98</td>
<td>98</td>
</tr>
<tr>
<td>Maximum moisture (%)</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>

**Cassava, *Manihot esculenta***

<table>
<thead>
<tr>
<th>Field Standards</th>
<th>Basic Seed</th>
<th>Certified 1&lt;sup&gt;st&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum previous cropping season</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Isolation (m)</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Maximum off-types (%)</td>
<td>0.5</td>
<td>1</td>
</tr>
<tr>
<td>Maximum permitted ratoons (Number)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Minimum number of inspections</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stem cutting quality standards</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Stem cutting quality standards minimum length</td>
<td>30 cm</td>
<td>30 cm</td>
</tr>
<tr>
<td>Minimum number of live nodes</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Minimum diameter</td>
<td>3 cm</td>
<td>3 cm</td>
</tr>
<tr>
<td>Skin injury/scar/damage (Maximum %)</td>
<td>15%</td>
<td>15%</td>
</tr>
</tbody>
</table>

**Diseases**

- Cassava mosaic disease (% by number of plants) African cassava mosaic: 0
- *Xanthomonas axonopodis* pv. manihotis (Bondar) Vauterin et al: 0
- Cassava Bacterial Blight (% by number of plants): 0
- Cassava brown streak virus Cassava brown streak disease: 0
Irish potato, *Solanum tuberosum*

<table>
<thead>
<tr>
<th>Field Standards</th>
<th>Basic Seed</th>
<th>Certified 1&lt;sup&gt;st&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum previous cropping season</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Isolation (m) *</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Maximum off-types (m&lt;sup&gt;2&lt;/sup&gt;)</td>
<td>1/100</td>
<td>2/100</td>
</tr>
<tr>
<td>Minimum number of inspections</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

### Diseases

- *Ralstonia solanacearum*, Bacterial wilt of potato  
  Basic Seed: 0  
  Certified 1<sup>st</sup>: 0
- *Erwinia carotovora*, Black leg %  
  Basic Seed: 0  
  Certified 1<sup>st</sup>: 0
- Potato virus Y  
  Basic Seed: 0.1  
  Certified 1<sup>st</sup>: 1
- Fusarium wilt  
  Basic Seed: 0  
  Certified 1<sup>st</sup>: 2/1000
- Verticillium wilt  
  Basic Seed: 0  
  Certified 1<sup>st</sup>: 0.5
- Potato virus X  
  Basic Seed: 0.3  
  Certified 1<sup>st</sup>: 2
- *Globodera rostochiensis* (golden nematode)  
  Basic Seed: 0  
  Certified 1<sup>st</sup>: 0
- *Clavibacter michiganensis* (ring rot)  
  Basic Seed: 0  
  Certified 1<sup>st</sup>: 0

### Tuber Size

- Small 28-35 mm  
  Basic Seed: 5 tubers/25kg bag  
  Certified 1<sup>st</sup>: 5 tubers/25kg bag
- Medium 36-45 mm  
  Basic Seed: 5 tubers/25kg bag  
  Certified 1<sup>st</sup>: 5 tubers/25kg bag
- Large 46-55 mm  
  Basic Seed: 5 tubers/25kg bag  
  Certified 1<sup>st</sup>: 5 tubers/25kg bag

### Standards during storage

- *Streptomyces scabiei*, Common potato scab  
  Maximum scab % of tubers per 50Kg bag  
  Basic Seed: 0.05  
  Certified 1<sup>st</sup>: 0.1
- *Spongospora subterranea*, Powdery scab  
  Maximum scab % of tubers per 50Kg bag  
  Basic Seed: 0.2  
  Certified 1<sup>st</sup>: 0.1
- *Rhizoctonia solani*, black scurf (%)  
  Basic Seed: 0.1  
  Certified 1<sup>st</sup>: 1
- *Phytophthora erythroseptica*, pink rot (%)  
  Basic Seed: 0  
  Certified 1<sup>st</sup>: 0.01
- *Erwinia carotovora*, soft rot (%)  
  Basic Seed: 0  
  Certified 1<sup>st</sup>: 0
- Tuber infested with live tuber moth larvae (%)  
  Basic Seed: 0.01  
  Certified 1<sup>st</sup>: 0.05
- Misshaped and damaged tubers (%)  
  Basic Seed: 0  
  Certified 1<sup>st</sup>: 0.02
- Surface of tuber with presence of soil and inert matter (%) by weight  
  Basic Seed: 1  
  Certified 1<sup>st</sup>: 1

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

GOVERNMENT OF (MEMBER STATE LOGO) MINISTRY OF AGRICULTURE

PLANT IMPORT PERMIT Number __________________________

Act e.g. Plant Pests and Disease Act (Import) Regulations, Year ______________________

PERMIT AUTHORIZING THE IMPORTATION OF GROWING MEDIA/ INJURIOUS ORGANISMS/INVERTEBRATES/ PLANTS AND PLANT PRODUCTS

Permission is granted to __________________________

(Name of importing Person/ Company)
Of __________________________

(Address of importer in importing Member State)

To import in one consignment, within six months of the date of this permit, from __________________________

(Name of exporting person/company)
Of __________________________

(Address of exporter in exporting Member State)
Through __________________________

(Entry point: border/ railway station/ airport/ seaport)

The following:

(Agricultural produce and products to be imported)

Subject to the following conditions/ requirements:

________________________________________________________________________

Additionall requirements/ declaration by the exporter:

________________________________________________________________________

Additional Declaration on Phytosanitary Certificate

Organism: AD1 – AD6

AD: an additional declaration on the Phytosanitary Certificate

DECLARE THAT;

AD1: the organism does not occur in the MEMBER STATE of production
AD2: the organism does not occur in the AREA of Production
AD3: the PARENT PLANT were INSPECTED during ACTIVE GROWTH and found free from the organism
AD4: the CONSIGNMENT was TESTED and found Free from the organism
AD5: the CONSIGNMENT was INSPECTED and found free from the organism
AD6: the CONSIGNMENT was treated with an appropriate fumigant not more than 14 days PRIOR to export; especially against the organism
Phytosanitary Certificate No. ________

National Plant Protection Organization of
TO: National Plant Protection Organization(s) of

I. Description of Consignment
Name and address of exporter:
Declared name and address of consignee:
Number and description of packages:
Distinguishing marks:
Place of origin:
Declared means of conveyance:
Declared point of entry:
Name of produce and quantity declared:
Botanical name of plants:

This is to certify that the plants, plant products or other regulated articles described herein have been inspected and/or tested according to appropriate official procedures and are considered to be free from the quarantine pests specified by the importing contracting party and to conform with the current phytosanitary requirements of the importing contracting party, including those for regulated non-quarantine pests. They are deemed to be practically free from other pests.*

II. Additional Declaration

III. Disinfestation and/or Disinfection Treatment
Date ________ Treatment ___________ Chemical (active ingredient)
Duration and temperature
Concentration
Additional information
Place of issue
(Stamp of Organization) Name of authorized officer

Date __________________ (Signature)_______________________________

No financial liability with respect to this certificate shall attach to (name of National Plant Protection Organization) or to any of its officers or representatives.*

* Optional clause
COMESA SEED TRADE HARMONIZATION REGULATIONS, 2014

SCHEDULE G

(reg. 34)

NON-COMPLIANCE NOTIFICATION

Government of (Member State Logo)

Ministry of Agriculture__________

Non-compliance Notification

(ISPM # 13)
- Reference number (PC number)
- Date - the date on which notification is sent should be noted
- Identity of the National Plant Protection Organization of the importing Member State
- Identity of the NPPO of the exporting Member State
- Identity of consignment - consignments should be identified by the phytosanitary certificate number if appropriate or by references to other documentation and including commodity class and scientific name (at least plant genus) for plants or plant products
- Identity of consignee and consignor
- Date of first action on the consignment
- Specific information regarding the nature of the non-compliance and emergency action including:
  - Identity of pest
  - Where appropriate, whether part or all of the consignment is affected
  - Problems with documentation
  - Phytosanitary requirements to which the non-compliance applies
  - Phytosanitary actions taken - the phytosanitary actions should be specifically described and the parts of the consignment affected by the actions identified
  - Authentication marks - the notifying authority should have a means for authenticating valid notifications (e.g. stamp, seal, letterhead, authorized signature).

Supporting information

Upon request, supporting information should be made available to the exporting Member State and may include as appropriate:
- Copy of the phytosanitary certificate or other relevant documents
- Diagnostic results
- Pest association, i.e. in which part of the consignment the pest was found or how it affects the consignment
- Other information deemed to be useful for the exporting Member State to be able to identify and correct non-compliance.
SCEDULE H

PHYTOSANITARY CERTIFICATE FOR RE-EXPORT

Phytosanitary Certificate for Re-Export No. __________

Plant Protection Organization of _______________ (Member State of re-export)
TO: Plant Protection Organization(s) of _______________ (Member State(s) of import)

I. Description of Consignment
Name and address of exporter:
Declared name and address of consignee:
Number and description of packages:
Distinguishing marks:
Place of origin:
Declared means of conveyance:
Declared point of entry:
Name of produce and quantity declared:
Botanical name of plants:

This is to certify that the plants, plant products or other regulated articles described above _______________ were imported into (Member State of re-export) _______________ from _______________ (Member State of origin) covered by Phytosanitary certificate No. ____________, *original * certified true copy * of which is attached to this certificate; that they are packed * repacked * in original * new containers, that based on the original phytosanitary certificate * and additional inspection *, they are considered to conform with the current phytosanitary requirements of the importing Member State, and that during storage in _______________ (Member State of re-export), the consignment has not been subjected to the risk of infestation or infection.

* Insert tick in appropriate * boxes

II. Additional Declaration

III. Disinfestation and/or Disinfection Treatment
Date ______ Treatment _______ Chemical (active ingredient)
Duration and temperature
Concentration
Additional information
Place of issue
(Stamp of Organization) Name of authorized officer
Date _______________ (Signature)_______________________________

No financial liability with respect to this certificate shall attach to ____________ (name of Plant Protection Organization) or to any of its officers or representatives.**

** Optional clause
### SCHEDULE I

**SEED TESTING CERTIFICATE**

<table>
<thead>
<tr>
<th>Name of Applicant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Species, variety, class, weight of lot</td>
</tr>
<tr>
<td>Testing and Issuing laboratory</td>
</tr>
<tr>
<td>Sampling by</td>
</tr>
<tr>
<td>Marks of lot (label numbers)</td>
</tr>
<tr>
<td>Seal of lot</td>
</tr>
<tr>
<td>Number of containers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANALYSIS RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Species</td>
</tr>
<tr>
<td>Pure Seed</td>
</tr>
<tr>
<td>Inert matter</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Kind of inert matter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other seeds</td>
</tr>
<tr>
<td>Other determinations</td>
</tr>
<tr>
<td>Place</td>
</tr>
</tbody>
</table>
## COMESA Quarantine Pest List

### Quarantine Pest List (within COMESA Region)

<table>
<thead>
<tr>
<th>Host</th>
<th>Pest Type</th>
<th>Pest</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Groundnut</strong> <em>(Arachis hypogaea)</em></td>
<td>Fungi</td>
<td><em>Verticillium dahlia</em></td>
</tr>
<tr>
<td></td>
<td>Virus</td>
<td><em>Peanut mottle virus</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Peanut clump virus</em></td>
</tr>
<tr>
<td><strong>Soybean</strong> <em>(Glycine max)</em></td>
<td>Fungi</td>
<td><em>Colletotrichum truncatum</em></td>
</tr>
<tr>
<td></td>
<td>Bacteria</td>
<td><em>Xanthomonas axonopodis pv.glycines</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Curtobacterium flaccumfaciens pv.</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Flaccumfaciens</em></td>
</tr>
<tr>
<td></td>
<td>Viruses</td>
<td><em>Tomato black ring virus</em></td>
</tr>
<tr>
<td><strong>Cotton</strong> <em>(Gossypium spp)</em></td>
<td>Fungi</td>
<td><em>Ascochyta gossypii</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Fusarium oxysporum f.sp. vasinfectum</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Verticillium dahlia</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Colletotrichum gossypii</em></td>
</tr>
<tr>
<td></td>
<td>Bacteria</td>
<td><em>Xanthomonas axonopodis pv.malvacearum</em></td>
</tr>
<tr>
<td><strong>Sunflower</strong> <em>(Helianthus annuus)</em></td>
<td>Fungi</td>
<td><em>Plasmopara halstedii</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Sclerotinia sclerotiorum</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Verticillium albo-atrum</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Verticillium dahlia</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Alternaria helianthi</em></td>
</tr>
<tr>
<td></td>
<td>Viruses</td>
<td><em>Tobacco ringspot virus</em></td>
</tr>
<tr>
<td><strong>Rice</strong> <em>(Oryza sativa)</em></td>
<td>Fungi</td>
<td><em>Sclerophthora macrospora</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Magnaporthe grisea</em></td>
</tr>
<tr>
<td></td>
<td>Bacteria</td>
<td><em>Acidovorax avenae subsp.avenae</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Pseudomonas fuscovaginae</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Xanthomonas oryzae pv.oryzicola</em></td>
</tr>
<tr>
<td></td>
<td>Nematodes</td>
<td><em>Aphelenchoides besseyi</em></td>
</tr>
<tr>
<td><strong>Pearl Millet</strong> <em>(Pennisetum glaucum)</em></td>
<td>Fungi</td>
<td><em>Claviceps fusiformis</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Moesziomyces bullatus</em></td>
</tr>
<tr>
<td>Plant</td>
<td>/Bacteria/</td>
<td>/Fungi/</td>
</tr>
<tr>
<td>-----------------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>BEAN (<em>Phaseolus lunatus</em>)</td>
<td>Sclerospora graminicola</td>
<td>Cochliobolus lunatus</td>
</tr>
<tr>
<td>SORGHUM (Sorghum)</td>
<td>Fungi</td>
<td>Glomerella graminicola</td>
</tr>
<tr>
<td>WHEAT (<em>Triticum aestivum</em>)</td>
<td>Fungi</td>
<td>Claviceps purpurea</td>
</tr>
<tr>
<td>MAIZE (<em>Zea mays</em>)</td>
<td>Fungi</td>
<td>Glomerella graminicola</td>
</tr>
<tr>
<td>CASSAVA (Manihot esculentum)</td>
<td>Fungi</td>
<td>Glomerella cingulata</td>
</tr>
</tbody>
</table>
| **IRISH POTATO**  
*_(Solanum tuberosum)_* | **Viruses** | *Cassava brown streak virus*  
*Cassava mosaic disease (CMD)*  
*East Africa mosaic disease-Ug.*  
**Insect Pest** | *Mononychellus tanajoa*  
**Fungi** | *Spongospora subterranea f.sp.subterranea*  
*Verticillium albo-atrum*  
**Bacteria** | *Clavibacter michiganensis*  
*Ralstonia solanacearum*  
*Erwinia carotovora subsp.atroseptica*  
**Virus** | *Potato spindle tuber viroid*  
**Nematodes** | *Globodera rostochiensis* |
<table>
<thead>
<tr>
<th>Seed Type</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-basic seed</td>
<td>Violet band on white</td>
</tr>
<tr>
<td>Basic seed</td>
<td>White</td>
</tr>
<tr>
<td>First generation Certified seed</td>
<td>Blue</td>
</tr>
<tr>
<td>Second generation certified seed</td>
<td>Red</td>
</tr>
</tbody>
</table>
Alliance for Commodity Trade in Eastern and Southern Africa (ACTESA),
Specialised Agency of COMESA
Ben Bella Road
P.O. Box 30051, Lusaka, Zambia.
Email: comesa@comesa.int; Web: http://www.comesa.int