



**RWANDA  
STANDARD**

**DRS  
275-2**

Second edition

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**Seeds — Requirements for certification—  
Part 2: Rice**

ICS 67.060

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Reference number

DRS 275-2: 2020

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## **Foreword**

Rwanda Standards are prepared by Technical Committees and approved by Rwanda Standards Board (RSB) Board of Directors in accordance with the procedures of RSB, in compliance with Annex 3 of the WTO/TBT agreement on the preparation, adoption and application of standards.

The main task of technical committees is to prepare national standards. Final Draft Rwanda Standards adopted by Technical committees are ratified by members of RSB Board of Directors for publication and gazettment as Rwanda Standards.

DRS 275-2 was prepared by Technical Committee RSB/TC 032, *Seeds and planting materials*.

This second edition cancels and replaces the first edition (RS 275-2:2015), which has been technically revised.

DRS 275 consists of the following parts, under the general title *Seeds — Requirements for certification*

- *Part 1: Common bean*
- *Part 2: Rice*
- *Part 3: Wheat*
- *Part 4: Peas*
- *Part 5: Sweet potatoes*
- *Part 6: Vegetable seeds*
- *Part 7: Cassava seeds*

### **Committee membership**

The following organizations were represented on the Technical Committee on *Seeds and planting materials* (RSB/TC 032) in the preparation of this standard.

Paragraph of participants

Rwanda Standards Board (RSB) – Secretariat

## Seeds — Requirements for certification— Part 2: Rice

### 1 Scope

This Draft Rwanda Standard specifies the certification requirements for the production of pre-basic, basic certified and quality declared seed of rice (*Oryza sativa* L.). It includes requirements for eligible varieties, field requirements, field inspections, seed sampling, laboratory requirements, certificates, packaging and labelling, and post-control tests.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

*International Seed Testing Association ISTA Rules*

*OECD, Seed Schemes; Guidelines for Control Plot Tests and Field Inspection of Seed Crops*

*OECD, Schemes for Varietal Certification or the Control of Seed Moving in the International Trade*

*UPOV TG/16/8, Guidelines for conducting DUS tests for Rice (Oryza sativa L.)*

### 3 Terms and definitions

For the purposes of this standard, terms and definitions given in ISTA, UPOV and OECD and RS 275 -1 apply.

### 4 Abbreviated terms

- **DUS:** Distinctness, Uniformity and Stability
- **ISTA:** International Seed Testing Association
- **OECD:** Organization for Economic Co-operation and Development
- **UPOV:** International Union for the Protection of New Varieties of Plants

### 5 Seed classes

For the purpose of this standard, the following classes of seed shall apply:

- a) pre-basic seed;
- b) basic seed; and

c) certified seed:

- 1) 1st generation (C1); and
- 2) 2nd generation (C2).

NOTE 1: 2nd generation (C2) will not exist for hybrids

## **6 General requirements**

### **6.1 Eligible varieties**

**6.1.1** Varieties eligible for seed certification shall be those that have been examined, tested and registered in the national list of varieties/variety catalogue.

**6.1.2** The national seed certification authority shall keep the official descriptor of the varieties in hard and electronic copies.

### **6.2 Application requirements for certification**

**6.2.1** The minimum information for an application for certification of a seed crop shall include the following:

- d) name, address and contact details of the seed grower;
- e) crop and variety to be sown;
- f) physical location;
- g) area and reference number of the field, and its cropping history for the past two cropping seasons;
- h) class of seed to be produced; and
- i) registration number of the seed grower.

**6.2.2** Information and records related to the previous cropping history, origin of seed planted, and field inspections shall be kept and used for certification to ensure full traceability of quality, genetic identity and purity of the seed harvested.

## **7 Field inspection**

**7.1** The national seed certification authority shall prepare the inspections' schedule for the inspectors, based on all necessary information on the application form, to ensure that the timing of inspections allows the requirements in Table 1 and Table 2 to be properly assessed.

**7.2** The inspector shall inspect the field in accordance with OECD seed schemes and shall check for isolation requirements, off types, the presence of noxious weeds, pests and diseases.

**7.3** A minimum of three inspections shall be done for each seed production field to check if the field requirements specified in Table 1 and table 2 are met.

**7.4** At the time of the first inspection, the inspector shall confirm with the grower the previous cropping of the field, checking on isolation, and the proof of origin/authentication of the variety planted by using the labels.

**7.5** Depending on the degree of contamination, the inspector may give instructions for off-types and diseased plants to be rogued so as to maintain the genetic purity. In case of noxious weeds found in the field, the grower shall be instructed to remove the weeds before harvesting.

**7.6** The field inspection report shall indicate the field status and comments for any corrective actions required such as re-inspection to confirm the field requirements. All field inspection reports shall be provided to the grower and the seed enterprise after each inspection in a timely manner. The field inspection report in Annex B shall be signed by both the inspector and the grower or the grower's representative.

## 8 Field requirements

**8.1** Pre basic seed shall be produced under the responsibility of the breeder or maintainer

**8.2** Certified seed shall be produced in two generations except in hybrids.

**8.3** The national certification authority shall inspect and certify the production of pre-basic, basic and certified seed crops

**8.4** A field producing a seed crop of rice shall be approved for certification if it complies with the requirements in Table 1 and Table 2.

**Table 1 — Field requirements for seed crops of rice (varieties)**

S/N	Variable	Pre-basic seed	Basic seed	Certified seed
i.	Isolation, m, min	5	5	5
ii.	Off types %, max	0.01	1	2
iii.	Rice Blast, %, max	0.1	0.1	0.5
iv.	Bacterial Leaf Blight, %, max	1	2	2

**Table 2 — Field requirements for seed crops of rice (hybrids)**

S/N	Variable	Pre-basic seed	Basic seed	Certified seed
i.	Land requirements (seasons before), min	1	1	1
ii.	Isolation, m, min	25	25	25
iii.	Off types %, max	0.01	0.01	0.1
iv.	Rice Blast %, max	0.1	0.1	0.5
v.	Bacterial Leaf Blight, % max	1	2	2

**8.5** Fields may be rejected for certification because of unsatisfactory condition caused by noxious weeds, poor growth, poor stands, excessive disease presence, insect damage, and any other condition that prevents accurate inspection or creates doubt as to the identity of the variety.

## 9 Seed sampling and laboratory requirements

**9.1** The harvested seed from the field approved for certification shall be kept as an identified unit until processing. After processing, a sample shall be submitted to laboratory for testing where a conformed sample shall be given a certificate with a unique lot number for the purpose of tracking and sampling.

**9.2** The maximum size of a seed lot for certification purposes is 30 000 kg; lots larger than this shall be divided and a given separate lot numbers.

**9.3** An inspector shall draw a representative submitted sample from each lot according to the ISTA rules (Chapter 2).

**9.4** The submitted sample shall be divided into three sub-samples, one for testing in the laboratory, one to be stored for reference purposes in case re-testing is necessary, and one for the post-control tests. The samples shall be marked with the same identification as the seed lot, securely sealed and shall be stored in cool and dry conditions to prevent contamination and loss of germination.

**9.5** Laboratories authorized by the national seed certification authority to conduct seed testing for certification shall follow the methodology established in the ISTA rules for rice seed.

**9.6** The seed lots shall comply with the laboratory requirements specified in Table 3 and Table 4.

**Table 3 — Laboratory requirements for seeds lots of rice (varieties)**

S/N	Variable	Pre-basic seed	Basic seed	Certified seed
i.	Pure seed, %, min.	98	98	98
ii.	Inert matter, %, max.	0.95	0.95	0.95
iii.	Other crop seeds, %, max.	0.05	0.02	0.05
iv.	Germination, %, min.	80	80	75
v.	Moisture content, % max.	14	14	14
vi.	Weed seeds, per kg, max.	0	0	0

**Table 4 — Laboratory requirements for seeds lots of rice (hybrids)**

S/N	Variable	Pre basic seed	Basic seed	Certified seed
i.	Pure seed, %, min.	99	99	98
ii.	Inert matter, %, max.	0.95	0.95	0.95
iii.	Other crop seeds, %, max.	0.05	0.02	0.05
iv.	Germination, %, min.	80	80	75
v.	Moisture content, % max.	14	14	14
vi.	Weed seeds, per kg, max.	0	0	0

**9.7** The laboratory test report shall be issued in accordance with Annex B.



## 10 Certificates

**10.1** The seed test certificate for a seed lot shall be signed and issued by the national seed certification authority and shall include all information presented in Annex D. This certificate shall be valid for a period of six (6) months.

**10.2** Carryover seed shall be re-sampled and retested for germination. If the test result complies with the minimum requirements, a new test certificate shall be issued for the seed lot, which cancels the previously issued certificate and shall include the certificate number of the cancelled certificate

## 11 Packaging and labeling

**11.1** All classes of seed that have been certified shall be packaged in new containers which shall be marked with the company name and crop species and shall have the official label of the national seed certification authority.

**11.2** The labels for each class are identified by the following colours:

- 1) **pre-basic seed:** Violet band on white
- 2) **basic seed:** White
- 3) **certified seed 1<sup>st</sup> generation:** Blue
- 4) **certified seed 2<sup>nd</sup> generation:** Red

**11.3** If seeds are treated with any chemical or product harmful for human or animal consumption, the container shall carry a label stating the chemical or product used and warning of the health risks.

**11.4** The labels shall be prominent, indelible, legible and fixed to the containers by an authorized person in such a way that they cannot be destroyed or easily removed. The following information shall be included on the official labels:

a) front of label:

- 1) name of the crop, "Rice seed";
- 2) species (Latin name);
- 3) variety denomination;
- 4) seed lot number;
- 5) test certificate number;
- 6) date of test;

- 7) net weight; and
- 8) seed treatment declaration (if applicable);

b) back of label:

- 1) logo of the national certification authority;
- 2) name and address of certifying authority;
- 3) seed class;
- 4) year and country of production; and
- 5) statement of re-packaging and re-labelling (if applicable).

**11.4** All containers/bags shall be closed either by hand or machine stitching and shall be sealed in such a way that if they are opened illegally, that violation can be detected.

**11.5** Repackaging and relabeling are authorized in the following cases:

- a) the national seed certification authority may authorize the re-packaging and re-labelling of a particular seed lot that is produced in another country, but shall retain the original label information of the producing country; and
- b) blending of a seed lot with other lots of the same variety and class (generation) is allowable if all seed lots of the blend have met the field and laboratory requirements for certification prior to blending. A new lot number shall be issued. Details of the blended lots and their proportions shall be kept by the certifying authority for traceability

## **12 Post-control tests**

The Post control tests shall be carried out in accordance with OECD Schemes for Varietal Certification or the Control of Seed Moving in the International Trade.

**Annex A**  
(normative)

**Field inspection report**

Reference number.....

Date of the report.....

**Seed grower information**

Name ..... Address.....

Telephone: ..... E-mail.....

Registration number..... Number of inspection.....

**Field location**

Province/Region..... District ..... Sector

Latitude..... Longitude ..... Field number

Field size (Ha/acre) ..... Cropping season ..... Crop species

Seed class ..... Variety ..... Previous cropping

Variable	Observations/results	Comments/remarks
Isolation, m		
Off types		
Noxious weeds		
Deliberative disease		
Other crops		
General conditions of the crop (for example, drought, crop husbandry, etc.)		

**Decision**

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Decision on the approval	Justification
The seed crop is approved for certification	
The seed crop is approved for certification	

Seed grower

Inspector signature

National seed certification authority

Date & signature

Date & signature

Date & signature

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## Annex B (normative)

### Seed laboratory test report

Name of seed grower:										
Species, variety, class, weight of lot:										
Testing and Issuing laboratory:										
Sampled by:										
Test number:										
Country of origin:										
Label serial number:										
Seed Lot Reference Number:										
Number of containers			Date of sampling		Date sample received			Date test(s)concluded		Test number
<b>ANALYSIS RESULTS</b>										
Purity				Germination						Moisture content, %
Pure seed %	Inert matter, %	Other crop seeds %	Weed seeds, per kg	Number of days	Normal seedlings, %	Hard seeds, %	Fresh seeds, %	Abnormal seedlings, %	Dead seeds, %	
Kind of inert matter:										
Other crop seeds:										
Weed seed:										
Other determinations:										
Place				Date						Signature

## Annex C (normative)

### Seed test certificate

This certificate is issued for a seed lot which has satisfied all the requirements of the certification scheme.

Previously issued certificate number.....	Certificate No. ....	Requirements: .....							
<b>SEED GROWER INFORMATION</b>									
Name:	Address:	Country of origin:							
<b>SEED LOT INFORMATION</b>									
Seed Reference Number	Lot Number	Species and variety							
Class		Weight of lot							
Number of containers									
<b>SAMPLING AND TESTING INFORMATION</b>									
Date of sampling	Sampled by	Date sample received							
Date test(s) concluded									
Name of testing laboratory:		Test number:							
<b>ANALYSIS RESULTS</b>									
<b>Purity</b>			<b>Germination</b>					<b>Moisture content%</b>	
<b>Pure seed %</b>	<b>Inert matter %</b>	<b>Other crop seeds %</b>	<b>Weed seeds Per kg</b>	<b>Normal seedlings</b>	<b>Abnormal seedlings</b>	<b>Fresh seeds</b>	<b>Hard seeds</b>		<b>Dead seeds</b>
<b>Kind of inert matter:</b> <b>Kind of other crop seeds:</b> <b>Kind of weed seeds:</b> <b>Other determinations:</b>					<b>Statement of packaging and re-labelling: (if applicable)</b> -				

National Seed Certification Authority

Signature .....

Place and Date .....

## Bibliography

- [1] RS 275-2: 2015, *Seeds — Requirements for certification — Part 2: Rice, First edition*

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