



RWANDA STANDARD

**DRS
303-1**

Second edition

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Ginger — Specification —

Part 1:

Fresh ginger

ICS 67.220.10

Reference number

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In order to match with technological development and to keep continuous progress in industries, standards are subject to periodic review. Users shall ascertain that they are in possession of the latest edition

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Foreword

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.

RS 303-1 was prepared by Technical Committee RSB/TC 016, *Fresh fruits and vegetables*

In the preparation of this standard, reference was made to the following standard:

- 1) CODEX STAN 281: *Codex standard for ginger*

FDRS 303 consists of the following parts, under the general title *Ginger — Specification*:

Part 1: Fresh ginger

Part 2: Dried and ground ginger.

Committee membership

The following organizations were represented on the Technical Committee on Fresh fruits and Vegetables (RSB/TC 016) in the preparation of this standard.

ADECOR

COVAFGA

Cultivating New Frontiers in Agriculture (CNFA).

E & Foods Direct Ltd

Innopro Ltd

Innopro Ltd

Inspectorate, Competition and Consumer Protection Authority (RICA)

National Industrial Research and Development Agency (NIRDA)

Nyabihu TVET School

Nyarutarama Incubation Center

One Acre Fund

Rugali Meat Processing Plant Ltd

Rwanda Food and Drugs Authority

Skai Limited

Spices Rwanda Ltd

Umurage Enterprise Ltd

Zamura Feeds Limited

Rwanda Standards Board (RSB) – Secretariat

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Fresh ginger — specification

1 Scope

This Rwanda Standard specifies requirements and methods of test for fresh ginger, grown from *Zingiber officinale* Roscoe, of the Zingiberaceae family, to be supplied fresh to the consumer and to be used for industrial processing

2 Normative references

CODEX STAN 193, *General standards for Contaminants and Toxins in Food and Feed*

RS CAC RCP 53, *Code of Hygienic Practice for Fresh Fruits and Vegetables*

RS CAC/RCP 1, *General Principles of Food Hygiene — Code of practice*

RS CAC/RCP 44, *Code of Practice for Packaging and Transport of Fresh Fruits and Vegetables*

RS EAS 38, *Labelling of prepared and prepackaged foods — General requirements*

RS ISO 16050, *Foodstuffs — Determination of aflatoxin B₁, and the total content of aflatoxins B₁, B₂, G₁ and G₂ in cereals, nuts and derived products — High-performance liquid chromatographic method.*

RS ISO 784, *Fresh fruits and vegetables — Sampling.*

3 Quality requirements

3.1 General requirements

3.1.1 In all classes, subject to the special provisions for each class and the tolerances allowed, the ginger shall be:

- a) whole;
- b) sound, produce affected by rotting or deterioration such as to make it unfit for consumption is excluded;
- c) clean, practically free of any visible foreign matter;
- d) practically free of damage caused by pests affecting the general appearance of the produce;
- e) free of abnormal external moisture, and properly dried if washed, excluding condensation following removal from cold storage;

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- f) free of any foreign smell and/or taste;
- g) firm;
- h) free of abrasions, provided light abrasions which have been dried properly are not regarded as a defect;
- i) sufficiently dry for the intended use; skin, stems and cuts due to harvesting shall be fully dried.

3.1.2 The development and condition of the ginger shall be such as to enable it:

- a) to withstand transport and handling; and
- b) to arrive in satisfactory condition at the place of destination.

3.2 Classification

Ginger shall be classified in three classes defined below:

3.2.1 “Extra” Class

Ginger in this class shall be of superior quality. It shall be characteristic of the variety and/or commercial type. The roots shall be cleaned, well shaped and free of defects, with the exception of very slight superficial defects, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package.

3.2.2 Class I

Ginger in this class shall be of good quality. It shall be characteristic of the variety and/or commercial type. The roots shall be firm, without evidence of shriveling or dehydration and without evidence of sprouting. The following slight defects, however, may be allowed, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package:

- a) Slight skin defects due to rubbing provided they are healed and dry and the total surface area affected not exceeding 10%.

3.2.3 Class II

This class includes ginger which does not qualify for inclusion in the higher classes, but satisfy the minimum requirements specified in 3.1 above. The roots should be reasonably firm. The following defects, however, may be allowed, provided the ginger retains their essential characteristics as regards the quality, the keeping quality and presentation:

- a) skin defects due to rubbing, provided they are healed and dry and the total surface area affected not exceeding 15%;
- b) early signs of sprouting (not more than 10% by weight by unit of presentation);

- c) slight markings caused by pests;
- d) healed suberized cracks, provided they are completely dry;
- e) slight traces of soil;
- f) bruises.

4 Size requirements

Fresh ginger shall be classified in accordance with Table 1.

S/N	Size code	Weight in gram
i.	A	$A > 300$
ii.	B	$200 < B \leq 300$
iii.	C	$150 < C \leq 200$
iv.	D	$D \leq 150$

5 Tolerances

Tolerances in respect of quality and size shall be allowed in each package for produce not satisfying the requirements of the class indicated.

5.1 Quality tolerances

5.1.1 "Extra" Class

Five percent (5 %) by number or weight of ginger not satisfying the requirements of the class, but meeting those of Class I or, exceptionally, coming within the tolerances of that class.

5.1.2 Class I

Ten percent (10 %) by number or weight of ginger not satisfying the requirements of the class, but meeting those of Class II or, exceptionally, coming within the tolerances of that class.

5.1.3 Class II

Ten percent (10 %) by number or weight of ginger satisfying neither the requirements of the class nor the minimum requirements, with the exception of produce affected by rotting or any other deterioration rendering it unfit for consumption.

5.2 Size tolerances

For “Extra” Class 5%; and for Class I and Class II, 10%; by number or by weight of ginger not satisfying the requirements of the indicated size.

6 Contaminants

6.1 The produce covered by this standard shall comply with CODEX STAN 193.

6.2 The produce covered by this Standard shall comply with the maximum residue limits for pesticides established by the Codex Alimentarius Commission.

6.3 When tested in accordance with RS ISO 16050 fresh ginger shall not contain more than 10mg/kg total aflatoxin and 5mg/kg aflatoxin B1.

7 Hygiene

Fresh ginger shall be prepared in accordance with the provisions of RS CAC RCP 1 and RS CAC/RCP 53.

7.1 Uniformity

The contents of each package shall be uniform and contain only ginger of the same origin, variety, and/or commercial type, quality and size. The visible part of the contents of the package shall be representative of the entire contents.

7.2 Packaging

7.2.1 Ginger shall be packaged in such a way as to protect the produce properly. The materials used inside the package shall be new, clean, and of a quality such as to avoid causing any external or internal damage to the produce. The use of materials, particularly of paper or stamps bearing trade specifications is allowed, provided the printing or labeling has been done with non-toxic ink or glue.

7.2.2 Packaging material shall not be toxic or impart toxic to the products.

7.2.3 Ginger shall be packed in each container in compliance with RS CAC/RCP 44.

7.2.1 Description of containers

The containers shall meet the quality, hygiene, ventilation and resistance characteristics to ensure suitable handling, shipping and preserving of the ginger. Packages shall be free of all foreign matter and smell.

8 Labeling

8.1 Consumer packages

In addition to the requirements of RS EAS 38, the following information shall appear on the label:

- a) **Nature of produce**; if the produce is not visible from the outside, each package shall be labeled as to the name of the produce and may be labeled as to name of the variety and/or commercial type.
- b) **Commercial identification**; the consumer package shall indicate class; size, number of units and/or net weight for retail packages.

8.2 Non retail containers

Each package shall bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside, or in the documents accompanying the shipment.

- a) name and address of exporter, packer and/or dispatcher;
- b) identification code;
- c) name of the produce if the contents are not visible from the outside;
- d) name of the variety;
- e) country of origin;
- f) class;
- g) size (size code or minimum and maximum weight in grams);
- h) number of units (optional); and
- i) net weight.

9 Sampling

Fresh ginger shall be sampled in accordance with RS ISO 874.

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