

codex alimentarius commission



FOOD AND AGRICULTURE
ORGANIZATION
OF THE UNITED NATIONS

WORLD
HEALTH
ORGANIZATION



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Agenda Item 2(c)

CX/FFV 03/4
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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FRESH FRUITS AND VEGETABLES

*11th Session,
Mexico City, Mexico, 8 - 12 September 2003*

UN/ECE STANDARDS FOR FRESH FRUITS AND VEGETABLES

BACKGROUND

1. As established in the Terms of Reference of the Codex Committee on Fresh Fruits and Vegetables, the Committee is entrusted to elaborate worldwide standards and codes of practice as may be appropriate for fresh fruits and vegetables. This task should perform in consultation with the UN/ECE Working Party on Standardization of Perishable Produce with particular regard to ensuring that there is not duplication of standards or codes of practice and that they follow the same broad format.¹
2. In regard to cooperation between UN/ECE and Codex in the elaboration of fresh fruit and vegetables standards, the need for close cooperation in order to avoid duplication was reiterated by the 43rd Session of the Codex Executive Committee (Geneva, Switzerland, 4-7 June 1996), and the suggestion was made that UN/ECE standards should be used as a starting point for draft Codex Standards where appropriate. On that occasion, the Executive Committee requested that relevant UN/ECE standards be distributed as working documents for the Codex Committee on Fresh Fruits and Vegetables when like products were being considered.²
3. In addition, the 46th Session of the CCEEXEC (Rome, Italy, 24-25 June 1999) stressed the need for exchanges of information between the two parties concerned while recognizing that harmonization of standards for these commodities was important and that the broadest possible consensus on all international standards needed to be achieved.³
4. The Codex Alimentarius Commission has also stressed the need for the CCFFV to cooperate and coordinate with the UN/ECE towards the elaboration of harmonized standards without duplication of effort. While avoiding any unnecessary duplication of work, the collaboration would benefit both Codex and UN/ECE by allowing the Commission to use UN/ECE standards as a base for developing Codex standards and in doing so to give UN/ECE the international recognition to its standards.⁴

¹ Codex Alimentarius Procedural Manual, 12th Edition, pages 113-114

² ALINORM 97/3, para. 15

³ ALINORM 99/4, para. 19

⁴ ALINORM 95/37, para. 32 & ALINORM 99/37, para. 206

5. Since the CCFFV is currently discussing draft Codex Standards for Oranges and Table Grapes as well as proposed draft Codex Standards for Apples and Tomatoes for which there are already UN/ECE standards that were taken as reference when elaborating the aforesaid Codex standards, the Codex Secretariat, in compliance with the recommendation of the Executive Committee, has attached to this document the UN/ECE Standards for Citrus Fruits, Table Grapes, Tomatoes and Apples for consideration by the Committee when discussing the corresponding Codex standards at its 11th Session.

6. Amendments to the UN/ECE Standards for Citrus Fruits, Table Grapes and Apples introduced as a result of the discussions held at the 48th Session of the UN/ECE Specialized Section on Standardization of Fresh Fruits and Vegetables (Geneva, June 2003) are not reflected in the documents attached herewith (see CX/FFV 03/3).

ECONOMIC COMMISSION FOR EUROPE
COMMITTEE FOR TRADE, INDUSTRY AND
ENTERPRISE DEVELOPMENT

Working Party on Agricultural Quality Standards

Fifty-eighth session, Geneva, 29 to 31 October 2002

REPORT OF THE FIFTY-EIGHTH SESSION

Addendum 5

UNECE Recommendation for Citrus Fruit

Note by the Secretariat : The document contains the text of the UNECE Recommendation for Citrus Fruit which was adopted by the Working Party for a one year trial period. With this decision the Working Party did not follow the Specialized Sections proposal to adopt the text as a revised UNECE standard because it was felt that the text could be improved. It will be discussed again in the Specialized Section in June 2003 to improve the text while maintaining the principle of the compromise concerning sizing.

GE.02

UNECE Recommendation

concerning the marketing and commercial
quality control of

CITRUS FRUIT

moving in international trade between and to
UN/ECE member countries

I. DEFINITION OF PRODUCE¹

This standard applies to the following fruit, classified as "citrus fruit", to be supplied fresh to the consumer, citrus fruit for industrial processing being excluded:

- lemons of varieties (cultivars) grown from the species *Citrus limon* (L.) Burm f.
- limes of varieties (cultivars) grown from the species *Citrus latifolia* (Yu. Tan.) Tan. which is a large fruited acid lime known also as Bearss, Persian, Tahiti and its hybrids.
- mandarines (*Citrus reticulata* Blanco), including satsumas (*Citrus unshiu* Marcow.), clementines (*Citrus clementina* Hort. ex Tan.), common mandarines (*Citrus deliciosa* Ten.)- and tangerines (*Citrus tangerina* Hort. ex Tan.) grown from these species and its hybrids.
- oranges of varieties (cultivars) grown from the species *Citrus sinensis* (L.) Osb.
- grapefruits of the varieties (cultivars) grown from the species *Citrus paradisi* Macf. and its hybrids.
- pummelos or Shaddock of varieties (cultivars) grown from the species *Citrus maxima* (Burm.) Merr. and its hybrids.

II. PROVISIONS CONCERNING QUALITY

The purpose of the standard is to define the quality requirements of the citrus fruit at the export control stage, after preparation and packaging.

A. Minimum requirements

In all classes, subject to the special provisions for each class and the tolerances allowed, the citrus fruit must be:

- intact
- free of bruising and/or extensive healed over cuts

¹ Information on botanical names taken from the GRIN database see www.ars-grin.gov.

- sound; produce affected by rotting or deterioration such as to make it unfit for consumption is excluded
- clean practically free of any visible foreign matter
- practically free from pests
- practically free from damage caused by pests
- free of signs of internal shrivelling
- free of damage caused by low temperature or frost
- free of all abnormal external moisture
- free of any foreign smell and/or taste.

The citrus fruit must have been carefully picked and have reached an appropriate degree of development and ripeness account being taken of criteria proper to the variety, the time of picking and the growing area.

The development and state of ripeness of the citrus fruit must be such as to enable them:

- to withstand transport and handling, and
- to arrive in satisfactory condition at the place of destination.

Citrus fruit meeting this ripeness requirement may be "degreened". This treatment is permitted only if the other natural organoleptic characteristics are not modified. It shall be carried out in the manner prescribed by the administrative authorities in each country and under their supervision.

B. Maturity requirements

Maturity of citrus fruit is defined by the following parameters specified for each species below:²

1. minimum juice content
2. minimum total soluble solids content (TSS), i.e. minimum sugar content
3. colouring

The degree of colouring shall be such that, following normal development the citrus fruit reach the colour typical of the variety at their destination point.

Lemons

- Minimum juice content:

Verdelli and Primofiore lemons:	20%
Other lemons:	25%
- Colouring: must be typical of the variety. However fruits with a green (but not dark green) colour are allowed provided they satisfy the minimum requirements as to juice content.

Limes

- - Minimum juice content: 42 %
- Colouring: must be typical of the variety on at least two-thirds of the total fruit surface. The fruit should be green but may show discolouring (yellow patches) up to 30 % of its surface.

Satsumas, clementines, other mandarin varieties and their hybrids

Satsumas other mandarin varieties and their hybrids: 33%

Clementines : 40%

- Colouring: must be typical of the variety on at least one-third of the surface of the fruit.

² *Reservation of Israel: The parameter of sugar/acid ratio should be included in the standard*

Oranges³

Thomson Navel and Tarocco:	30%
Washington Navel:	33%
Other varieties:	35%

- Colouring:⁴ must be typical of the variety. However, fruits with light green colour are allowed, provided it does not exceed one-fifth of the total surface of the fruit.

Grapefruits

- Minimum juice content: 35%
- Minimum sugar content (TSS): 9 % for Oroblanco
- Colouring: must be typical of the variety. However, fruit with a greenish colour (green in Oroblanco) are allowed provided they meet with the minimum requirements as to juice content.

Pummelos (Shaddock)

- Minimum sugar content (TSS): 8 %
- Colouring: must be typical of the variety on at least two-thirds of the surface of the fruit.

C. Classification

Citrus fruit are classified in three classes defined below:

(i) **"Extra" Class**

Citrus fruit in this class must be of superior quality. In shape, external appearance, development and colouring they must be characteristic of the variety and/or commercial type.

They must be free from 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.

(ii) **Class I**

Citrus fruit in this class must be of good quality. They must be characteristic of the variety and/or commercial type.

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:

- slight defect in shape
- slight defect in colouring
- slight skin defects occurring during the formation of the fruit, such as silver scurfs, russets, etc.
- slight healed defects due to a mechanical cause such as hail damage, rubbing, damage from handling, etc.

(iii) **Class II**

This class includes citrus fruit which do not qualify for inclusion in the higher classes but satisfy the minimum requirements specified above.

³ Reservation of Israel: A minimum sugar/acid ratio of 6.0:1 for oranges and 5.5:1 for pigmented oranges should be included in the standard.

⁴ Reservation of Belgium, Denmark, Germany, Netherlands, Slovakia, Sweden and United Kingdom: Green skinned oranges should be allowed provided their maturity requirements conform with the following parameters:

- minimum juice content: 38 %
- minimum sugar/acid ratio: 6,5:1

The following defects may be allowed, provided the citrus fruit retain their essential characteristics as regards the quality, the keeping quality and presentation:

- defect in shape
- defect in colouring
- rough skin
- skin defects occurring during the formation of the fruit, such as silver scurfs, russets, etc.
- healed defects due to a mechanical cause such as hail damage, rubbing, damage from handling, etc.
- superficial healed skin alterations
- slight and partial detachment of the pericarp for oranges (which is allowed for satsumas, clementines, and other mandarin varieties and their hybrids).

III. PROVISIONS CONCERNING SIZING

Size is determined by the maximum diameter of the equatorial section of the fruit.

A. Minimum size

Fruits of less than the following minimum sizes are excluded:

Lemons	45	mm
Limes	42	mm
Satsumas other mandarin varieties		
and their hybrids	45	mm
Clementines	35	mm
Oranges	53	mm
Grapefruit and its hybrids	70	mm
Pummelos	110	mm

B. Size scales

The scales of sizes are as follows:

Lemons		Limes	
Size Code	Diameter in mm	Size Code	Diameter in mm
0	79 – 90		
1	72 – 83	1	58 – 67
2	68 – 78	2	53 – 62
3	63 – 72	3	48 – 57
4	58 – 67	4	45 – 52
5	53 – 62	5	42 – 49
6	48 – 57		
7	45 – 52		

Satsumas, clementines, and other mandarin varieties and their hybrids		Oranges	
Size Code	Diameter in mm	Size Code	Diameter in mm
1 - XXX	78 and above		
1 - XX	67 – 78		
1 or 1 - X	63 – 74	0	92 – 110
2	58 – 69	1	87 – 100
3	54 – 64	2	84 – 96
4	50 – 60	3	81 – 92
5	46 – 56	4	77 – 88
6 ⁵	43 – 52	5	73 – 84
7	41 – 48	6	70 – 80
8	39 – 46	7	67 – 76
9	37 – 44	8	64 – 73
10	35 – 42	9	62 – 70
		10	60 – 68
		11	58 – 66
		12	56 – 63
		13	53 – 60

Grapefruit and its hybrids		Pummelos	
Size Code	Diameter in mm	Size Code	Diameter in mm
1	109 – 139	1	156 – 170
2	100 – 119	2	148 – 162
3	93 – 110	3	140 – 154
4	88 – 102	4	132 – 146
5	84 – 97	5	123 – 138
6	81 – 93	6	116 – 129
7	77 – 89	7	110 – 118
8	73 – 85		
9	70 – 80		

Citrus fruit may be packed by count. In this case, provided the size uniformity required by the standard is retained, the size range in the package may fall outside a single size code, but within two adjacent codes.

C. Uniformity

Uniformity in size is achieved by the above mentioned size scales, unless otherwise stated as follows:

⁵ Size below 45 mm refer only to clementines.

(i) For fruit arranged in regular layers in the package, including unit consumer packages, the maximum difference between the smallest and the largest fruit, within a single size code or, in the case of citrus fruit packed by count, within two adjacent codes, must not exceed the following maxima:

	Size Code	Maximum difference between fruit in the same package in mm
Lemons	0 - 7	7
Limes	1 - 5	7
Satsumas, clementines, other mandarin varieties and their hybrides	1 - 4	9
	5 - 6	8
	7 - 10	7
Oranges	0 - 2	11
	3 - 6	9
	7 - 13	7

(ii) For fruit not arranged in regular layers in packages and in individual rigid packages for direct sale to the consumer, the difference between the smallest and the largest fruit in the same package must not exceed the range of the appropriate size grade in the size scale

(iii) For fruit in bulk bins and fruit in individual non-rigid (nets, bags...) packages for direct sale to the consumer, the maximum size difference between the smallest and the largest fruit in the same lot or package must not exceed the range obtained by grouping three consecutive sizes in the size scale.

IV. PROVISIONS CONCERNING TOLERANCES

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

A. Quality tolerances

(i) "Extra" Class

5 per cent by number or weight of citrus fruit not satisfying the requirements of the class, but meeting those of Class I or, exceptionally, coming within the tolerances of that class.

(ii) Class I

10 per cent by number or weight of citrus fruit not satisfying the requirements of the class, but meeting those of Class II, or exceptionally, coming within the tolerances of that class.

(iii) Class II

10 per cent by number or weight of citrus fruit 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. Within this tolerance, a maximum of 5 per cent is allowed of fruit showing slight superficial unhealed damage, dry cuts or soft and shrivelled fruit.

B. Size tolerances

For all classes and types of presentation: 10 per cent by number or weight of citrus fruit corresponding to the size immediately below and/or above that (or those, in the case of the combination of three sizes) mentioned on the packages or the transport documents is allowed.

In any case, the tolerance of 10 per cent applies only to fruit not smaller than the following minima:

Lemons 43 mm

Limes 40 mm

Satsumas, other mandarin varieties and their hybrids	43 mm
Clementines	34 mm
Oranges	50 mm
Grapefruit and its hybrids	67 mm
Pummelos	98 mm

V. PROVISIONS CONCERNING PRESENTATION

A. Uniformity

The contents of each package must be uniform and contain only citrus fruit of the same origin, variety or commercial type, quality, and size, and appreciably of the same degree of ripeness and development.

In addition, for the "Extra" Class, uniformity in colouring is required.

The visible part of the contents of the package must be representative of the entire contents.

Sales packages of a net weight not exceeding 3 kilos may contain mixtures of citrus fruit of different species, provided they are uniform in quality and, for each species concerned, they are uniform in origin, variety or commercial type and size, and appreciably of the same degree of ripeness and development.

B. Packaging

The citrus fruit must be packed in such a way as to protect the produce properly.

The materials used inside the package must 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 labelling has been done with non-toxic ink or glue.

If the fruit are wrapped, thin, dry, new and odourless⁶ paper must be used.

The use of any substance tending to modify the natural characteristics of the citrus fruit, especially its taste or smell⁶, is prohibited.

Packages must be free of all foreign matter. However, a presentation where a short (not wooden) twig with some green leaves adheres to the fruit is allowed.

C. Presentation

The citrus fruit may be presented:

- (a) arranged in regular layers in packages.
- (b) not arranged in regular layers in packages or in bulk bins. This type of presentation is only allowed for Classes I and II.
- (c) in individual packages for direct sale to the consumer of a weight less than 5 kg either
 - made up by number of fruit or
 - made up by weight of fruit.

VI. PROVISIONS CONCERNING MARKING

Each package⁷ must bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside.

⁶ The use of preserving agents or any other chemical substance liable to leave a foreign smell on the skin of the fruit is permitted where it is compatible with the regulations of the importing country.

⁷ Package units of produce prepacked for direct sale to the consumer shall not be subject to these marking provisions but shall conform to the national requirements. However, the markings referred to shall in any event be shown on the transport packaging containing such package units.

A. Identification

- Packer) Name and address or
 and/or) officially issued or
 Dispatcher) accepted code mark⁸

B. Nature of produce

- Name of the species if the produce is not visible from the outside, except for satsumas, clementines, other mandarin varieties and their hybrids for which the name of the species or variety is compulsory.
- Name of the variety, for oranges.
- Name of the type:
- for lemons: the indication "Verdelli" and "Primofiore" where appropriate,
- for clementines: the indication AClementines, pipless@, AClementines@ (1 to 10 pips), AClementines with pips@ (more than 10 pips) where appropriate,
- for grapefruit and its hybrids: the indication Apink@ or Ared@ where appropriate,
- for pummelos: the indication Apink@ or Ared@ where appropriate.
- In case of sales packages containing a mixture of species of citrus fruit of different species, the names of the different species shall appear in addition to the details listed above.

C. Origin of produce

- Country of origin and, optionally, district where grown, or national, regional or local place name.
- In the case of sales packages containing a mixture of species of citrus fruit of different origins, the indication of each country of origin shall appear next to the name of the species concerned.

D. Commercial specifications

- Class
- Size code (or, when fruit packed by count fall under two adjacent codes, size codes or minimum and maximum diameter in mm) for fruit presented in accordance with the size scale or the lower and the upper limiting size code in the case of three consecutive sizes of the size scale
- Size code (or, when fruit packed by count fall under two adjacent codes, size codes or minimum and maximum diameter in mm) and number of fruit, in the case of fruit arranged in layers in the package
- Where appropriate, mention of the preserving agents or other chemical substance used, where such use is compatible with the regulations of the importing country.⁹

E. Official control mark (optional)

Published 1963

Revised 1992, 2000, 2002

The UNECE Standard for Citrus Fruit

has led to an explanatory brochure published by the OECD Scheme

⁸ The national legislation of a number of countries requires the explicit declaration of the name and address. However, in the case where a code mark is used, the reference "packer and/or dispatcher (or equivalent abbreviations)" has to be indicated in close connection with the code mark.

⁹ Reservation from Chile.

ECONOMIC COMMISSION FOR EUROPE
COMMITTEE FOR TRADE, INDUSTRY AND
ENTERPRISE DEVELOPMENT

Working Party on Agricultural Quality Standards

Fifty-eighth session, Geneva, 29 to 31 October 2002

REPORT OF THE FIFTY-EIGHTH SESSION

Addendum 9

UNECE Standard/Recommendation for Table Grapes

Note by the Secretariat: This document contains the revised UNECE Standard/Recommendation for Table Grapes (FFV-19), as adopted by the Working Party. The texts in square brackets concerning maturity requirements and late harvest grapes are in trial period until November 2003.

GE.02

UNECE STANDARD/RECOMMENDATION FFV-19

concerning the marketing and commercial
quality control of

TABLE GRAPES

moving in international trade between and to
UN/ECE member countries

I. DEFINITION OF PRODUCE

This standard applies to table grapes of varieties (cultivars) grown from *Vitis vinifera L.* to be supplied fresh to the consumer, table grapes for industrial processing being excluded.

II. PROVISIONS CONCERNING QUALITY

The purpose of the standard is to define the quality requirements of table grapes at the export control stage, after preparation and packaging.

A. Minimum requirements

In all classes, subject to the special provisions for each class and the tolerances allowed, bunches and berries must be:

- sound; produce affected by rotting or deterioration such as to make it unfit for consumption is excluded
- clean and practically free of any visible foreign matter
- practically free from pests
- practically free from damage caused by pests
- free of abnormal external moisture
- free of any foreign smell and/or taste.

In addition, berries must be:

- intact
- well formed
- normally developed.

Pigmentation due to sun is not a defect.

Bunches must have been carefully picked.

The bunches must be sufficiently developed and display satisfactory ripeness.

[**Note by the secretariat:** This text is in trial period until November 2003.]

The fruit must be such that the juice of the berries has a refractometric index of at least:

- 12° Brix for the Alphonse Lavallee, Cardinal and Victoria varieties,
- 13° Brix for all other seeded varieties,
- 14°Brix for all seedless varieties.

In addition all varieties must have satisfactory sugar/acid ratio levels.]

The development and condition of the table grapes must be such as to enable them:

- to withstand transport and handling, and
- to arrive in satisfactory condition at the place of destination.

B. Classification

The table grapes are classified in three classes defined below:

(i) **"Extra" Class**

Table grapes in this class must be of superior quality. In shape, development and colouring, the bunches must be typical of the variety, allowing for the district in which they are grown, and have no defects.

Berries must be firm, firmly attached, evenly spaced along the stalk and have their bloom virtually intact.

(ii) **Class I**

Table grapes in this class must be of good quality. In shape, development and colouring the bunches must be typical of the variety, allowing for the district in which they are grown.

Berries must be firm, firmly attached and, as far as possible, have their bloom intact. They may, however, be less evenly spaced along the stalk than in the "Extra" Class.

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:

- slight defects in shape
- slight defects in colouring
- very slight sun scorch affecting the skin only.

(iii) **Class II**

This class includes table grapes which do not qualify for inclusion in the higher classes but satisfy the minimum requirements specified above.

The bunches may show slight defects in shape, development and colouring, provided these do not impair the essential characteristics of the variety, allowing for the district in which they are grown.

The berries must be sufficiently firm and sufficiently attached, and where possible, still have their bloom. They may be less evenly spaced along the stalk than in Class I.

The following defects are allowed provided the table grapes retain their essential characteristics as regards the quality, the keeping quality and presentation:

- defects in shape
- defects in colouring
- slight sun scorch affecting the skin only
- slight bruising
- slight skin defects.

III. PROVISIONS CONCERNING SIZING

Size is determined by the weight of the bunch.

The following minimum size requirements per bunch are defined for table grapes grown under glass and for open-grown table grapes, small-berry varieties listed in the annex, or other varieties respectively.

	Table grapes grown under glass if indicated	Open grown table grapes	
		all varieties excluding small-berry varieties listed in the annex	Small-berry Varieties listed in the annex
"Extra" Class	300 g	200 g	150 g
Class I	250 g	150 g ¹	100 g
Class II	150 g	100 g	75 g

IV. PROVISIONS CONCERNING TOLERANCES

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

A. Quality tolerances

(i) "Extra" Class

5 per cent by weight of bunches not satisfying the requirements of the class, but meeting those of Class I or, exceptionally, coming within the tolerances of that class.

(ii) Class I

10 per cent by weight of bunches not satisfying the requirements of the class but meeting those of Class II or, exceptionally, coming within the tolerances of that class.

(iii) Class II

10 per cent by weight of bunches 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.

B. Size tolerances

(i) "Extra" Class and Class I

10 per cent by weight of bunches not satisfying the size requirements of the class, but meeting those of the class immediately below.

(ii) Class II

10 per cent by weight of bunches not satisfying the size requirements of the class but weighing not less than 75 g.

(iii) For all classes:

in each package for direct sale to the consumer not exceeding 1 kg net weight, one bunch weighing less than 75 g is allowed to adjust the weight, provided the bunch meets all other requirements of the specified class.

V. PROVISIONS CONCERNING PRESENTATION

A. Uniformity

The contents of each package must be uniform and contain only bunches of the same origin, variety, quality and degree of ripeness.

In the case of the "Extra" Class, the bunches must be of more or less identical size and colouring.

¹ [Note by the secretariat: This text is in trial period until November 2003

Table grapes of varieties Barlinka, Bonheur, La Rochelle, Dauphine and Sunred Seedless, marked as late harvest table grapes (bunches from the secondary harvest) may conform to a minimum bunch weight of 100g, provided that the bunches show the characteristic twist of the stems.]

In the case of grapes packed in small consumer packages of a net weight not exceeding one kilogramme, uniformity of variety and origin is not required.

The inclusion in each package of bunches of different colours for decorative purposes shall be allowed in the case of the variety Chasselas.

The visible part of the contents of the package must be representative of the entire contents.

B. Packaging

The table grapes must be packed in such a way as to protect the produce properly.

In the case of the "Extra" Class, the bunches must be packed in a single layer.

The materials used inside the package must 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 paper or stamps, bearing trade specifications is allowed provided the printing or labelling has been done with non-toxic ink or glue.

Packages must be free of all foreign matter, although a fragment of vine shoot no more than 5 cm in length may be left on the stem of the bunch as a form of special presentation.

VI. PROVISIONS CONCERNING MARKING

Each package² must bear the following particulars in letters grouped on the same side, legibly and indelibly marked, and visible from the outside:

A. Identification

- Packer) Name and address or
- and/or) officially issued or
- Dispatcher) accepted code mark.³

B. Nature of produce

- "Table grapes", if the contents are not visible from the outside
- Name of the variety or, where applicable, names of varieties.
- Δ Underglass®, where applicable.

C. Origin of produce

- Country of origin or, where applicable, countries of origin and, optionally, district where grown, or national, regional or local place name.

D. Commercial specifications

- Class.
- Alate harvest grapes®, where applicable.

E. Official control mark (optional)

Published 1961
Revised 1997, 1999, 2000, 2001, 2002
The UNECE Standard for Table Grapes
has led to an explanatory brochure published by the OECD Scheme

² Package units of produce prepacked for direct sale to the consumer shall not be subject to these marking provisions but shall conform to the national requirements. However, the markings referred to shall in any event be shown on the transport packaging containing such package units.

³ The national legislation of a number of countries requires the explicit declaration of the name and address. However, in the case where a code mark is used, the reference "packer and/or dispatcher (or equivalent abbreviations)" has to be indicated in close connection with the code mark.

ANNEX: EXHAUSTIVE LIST OF SMALL-BERRY VARIETIES

Some of the varieties listed in the following may be marketed under names for which trademark protection has been sought or obtained in one or more countries. Names believed by the United Nations to be varietal names are listed in the first column. Other names by which the United Nations believes the variety may be known are listed in the second column. Neither of these two lists are intended to include trademarks. References to known trademarks have been included in footnotes for information only.⁴

Variety	Synonyms
Admirable de Courtiller	Admirable - Csiri Csuri
Albillo	Acerba - Albuela - Blanco Ribera - Cagalon
Angelo Pirovano	I. Pirovano 2
Annamaria	I. Ubizzoni 4
Baltali	
Beba	Beba de los Santos - Eva
Catalanesca	Catalanesa - Catalana - Uva Catalana
Chasselas blanc	Chasselas doré - Fendant - Franceset - Franceseta - Gutedel - Krachtgutedel - White van der Laan
Chassalas rouge	
Chelva	Chelva de Cebreros - Guareña - Mantuo - Villanueva
Ciminnita	Cipro bianco
Clairette	Blanquette - Malvoisie - Uva de Jijona
Colombana bianca	Veredea - Colombana de Peccioli
Dehlro	
Delizia di Vaprio	I. Pirovano 46 A
Exalta	
Flame Seedless	Red Flame
Gros Vert	Abbondaza - St.Jeannet - Trionfo dell'Esposizione - Verdal - Trionfo di Gerusalemme

⁴ **Disclaimer:**

- (1) Some of the varietal names listed in the first column may indicate varieties for which patent protection has been obtained in one or more countries. Such proprietary varieties may only be produced or traded by those authorized by the patent holder to do so under an appropriate license. The United Nations takes no position as to the validity of any such patent or the rights of any such patent-holder or its licensee regarding the production or trading of any such variety.
- (2) The United Nations endeavoured to ensure that no trademark names are listed in the table. However, it is the responsibility of any trademark owner to notify the United Nations promptly if a trademark name has been included in the table and to provide the United Nations (see address below) with an appropriate varietal, or generic name for the variety as well as adequate evidence ownership of any applicable patent or trademark regarding such variety. Provided that no further information is needed from the trademark holder, the Working Party on Agricultural Quality Standards will change the list accordingly at the session following receipt of the information. The United Nations takes no position as to the validity of any such trademarks or the rights of any such trademark owners or their licensees.

United Nations Economic Commission for Europe,
 Trade Development and Timber Division, Agricultural Standards Unit
 Palais des Nations, 1211 Geneva 10, Switzerland
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Variety	Synonyms
Jaoumet	Madeleine de St.Jacques - Saint Jacques
Madeleine	Angevine - Angevine Oberlin - Madeleine Angevine Oberlin - Republicain
Mireille	
Molinera	Besgano - Castiza - Molinera gorda
Moscato d'Adda	Muscat d'Adda
Moscato d'Amburgo	Black Muscat - Hambro - Hamburg - Hamburski Misket - Muscat d'Hambourg - Musato Preto
Moscato di Terracina	Moscato di Maccarese
Oeillade	Black Malvoisie - Cinsaut - Cinsault - Ottavianello - Sinso
Panse precoce	Bianco di Foster - Foster's white - Sicilien
Perla di Csaba	Cabski Biser - Julski muskat - Muscat Julius - Perle de Csaba
Perlaut	
Perlette	
Pizzutello bianco	Aetonychi aspro - Coretto - Cornichon blanc - Rish Baba - Sperone di gallo - Teta di vacca
Precoce de Malingre	
Primus	I. Pirovano 7
Prunesta	Bermestia nera – Pergola rossa - Pergolese di Tivoli
Regina dei Vigneti	Königin der Weingärten - Muskat Szölöskertek Kizalyneja - Szölöskertek Kizalyneh - Rasaki ourgarias - Regina Villoz - Reina de las Viñas - Reine des Vignes - I. Mathiasz 140 - Queen of the Vineyards
Servant	Servan - Servant di Spagna
Sideritis	Sidiritis
Sultanines	Bidaneh - Kishmich - Kis Mis - Sultan - Sultana - Sultani - Cekirdesksiz - Sultanina bianca - Sultaniye - Thompson seedless and mutations
Valenci blanc	Valensi - Valency - Panse blanche
Valenci noir	Planta Mula - Rucial de Mula - Valenci negro
Yapincak	

ECONOMIC COMMISSION FOR EUROPE
 COMMITTEE FOR TRADE, INDUSTRY AND
 ENTERPRISE DEVELOPMENT

Working Party on Standardization of
Perishable Produce and Quality Development

Fifty-sixth session, Geneva, 6 to 8 November 2000

REPORT OF THE FIFTY-SIXTH SESSION

Addendum 14

Note by the secretariat

This document contains the revised UN/ECE Standard for Tomatoes (FFV-36), as adopted by the Working Party.
 GE.00-

UN/ECE STANDARD FFV-36

concerning the marketing and commercial
quality control of

TOMATOES

moving in international trade between and to
UN/ECE member countries

I. DEFINITION OF PRODUCE

This standard applies to tomatoes of varieties (cultivars) grown from *Lycopersicum esculentum Mill.* to be supplied fresh to the consumer, tomatoes for industrial processing being excluded.

Tomatoes may be classified into four commercial types:

- "round"
- "ribbed"
- "oblong" or "elongated"
- "cherry" tomatoes (including "cocktail" tomatoes)

II. PROVISIONS CONCERNING QUALITY

The purpose of the standard is to define the quality requirements of tomatoes at the export control stage, after preparation and packaging.

A. Minimum requirements

In all classes, subject to the special provisions for each class and the tolerances allowed, the tomatoes must be:

- intact
- sound, produce affected by rotting or deterioration such as to make it unfit for consumption is excluded
- clean, practically free of any visible foreign matter
- fresh in appearance
- practically free from pests
- practically free from damage caused by pests
- free of abnormal external moisture
- free of any foreign smell and/or taste.

In the case of trusses of tomatoes, the stalks must be fresh, healthy, clean and free from all leaves and any visible foreign matter.

The development and condition of the tomatoes must be such as to enable them:

- to withstand transport and handling, and
- to arrive in satisfactory condition at the place of destination.

B. Classification

Tomatoes are classified in three classes defined below:

(i) ***Extra Class***

Tomatoes in this class must be of superior quality. They must have firm flesh and must be characteristic of the variety as regards shape, appearance and development.

Their colouring, according to their state of ripeness, must be such as to satisfy the requirements set out in the last sub-paragraph of paragraph A above.

They must be free from greenbacks and other 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.

(ii) ***Class I***

Tomatoes in this class must be of good quality. They must be reasonably firm and characteristic of the variety.

They must be free of cracks and visible greenback. 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 defect in shape and development
- a slight defect in colouring
- slight skin defects
- very slight bruises.

Furthermore, "ribbed" tomatoes may show:

- healed cracks not more than 1 cm long
- no excessive protuberances
- small umbilicus, but no suberization
- suberization of the stigma up to 1 cm²
- fine blossom scar in elongated form (like a seam), but not longer than two-thirds of the greatest diameter of the fruit.

(iii) ***Class II***

This class includes tomatoes which do not qualify for inclusion in the higher classes, but satisfy the minimum requirements specified above.

They must be reasonably firm (but may be slightly less firm than in Class I) and must not show unhealed cracks.

The following defects may be allowed provided the tomatoes retain their essential characteristics as regards the quality, the keeping quality and presentation:

- defects in shape, development and colouring
- skin defects or bruises, provided the fruit is not seriously affected
- healed cracks not more than 3 cm in length for round, ribbed or oblong tomatoes.

Furthermore, "ribbed" tomatoes may show:

- more pronounced protuberances than allowed under Class I, but without being misshapen
- an umbilicus
- suberization of the stigma up to 2 cm²
- fine blossom scar in elongated form (like a seam).

III. PROVISIONS CONCERNING SIZING

Size is determined by the maximum diameter of the equatorial section. The following provisions shall not apply to "cherry" tomatoes.

A. Minimum size

For tomatoes classified in the "Extra" Class and Classes I and II, the minimum size is set at:

- 35 mm for "round" and "ribbed" tomatoes
- 30 mm for "oblong" tomatoes.

B. Sizing scale

The tomatoes are graded according to the following sizing scale:

30 mm and over but under	35 mm ¹
35 mm " " " "	40 mm
40 mm " " " "	47 mm
47 mm " " " "	57 mm
57 mm " " " "	67 mm
67 mm " " " "	82 mm
82 mm " " " "	102 mm
102 mm and over	

Observance of the sizing scale is compulsory for "Extra" Class and Class I tomatoes.

This sizing scale shall not apply to trusses of tomatoes.

IV. PROVISIONS CONCERNING TOLERANCES

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

A. Quality tolerances

(i) "Extra" Class

5 per cent by number or weight of tomatoes not satisfying the requirements of the class but meeting those of Class I or, exceptionally, coming within the tolerances of that class.

(ii) Class I

10 per cent by number or weight of tomatoes not satisfying the requirements of the class but meeting those of Class II or, exceptionally, coming within the tolerances of that class. In the case of trusses of tomatoes, 5% by number or weight of tomatoes detached from the stalk.

¹ Only for "oblong" tomatoes.

(iii) ***Class II***

10 per cent by number or weight of tomatoes satisfying neither the requirements of the class nor the minimum requirements, with the exception of produce affected by rotting, marked bruising or any other deterioration rendering it unfit for consumption. In the case of trusses of tomatoes, 10% by number or weight of tomatoes detached from the stalk.

B. Size tolerances

For all classes: 10 per cent by number or weight of tomatoes conforming to the size immediately above or below that specified, with a minimum of 33 mm for "round" and "ribbed" tomatoes, and 28 mm for "oblong" tomatoes.

V. PROVISIONS CONCERNING PRESENTATION**A. Uniformity**

The contents of each package must be uniform and contain only tomatoes of the same origin, variety or commercial type, quality and size (if sized).

The ripeness and colouring of tomatoes in "Extra" Class and Class I must be practically uniform. In addition, the length of "oblong" tomatoes must be sufficiently uniform.

The visible part of the contents of the package must be representative of the entire contents.

B. Packaging

The tomatoes must be packed in such a way as to protect the produce properly.

The materials used inside the package must 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 paper or stamps bearing trade specifications is allowed provided the printing or labelling has been done with non-toxic ink or glue.

Packages must be free of all foreign matter.

C. Presentation

The tomatoes may be presented as follows:

- (i) As individual tomatoes, with or without calyx and short stalk;
- (ii) As trusses of tomatoes, in other words, in entire inflorescences or parts of inflorescences, where each inflorescence or part of each inflorescence should comprise at least the following number of tomatoes:
 - 3 (2 if prepackaged) or
 - in the case of trusses of 'cherry' tomatoes, 6 (4 if prepackaged).

VI. PROVISIONS CONCERNING MARKING

Each package² must bear the following particulars in letters grouped on the same side, legibly and indelibly marked and visible from the outside:

A. Identification

- | | | |
|------------|---|----------------------------------|
| Packer |) | Name and address or |
| and/or |) | officially issued or |
| Dispatcher |) | accepted code mark. ³ |

² Package units of produce prepacked for direct sale to the consumer shall not be subject to these marking provisions but shall conform to the national requirements. However, the markings referred to shall in any event be shown on the transport packaging containing such package units.

³ The national legislation of a number of countries requires the explicit declaration of the name and address. However, in the case where a code mark is used, the reference "packer and/or dispatcher (or equivalent abbreviations)" has to be indicated in close connection with the code mark.

B. Nature of produce

- "Tomatoes" or "trusses of tomatoes" and the commercial type if the contents are not visible from the outside. These details must always be provided for "cherry" (or "cocktail") tomatoes whether in trusses or not.
- Name of the variety (optional).

C. Origin of produce

- Country of origin and, optionally, district where grown, or national, regional or local place name.

D. Commercial specifications

- Class
- Size expressed as minimum and maximum diameters (if sized), or the word "unsized" where appropriate.

E. Official control mark (optional)

Published 1961

Revised 1997, 2000

The UN/ECE Standard for Tomatoes

has led to an explanatory brochure published by the OECD Scheme

ECONOMIC COMMISSION FOR EUROPE
COMMITTEE FOR TRADE, INDUSTRY AND
ENTERPRISE DEVELOPMENT

Working Party on Agricultural Quality Standards

Fifty-eighth session, Geneva, 29 to 31 October 2002

REPORT OF THE FIFTY-EIGHTH SESSION

Addendum 3

UNECE Standard for Apples

Note by the Secretariat : This document contains the new UNECE Standard for Apples which was adopted by the Working Party. Together with the new UNECE Standard for Pears it replaces the UNECE Standard FFV-01 for Apples and Pears which is therefore deleted.

GE.02

UNECE STANDARD FFV-50

concerning the marketing and commercial
quality control of

APPLES

moving in international trade between and to
UNECE member countries

I. DEFINITION OF PRODUCE

This standard applies to apples of varieties (cultivars) grown from *Malus domestica* Borkh. to be supplied fresh to the consumer, apples for industrial processing being excluded.

II. PROVISIONS CONCERNING QUALITY

The purpose of the standard is to define the quality requirements of apples at the export control stage, after preparation and packaging.

A. Minimum requirements

In all classes, subject to the special provisions for each class and the tolerances allowed, apples must be:

- intact
- sound; produce affected by rotting or deterioration such as to make it unfit for consumption is excluded
- clean, practically free of any visible foreign matter
- practically free from pests
- practically free from damage caused by pests
- free of abnormal external moisture
- free of any foreign smell and/or taste.

In addition, they must have been carefully picked.

The development and condition of the apples must be such as to enable them:

- to continue their ripening process and to reach the degree of ripeness required in relation to the varietal characteristics¹

¹ Due to varietal characteristics of the Fuji variety concerning maturity at harvest, radial watercore is permitted providing it is contained within the vascular bundles of each fruit.

- to withstand transport and handling, and
- to arrive in satisfactory condition at the place of destination.

B. Classification

Apples are classified in three classes defined below:

(i) "Extra" Class

Apples in this class must be of superior quality. In shape, size and colouring they must be characteristic of the variety² and the stalk must be intact.

The flesh must be perfectly sound.

They must be free from defects with the exception of very slight superficial defects provided these do not affect the general appearance of the fruit, the quality, the keeping quality and presentation in the package.

(ii) Class I

Apples in this class must be of good quality. In shape, size and colouring they must be characteristic of the variety.²

The flesh must be perfectly sound.

The following slight defects, however, may be allowed, on individual fruit provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package:

- a slight defect in shape
- a slight defect in development
- a slight defect in colouring
- slight skin defects which must not extend over more than:
 - 2 cm in length for defects of elongated shape
 - 1 cm² of total surface area for other defects, with the exception of scab (*Venturia inaequalis*), which must not extend over more than 0.25 cm² cumulative in area.
 - slight bruising not exceeding 1 cm² in area and not discoloured.

The stalk may be missing, provided the break is clean and the adjacent skin is not damaged.

(iii) Class II

This class includes apples which do not qualify for inclusion in the higher classes but satisfy the minimum requirements specified above.²

The flesh must be free from major defects.

The following defects are allowed provided the fruit retains its essential characteristics as regards the quality, the keeping quality and presentation.

- defects in shape
- defects in development
- defects in colouring

² The criteria for colouring and russetting as well as a non-exhaustive list of varieties are set out in the Annex of this standard.

- skin defects which must not extend over more than:
- 4 cm in length for defects of elongated shape
- 2.5 cm² total surface area for other defects, including slightly discoloured bruising, with the exception of scab (*Venturia inaequalis*), which must not extend over more than 1 cm² cumulative in area.
- slight bruising not exceeding 1.5 cm² in area which may be slightly discoloured.

III. PROVISIONS CONCERNING SIZING

Size is determined by maximum diameter of the equatorial section or by weight.

A minimum size³ by diameter is required⁴ for each class as follows:

	Extra	Class I	Class II
Apples			
Large fruited varieties ²	65 mm	60 mm	60 mm
Other varieties	60 mm	55 mm	50 mm

To ensure there is uniformity of size within a package, the difference in diameter between fruit in the same package shall be limited to:

- 5 mm for "Extra" Class fruit and for Class I and II fruit packed in rows and layers⁵
- 10 mm for Class I fruit packed loose in the package or in consumer packages.⁶

For fruit sized according to weight, the difference in weight between fruit in the same package shall be limited to;

- 20% of the average individual fruit weight in the package for Class Extra and for Class I and II fruit packed in rows and layers
- 25% of the average individual fruit weight in the package for Class I fruit packed loose in the package or in consumer packages.

There is no sizing uniformity limit for Class II fruit packed loose in the package or in consumer packages.

IV. PROVISIONS CONCERNING TOLERANCES

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

A. Quality tolerances

(i) "Extra" Class

5 per cent by number or weight of apples not satisfying the requirements of the class, but meeting those of Class I or, exceptionally, coming within the tolerances of that class.

³ The European Community and Slovakia have adopted larger minimum sizes for apples as follows:

Large fruited varieties: 70mm fro "Extra" Class; 65mm for Classes I and II

Other varieties: 60mm for "Extra" Class; 55mm for Classes I and II

⁴ New Zealand, Chile and South Africa do not consider there to be an effective correlation between fruit sized by weight and the requirements for minimum diameter. New Zealand will propose that separate minimum requirements for weight sizing be included in the standard once further data has been obtained on this and the related issue of maturity requirements.

⁵ However, for apples of the varieties Bramley's Seedling (Bramley, Triomphe de Kiel) and Horneburger, the difference in diameter may amount to 10 mm.

⁶ However, for apples of the varieties Bramley's Seedling (Bramley, Triomphe de Kiel) and Horneburger the difference in diameter may amount to 20 mm.

(ii) *Class I*

10 per cent by number or weight of apples not satisfying the requirements of the class, but meeting those of Class II or, exceptionally, coming within the tolerances of that class.

(iii) *Class II*

10 per cent by number or weight of apples 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.

Within this tolerance, a maximum of 2 per cent by number or weight of fruit is allowed which shows the following defects:

- serious attacks of cork (bitter pit) or water-core
- slight damage or unhealed cracks
- very slight traces of rot
- presence of internal feeding pests and/or damage to the flesh caused by pests.

B. Size tolerances

For all classes:

- (a) for fruit which is subject to the rules of uniformity, 10 per cent by number or weight of fruit corresponding to the size immediately above or below that marked on the package, with, for fruit classified in the smallest grade allowed a maximum variation of 5 mm below the minimum;
- (b) for fruit which is not subject to the rules of uniformity, 10 per cent by number or weight of fruit below the minimum size laid down, with a maximum variation of 5 mm below the minimum size.

V. PROVISIONS CONCERNING PRESENTATION**A. Uniformity**

The contents of each package must be uniform and contain only apples of the same origin, variety, quality, and size (if sized) and the same degree of ripeness.

In the case of the "Extra" Class, uniformity also applies to colouring.

The visible part of the contents of the package must be representative of the entire contents.

Uniformity of variety and origin are not required for apples in consumer packages of a net weight not exceeding 5 kg.

B. Packaging

The apples must be packed in such a way as to protect the produce properly. In particular, consumer packages of a net weight exceeding 3kg shall be sufficiently rigid to ensure proper protection of the produce.

The materials used inside the package must 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 labelling has been done with non-toxic ink or glue.

Packages must be free of all foreign matter.

C. Presentation

For "Extra" Class fruit must be packed in layers.

VI. PROVISIONS CONCERNING MARKING

Each package⁷ must bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside:

A. Identification

- Packer) Name and address or
- and/or) officially issued or
- Dispatcher) accepted code mark.⁸

B. Nature of produce

- "Apples", if the contents are not visible from the outside
- Name of the variety

In the case of consumer packages containing a mixture of apples of different varieties, names of the different varieties.

C. Origin of produce

- Country of origin and, optionally, district where grown, or national, regional or local place name.
- In the case of consumer packages containing a mixture of varieties of apples of different origins, the indication of each country of origin shall appear next to the name of the variety concerned.

D. Commercial specifications

- Class
- Size, or for fruit packed in rows and layers, number of units.

If identification is by the size, this should be expressed:

- (a) for produce subject to the uniformity rules, as minimum and maximum diameters or weight;
- (b) for produce not subject to the uniformity rules, the diameter or weight of the smallest fruit in the package.

E. Official control mark (optional)

Published 2002*

*This text was previously part of a combined standard for apples and pears (FFV-01), published 1960 with revisions 1996, 2000. An explanatory brochure for this standard was published by the OECD Scheme.

⁷ Consumer packages shall not be subject to these marking provisions but shall conform to the national requirements. However, the markings referred to shall in any event be shown on the transport packaging containing such package units.

⁸ The national legislation of a number of countries requires the explicit declaration of the name and address. However, in the case where a code mark is used, the reference "packer and/or dispatcher (or equivalent abbreviations)" has to be indicated in close connection with the code mark.

ANNEX

1. Colouring, Criteria for Apples, Colour Groups and Codes

Colour group	A	B	C
	total surface area of red colouring characteristic of the variety	total surface area of mixed red colouring characteristic of the variety	, total surface area of slightly red coloured, blushed or striped characteristic of the variety
Class Extra	3/4	1/2	1/3
Class I	1/2	1/3	1/10
Class II	1/4	1/10	—

2. Russetting Criteria for Apples

R = Variety for which russetting is a characteristic of the skin and is not a defect if it corresponds to the typical appearance of the variety.

For varieties not marked with an "R" in the list below, russetting is allowed within the following limits

	Extra	I	II	Tolerances for Class II
(i) <u>Brown patches</u>	not outside the stem cavity	may slightly beyond the stem or pistil cavities	go beyond the stem or pistil cavities	fruit not seriously detracting from the appearance and condition of the package
	not rough	not rough	slightly rough	
(ii) <u>Russetting</u>		Maximum surface area of the fruit permitted		
<u>thin net-like russetting</u> (not contrasting strongly with the general colouring of the fruit)	slight and isolated traces of russetting not altering the general appearance of the fruit and of the package		1/5	½
<u>Heavy</u>	None	1/20	1/3	fruit not seriously detracting from the appearance and condition of the package
<u>Cumulative defects</u> (with the exception of brown patches which are excluded from these cumulative defects)				fruit not seriously detracting from the appearance and condition of the package
In no case may thin russetting and heavy russetting taken together exceed a maximum of:		1/5	½	fruit not seriously detracting from the appearance and condition of the package

3. Size Criteria for Apples

L = Large fruited variety

Non-Exhaustive List of Apple Varieties⁹

Some of the varieties listed in the following may be marketed under names for which trademark protection has been sought or obtained in one or more countries. Names believed by the United Nations to be varietal names are listed in the first column. Other names by which the United Nations believes the variety may be known are listed in the second column. Neither of these two lists are intended to include trademarks. References to known trademarks have been included in the third column for information only. The presence of any trademarks in the third column does not constitute any license or permission to use that trademark – such license must come directly from the trademark owner. In addition, the absence of a trademark in the third column does not constitute any indication that there is no registered/ pending trademark for such a variety.¹⁰

Variety	Synonyms	Tradenames	Colour group	Russetting	Size
African Red		African Carmine™	B		
Akane	Tohoku 3	Primerouge®	B		
Alborz Seedling			C		
Aldas			B		
Alice			B		
Alkmene	Early Windsor		C		
Alwa			B		
Angold			C		L
Apollo	Beauty of Blackmoor		C		L
Arkcharm	Arkansas No 18, A 18		C		L

⁹ Fruits of varieties that are not part of the list must be graded according to their varietal characteristics. Coloured and/or large fruited varieties as well as those showing a characteristic russeting should be included in the list to provide information about the varietal characteristics. The update of the list may be requested through the Specialized Section for the Standardization of Fresh Fruit and Vegetables.

¹⁰ Disclaimer:

- (1) Some of the varietal names listed in the first column may indicate varieties for which patent protection has been obtained in one or more countries. Such proprietary varieties may only be produced or traded by those authorized by the patent holder to do so under an appropriate license. The United Nations takes no position as to the validity of any such patent or the rights of any such patent-holder or its licensee regarding the production or trading of any such variety.
- (2) The United Nations endeavoured to ensure that no trademark names are listed in columns 1 and 2 of the table. However, it is the responsibility of any trademark owner to notify the United Nations promptly if a trademark name has been included in the table and to provide the United Nations (see address below) with an appropriate varietal, or generic name for the variety as well as adequate evidence ownership of any applicable patent or trademark regarding such variety. Provided that no further information is needed from the trademark holder, the Working Party on Agricultural Quality Standards will change the list accordingly at the session following receipt of the information. The United Nations takes no position as to the validity of any such trademarks or the rights of any such trademark owners or their licensees.

Variety	Synonyms	Tradenames	Colour group	Russetting	Size
Arlet			B	R	
Aroma			C		
Red coloured mutants of Aroma e. g. Amorosa			B B		
Auksis			B		
Belfort	Pella		B		
Belle de Boskoop and mutants				R	L
Belle fleur double					L
Berlepsch	Freiherr von Berlepsch		C		
Berlepsch rouge	Red Berlepsch, Roter Berlepsch		B		
Blushed Golden					L
Bohemia			B		L
Boskoop rouge	Red Boskoop, Roter Boskoop		B	R	L
Braeburn			B		L
Red coloured mutants of Braeburn e. g. Annaglo Hidala Joburn Lochbuie Red Braeburn Mahana Red Mariri Red Redfield Royal Braeburn		Hillwell ® Aurora™, Red Braeburn™, Southern Rose™ Redfield ® Eve™, Red Braeburn™, Southern Rose™ Red Braeburn™, Southern Rose™	A A A A A A A		L L L L L L L
Bramley's Seedling	Bramley, Triomphe de Kiel				L
Brettacher Sämling					L
Calvilles, Groupe des					L
Cardinal			B		

Variety	Synonyms	Tradenames	Colour group	Russetting	Size
Carola	Kalco		C		L
Caudle		Cameo™	B		
Charden					L
Charles Ross					L
Civni		Rubens ®	B		
Coromandel Red	Corodel		A		L
Cortland			B		L
Cox's Orange Pippin and mutants	Cox orange		C	R	
Red coloured mutants of Cox's Orange Pippin e. g.			B	R	
Cherry Cox			B	R	
Crimson Bramley					L
Cripps Pink		Pink Lady ®	C		
Cripps Red		Sundowner™	A		
Dalili		Ambassy ®	C		L
Delblush		Temptation ®			L
Delcorf and mutants e. g.		Delbarestivale ®	C		L
Dalili		Ambassy ®	C		L
Monidel			C		L
Delgollune		Delbard Jubilé ®	B		L
Delicious ordinaire	Ordinary Delicious		B		
Deljeni		Primgold ®			L
Delikates			B		
Delor			C		L
Discovery			C		
Dunn's Seedling				R	
Dykmanns Zoet			C		
Egremont Russet				R	
Elan					L
Elise	Red Delight	Roblos ®	A		L
Ellison's orange	Ellison		C		L
Elstar and mutants			C		

Variety	Synonyms	Tradenames	Colour group	Russetting	Size
e. g.					
Daliter		Elton™	C		
Elshof			C		
Elstar Armhold			C		
Elstar Reinhardt			C		
Red coloured mutants of Elstar e. g.			B		
Bel-El		Red Elswout™	B		
Daliest		Elista™	B		
Goedhof		Elnica™	B		
Red Elstar			B		
Valstar			B		
Empire			A		
Falstaff			C		
Fiesta	Red Pippin		C		
Florina		Querina ®	B		L
Fortune				R	
Fuji and mutants			B		L
Gala			C		
Red coloured mutants of Gala e. g.			A		
Baigent		Brookfield ®	A		
Galaxy			A		
Mitchgla		Mondial Gala ®	A		
Obrogala			A		
Regala			A		
Regal Prince		Gala Must ®	A		
Tenroy		Royal Gala ®	A		
Garcia					L
Ginger Gold					L
Gloster			B		L
Goldbohemia					L
Golden Delicious and mutants					L
Golden Russet				R	
Golden Supreme	Gradigold, Golden Extreme				L

Variety	Synonyms	Tradenames	Colour group	Russetting	Size
Goldrush	Coop 38				L
Goldstar					L
Granny Smith					L
Gravenstein rouge	Red Gravenstein, Roter Gravensteiner		B		L
Gravensteiner	Gravenstein				L
Greensleaves					L
Holsteiner Cox and mutants	Holstein			R	
Holstein rouge	Red Holstein, Roter Holsteiner Cox		C	R	
Honeycrisp		Honeycrunch ®	C		L
Honey gold					L
Horneburger					L
Howgate Wonder	Manga				L
Idared			B		L
Ingrid Marie			B	R	
Isbranica			C		
Jacob Fisher					L
Jacques Lebel					L
Jamba			C		L
James Grieve and mutants					L
James Grieve rouge		Red James Grieve	B		L
Jarka			C		L
Jerseymac			B		
Jester					L
Jonagold a) e. g.			C		L
Crowngold			C		L
Daligo			C		L
Daliguy	Jonasty		C		L
Dalijean	Jonamel		C		L
Jonagold 2000	Excel		C		L
Jonabel			C		L

a) However, for the variety Jonagold at least one-tenth of the surface of the fruit in Class II must be striped with red colouring

Variety	Synonyms	Tradenames	Colour group	Russetting	Size
Jonabres			C		L
King Jonagold			C		L
New Jonagold	Fukushima		C		L
Novajo	Veulemanns		C		L
Schneica	Jonica		C		L
Wilmuta			C		L
Jonagored and similar coloured mutants of Jonagold e. g.			A		L
Decosta			A		L
Jomured	Van de Poel		A		L
Jonagold Boerekamp		Early Queen ®	A		L
Jomar		Marnica ®	A		L
Jonagored Supra			A		L
Jonaveld		First Red ®	A		L
Primo			A		L
Romagold	Surkijn		A		L
Rubinstar			A		L
Red Jonaprince		Wilton's ®, Red Prince ®	A		L
Jonalord			C		
Jonathan			B		
Julia			B		
Jupiter					L
Karmijn de Sonnaville			C	R	L
Katja	Katy		B		
Kent				R	
Kidd's Orange Red			C	R	
Kim			B		
Lady Williams			B		L
Lane's Prince Albert					L
Laxton's Superb			C	R	
Ligol			B		L
Lobo			B		
Lodel			A		
Lord Lambourne			C		

Variety	Synonyms	Tradenames	Colour group	Russetting	Size
Maigold			B		
McIntosh			B		
Melodie			B		L
Melrose			C		L
Meridian			C		
Moonglo			C		
Morgenduft	Imperatore		B		L
Mutsu		Crispin ®			L
Normanda			C		L
Nueva Europa			C		
Nueva Orleans			B		L
Odin			B		
Ontario			B		L
Orlovskoje polosatoje			C		
Ozark Gold					L
Paula Red			B		
Pero de Cirio					L
Piglos			B		L
Pikant			B		L
Pikkolo			C		
Pilot			C		
Pimona			C		
Pinova		Corail ®	C		
Pirella		Pirol ®	B		L
Piros			C		L
Rafzubex		Rubinette ® Rosso	A		
Rafzubin		Rubinette ®	C		
Rajka			B		
Rambour d'hiver					L
Rambour Franc			B		
Reanda			B		L
Rebella			C		L
Red Delicious and mutants e. g.			A		L
Erovan	Early Red One		A		L

Variety	Synonyms	Tradenames	Colour group	Russetting	Size
Fortuna Delicious			A		L
Oregon	Oregon Spur Delicious		A		L
Otago			A		L
Red King			A		L
Red Spur			A		L
Red York			A		L
Richared			A		L
Royal Red			A		L
Shotwell Delicious			A		L
Stark Delicious			A		L
Starking			A		L
Starkrimson			A		L
Starkspur			A		L
Topred			A		L
Well Spur			A		L
Red Dougherty			A		
Red Rome			A		
Redkroft			A		
Regal			A		
Regina			B		L
Reglindis			C		L
Reine des Reinettes	Gold Parmoné, Goldparmäne		C		
Reineta Encarnada			B		
Reinette Rouge du Canada			B		L
Reinette de Orléans					L
Reinette Blanche du Canada	Reinette du Canada, Canada Blanc, Kanadarenette			R	L
Reinette de France					L
Reinette de Landsberg					L
Reinette grise du Canada	Graue Kanadarenette			R	L
Relinda			C		
Remo			B		
Renora			B		L

Variety	Synonyms	Tradenames	Colour group	Russetting	Size
Resi			B		
Resista					L
Retina			B		L
Rewena			B		L
Roja de Benejama	Verruga, Roja del Valle, Clavelina		A		
Rome Beauty	Belle de Rome, Rome		B		
Rosana			B		L
Royal Beaut			A		L
Rubin			C		L
Rubinola			B		L
Sciearly		Pacific Beauty™	A		
Scifresh		Jazz™	B		
Sciglo		Southern Snap™	A		
Sciray			A		
Scired		Pacific Queen™	A	R	
Sciros		Pacific Rose™	A		L
Selena			B		L
Shampion			B		L
Sinap Orlovskij					L
Snycgold	Earlygold				L
Sommerregent			C		
Spartan			A		
Splendour			A		
St. Edmunds Pippin				R	
Starks's Earliest			C		
Štaris	Staris		A		
Sturmer Pippin				R	
Summerred			B		
Sunrise			A		
Sunset				R	
Suntan				R	L
Sweet Caroline			C		L
Topaz			B		
Tydeman's Early	Tydeman's Early		B		L

Variety	Synonyms	Tradenames	Colour group	Russetting	Size
Worcester					
Vista Bella	Bellavista		B		
Wealthy			B		
Worcester Pearmain			B		
York			B		