

Standard Layout for UNECE Explanatory Brochures on Fresh Fruit and Vegetables (FFV)

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NOTE

Working Party on Agricultural Quality Standards

The commercial quality standards developed by the Working Party on Agricultural Quality Standards of the United Nations Economic Commission for Europe (UNECE) help facilitate international trade, encourage high-quality production, improve profitability and protect consumer interests. UNECE standards are used by governments, producers, traders, importers and exporters, and other international organizations. They cover a wide range of agricultural products, including fresh fruit and vegetables, dry and dried produce, seed potatoes, meat, cut flowers, eggs and egg products.

Any member of the United Nations can participate, on an equal footing, in the activities of the Working Party. For more information on agricultural standards, please visit our website <www.unece.org/trade/agr>.

The present Standard Layout for UNECE Explanatory Brochures on Fresh Fruit and Vegetables (FFV) is based on document ECE/CTCS/WP.7/2015/13, reviewed and adopted by the Working Party at its seventy-first session.

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Background information

The UNECE Standard Layout for FFV Explanatory Brochures is based on the 2011 edition of the Standard Layout for UNECE standards on fresh fruit and vegetables and the general explanatory notes from the UNECE brochures published since 2009.

The following conventions are used in the text:

{text}: For text which explains the use of the Standard Layout. This text does not appear in the brochure. It is replaced by text appropriate for a specific brochure.

<text>: For optional texts or text for which several alternatives exist, depending on the product.

When developing an explanatory brochure based on this Standard Layout, product-specific provisions of the relevant standard must be included. Other product-specific explanatory notes may also be added. Photos illustrating characteristics of the produce and defects should be inserted, as appropriate.

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The official text of the standard is indicated in bold type; the interpretative text of the standard is indicated in black. References to photos representing the visual interpretation are printed in black bold. The entire text of the standard without the interpretative text appears in Annex II.

I. Definition of produce

This standard applies to *{name of produce}* of varieties (cultivars) grown from *{Latin botanical reference in italics followed where necessary by the author's name in normal type}* to be supplied fresh to the consumer, *{name of produce}* for industrial processing being excluded.

{Indicate explanatory notes highlighting the variability of varieties and/or commercial types}

{Indicate explanatory notes related to the methods of production including photo(s) should be included provided this information is relevant with respect to the scope of the standard.}

Interpretation:

Examples of commercially grown varieties are shown in **Photos 1-*{xxx}***.

Photo 1. Definition of produce – *{xxx}*

Photo *{x}*. Definition of produce – *{xxx}*

II. Provisions concerning quality

The purpose of the standard is to define the quality requirements for *{name of produce}* at the export-control stage after preparation and packaging.

However, if applied at stages following export, products may show in relation to the requirements of the standard:

- **A slight lack of freshness and turgidity**
- **For products graded in classes other than the “Extra” Class, a slight deterioration due to their development and their tendency to perish.**

The holder/seller of products may not display such products or offer them for sale, or deliver or market them in any manner other than in conformity with this standard. The holder/seller shall be responsible for observing such conformity.

Advice: At the packing stage, special attention should be paid to ensure that the minimum requirements have been met. Produce with any progressive defects will deteriorate during transportation and distribution.

A. Minimum requirements

In all classes, subject to the special provisions for each class and the tolerances allowed, the *{name of produce}* must be:

{List the minimum requirements in the same order as they appear in the standard; photo(s) for each one, if possible and necessary.}

- **intact,**

Interpretation: *{name of produce}* must not have any damage or injury affecting the integrity of the produce. *{Name of produce}* with mechanical damage, unhealed injuries or cracks exposing the interior of the produce are not allowed.

Examples related to the minimum requirement “intact” are shown in **Photos *{x-y}***.

Photo {x}. Minimum requirement: “intact”. Mechanical damage – not allowed

Photo {x}. Minimum requirement: „intact”. Split fruit — not allowed

- **sound; produce affected by rotting or deterioration, such as to make it unfit for consumption, is excluded**

Interpretation: *{name of produce}* must be free from disease (caused by fungi, bacteria or viruses), physiological disorders or serious deterioration, which appreciably affect their appearance, edibility or keeping quality. *{Name of produce}* affected by rotting, even if the signs are very slight but liable to make the fruit unfit for consumption upon arrival at destination, should be excluded.

The *{name of produce}* with the following defects are therefore excluded:

- rotting
- mould
- serious bruising

{Additional defects may be added, previous defects may be deleted if not relevant for a given produce.}

Examples related to the minimum requirement “sound” are shown in **Photos {x-y}**.

Photo {x}. Minimum requirement: “sound”. Early signs of rotting – not allowed

Photo {x}. Minimum requirement: “sound”. Serious bruising – not allowed

- **clean, practically free of any visible foreign matter**

Interpretation: The presence of visible foreign matter can detract from commercial presentation and acceptance of *{name of produce}*. Therefore, the acceptable limit for “practically free” would be – in all classes – very slight traces of dust. Soiling or any traces of inorganic deposits are not allowed. Any deposits of a blue, green or other unusual colour indicating the presence of traces of pesticide residues are not allowed.

Examples related to the minimum requirement “clean” are shown in **Photos {x-y}**.

Photo {x}. Minimum requirement: “clean”. The bloom is a characteristic of the fruit and is not a defect

Photo {x}. Minimum requirement: “clean”. Very slight traces of dust – limit allowed in all classes

Photo {x}. Minimum requirement: “clean”. Soiled fruit – not allowed

- **practically free from pests**

Interpretation: The presence of pests can detract from the commercial presentation and acceptance of the *{name of produce}*. Therefore, the acceptable limit for “practically free” would be – in all classes – the odd insect, mite or other pests in the package or sample; any colonies are not allowed.

Examples related to the minimum requirement “practically free from pests” are shown in **Photos {x-y}**.

Photo {x}. Minimum requirement: “practically free from pests”. One pest (*{name of pest}*) – limit allowed in all classes

Photo {x}. Minimum requirement: “practically free from pests”. Colony of pests (*{name of pest}*) – not allowed.

- **<practically free of damage caused by pests>**

Interpretation: Pest damage affecting the flesh makes the produce unfit for consumption. Therefore, the acceptable limit for "practically free" would be – in all classes – very slight traces of damage caused by pests.

Examples related to the minimum requirement „practically free from damage caused by pests” are shown in **Photos {x-y}**.

Photo {x}. Minimum requirement: “practically free from damage caused by pests”. Hole left by a fruit fly larvae leaving the fruit – not allowed

Photo {x}. Minimum requirement: “practically free from damage caused by pests”. Feeding damage caused by larvae – not allowed

- **<free from damage caused by pests affecting the flesh>**

Interpretation: Pest damage affecting the flesh makes the produce unfit for consumption and is not allowed. Any pest damage affecting the skin only is restricted to the limits allowed for skin defects in the respective classes.

Examples related to the minimum requirement „free from damage caused by pests affecting the flesh” are shown in **Photos {x-y}**.

Photo {x}. Minimum requirement: “free from damage caused by pests affecting the flesh”. Hole left by a fruit fly larvae leaving the fruit – not allowed

Photo {x}. Minimum requirement: “free from damage caused by pests affecting the flesh”. Feeding damage caused by larvae – not allowed

- **free of abnormal external moisture**

Interpretation: This provision applies to excessive moisture, for example, free water lying inside the package, but does not include condensation on produce following release from cool storage or refrigerated vehicle.

- **free of any foreign smell and/or taste.**

Interpretation: This provision applies to {name of produce} stored or transported under poor conditions, which have consequently resulted in their absorbing abnormal smells and/or tastes, in particular through the proximity of other products which give off volatile odours.

The development and condition of the {name of produce} must be such as to enable them:

- **to withstand transportation and handling**
- **to arrive in satisfactory condition at the place of destination.**

B. Maturity requirements

{If the standard comprises a section on maturity requirements the following interpretative notes may be included as appropriate :}

The {name of produce} must be sufficiently developed, and display satisfactory ripeness. The development and state of maturity of the {name of produce} 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 characteristics.

Interpretation: Shape, size and surface colour convey information about the maturity level of specific variety.

<Once picked, *{name of produce}* continue to mature, provided the fruit has reached the stage of maturity ensuring proper completion of the ripening process resulting in normal taste, flavour and odour.>

<The intent of setting a minimum limit is to assure that fruits are harvested at a maturity stage which enables them to enter the distribution chain in good condition and to continue the ripening to achieve good eating quality.>

<Objective methods to determine firmness, refractometric index and sugar/acid ratio are described in the Guidelines on Objective Tests to Determine the Quality of Fruit and Vegetables and Dry and Dried Produce ¹.>

Examples related to the maturity requirement “satisfactory ripeness” are shown in **Photos {x-y}**.

Photo {x}. Maturity requirement: “satisfactory ripeness”. Range of different ripening stages

C. Classification

{Name of produce} are classified in three classes, as defined below.

(i) “Extra” Class

{Name of produce} in this class must be of superior quality. They must be characteristic of the variety and/or commercial type.

<They must be :>

{List the explanatory notes in the same order as they appear in the standard. If possible, include photo(s) for each one}.

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.

Interpretation: <Changes in colouration as *{name of produce}* mature are not considered to be defects in colouring. “Extra” Class fruit in packages must be uniform in colouring. >

Examples related to Class “Extra” are shown in **Photos {x-y}**.

Photo {x}. Classification: “Extra” Class. A very slight superficial defect – limit allowed

(ii) Class I

{Name of produce} in this class must be of good quality. They must be characteristic of the variety and/or commercial type.

<They must be :>

{List the explanatory notes in the same order as they appear in the standard. If possible, include photo(s) for each one}.

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:

¹ <http://www.oecd.org/tad/fv>

- a slight defect in shape,

Interpretation:

Examples of Class I shape defects are shown in **Photos {x-y}**.

Photo x. Classification: “Class I, a slight defect in shape”. *{Name of variety}*. typical shape (left), a slight defect in shape (right) – limit allowed

- slight defects in colouring,

Interpretation: <Changes in colouration as *{name of produce}* mature are not considered colour defects.>

Examples of Class I defects in colouring are shown in **Photos {x-y}**.

Photo {x}. Classification: “Class I, slight defects in colouring”. Slight defects in colouring, caused by the sun – limit allowed

- slight skin defects,

Interpretation:

Examples of Class I slight skin defects are shown in **Photos {x-y}**.

Photo {x}. Classification: “Class I, slight skin defects”. Slight healed cracks – limit allowed

Photo {x}. Classification: “Class I, slight skin defects”. Slight rubbing – limit allowed

Photo {x}. Classification: “Class I, slight skin defects”. Slight damage caused by scales affecting the skin only – limit allowed

(iii) **Class II**

This class includes *{name of produce}* that do not qualify for inclusion in the higher classes but satisfy the minimum requirements specified above:

Interpretation: *{name of produce}* in this class must be of reasonable quality and suitable for human consumption.

The following defects may be allowed, provided the *{name of produce}* retain their essential characteristics as regards the quality, the keeping quality and presentation:

- defects in shape,

Interpretation:

Examples of Class II shape defects are shown in **Photos {x-y}**.

Photo {x}. Classification: “Class II, defects in shape”. *{name of variety}*: typical shape (left), defect in shape (right) – limit allowed

Photo {x}. Classification: “Class II, defects in shape”. *{name of variety}*: serious defect in shape – not allowed

- defects in colouring,

Interpretation: <Changes in colouration as *{name of produce}* mature are not considered colour defects.>

Examples of Class II defects in colouring are shown in **Photos {x-y}**.

Photo {x}. Classification: “Class II, defects in colouring”. Defects in colouring caused by the sun – limit allowed

- skin defects.

Interpretation:

Examples of Class II skin defects are shown in **Photos {x-y}**.

Photo {x}. Classification: “Class II, skin defects”. Healed cracks – limit allowed

Photo {x}. Classification: “Class II, skin defects”. Skin defects caused by rubbing – limit allowed

Photo {x}. Classification: “Class II, skin defects”. Damage caused by scales affecting the skin only – limit allowed

III. Provisions concerning sizing

Size is determined by ... *{provisions of the respective standard}*

The minimum size shall be: ... *{provisions of the respective standard}*

To ensure uniformity in size, the range in size between produce in the same package shall be: *{provisions of the respective standard}*

<**Uniformity in size is compulsory for** *{provisions of the respective standard}*>

Interpretation:

An example of sizing is shown in **Photos {x-y}**.

Photo {x}. Sizing. Checking the size.

IV. Provisions concerning tolerances

At all marketing stages, tolerances in respect of quality and size shall be allowed in each lot for produce not satisfying the requirements of the class indicated.

Interpretation: Tolerances are provided to allow for deviation in handling and for natural deterioration of fresh produce over time.

Conformity with tolerances should be determined using at least the OPERATING RULES FOR THE CONFORMITY CHECKS as set out in Annex II to the Council Decision Revising the OECD „SCHEME FOR THE APPLICATION OF INTERNATIONAL STANDARDS FOR FRUIT AND VEGETABLES” [C(2006)95]².

A. Quality tolerances**(i) “Extra” Class**

A total tolerance of 5 per cent, by number or weight, of {name of produce} not satisfying the requirements of the class but meeting those of Class I is allowed. Within this tolerance not more than 0.5 per cent in total may consist of produce satisfying the requirements of Class II quality.

Interpretation: The 5 per cent tolerance covers all shape, skin and colour defects allowed in Class I. The 0.5 per cent tolerance covers all shape, skin and colour defects, as well as bruises allowed in Class II.

² www.oecd.org/dataoecd/33/0/19517729.PDF

{Possible tolerances for individual defects depending on the relevant standard should be included}.

(ii) **Class I**

A total tolerance of 10 per cent, by number or weight, of {name of produce} not satisfying the requirements of the class but meeting those of Class II is allowed. Within this tolerance not more than 1 per cent in total may consist of produce satisfying neither the requirements of Class II quality nor the minimum requirements, or of produce affected by decay.

Interpretation: The 10 per cent tolerance covers all shape, skin and colour defects, as well as bruising allowed in Class II. The 1 per cent tolerance covers all defects not meeting the minimum requirements including those rendering the produce unfit for consumption.

(iii) **Class II**

A total tolerance of 10 per cent, by number or weight, of {name of produce} satisfying neither the requirements of the class nor the minimum requirements is allowed. Within this tolerance not more than 2 per cent in total may consist of produce affected by decay.

Interpretation: The 10 per cent tolerance covers all malformations, serious skin and colour defects as well as defects not meeting the minimum requirements but not affecting edibility such as slight damage, soiling, lack of freshness. The 2 per cent tolerance covers all defects not meeting the minimum requirements rendering the produce unfit for consumption.

B. Size tolerances

For all classes (if sized): A total tolerance of 10 per cent, by number or weight, of {name of produce} not satisfying the requirements as regards sizing is allowed.

Interpretation: The size tolerances are granted for produce below or above a set minimum as well as for produce deviating from the allowed and/or indicated size range.

V. Provisions concerning presentation

A. Uniformity

The contents of each package <(or lot for produce presented in the transport vehicle)> must be uniform and contain only {name of produce} of the same origin, <variety,> quality and size <(if sized)>.

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

Interpretation: Presentation should not be misleading, i.e. concealing in the lower layers of the package produce inferior in quality and size (if sized) to that displayed and marked.

Examples of uniform presentation are shown in **Photos {x-y}**.

Photo {x}. Presentation: "Uniformity". "Extra" Class presentation of ({name of variety})

Photo {x}. Presentation: "Uniformity". Class I presentation of ({name of variety})

Photo {x}. Presentation: "Uniformity". Class II presentation of ({name of variety})

Photo {x}. Presentation: “Uniformity”. Classes I and II – no uniformity in colouring required

B. Packaging

The {name of produce} must be packed in such a way as to protect the produce properly.

Interpretation: Packages must be of such quality and strength as to protect the {name of produce} during transportation and handling.

The materials used inside the package must be 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.

Stickers individually affixed to the produce shall be such that, when removed, they neither leave visible traces of glue nor lead to skin defects.

Packages must be free of all foreign matter.

Interpretation: Clean materials should be used to protect the produce from foreign matter, such as leaves, sand or soil, which could cause a negative impact on the produce and its presentation. A visible lack of cleanliness in several packages is not allowed.

Examples of packaging are shown in **Photos {x-y}**.

Photo {x}. Presentation: “Packaging”. Single-layer package

Photo {x}. Presentation: “Packaging”. {name of produce} loose in a package

Photo {x}. Presentation: “Packaging”. {name of produce} in sales packages

Photo {x}. Presentation: “Packaging”. Sales packages in a package

Photo {x}. Presentation: “Packaging”. Stickers on the fruit allowed in all classes

VI. Provisions concerning marking

Each package³ must bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside.

Interpretation: In the case of packed produce, all particulars must be grouped on the same side of the package, either on a label attached to or printed on the package with water-insoluble ink.

In the case of re-used packages, all previous labels must be carefully removed and/or previous indications deleted.

Although these marking provisions do not apply to sales packages presented in packages, the indications given on both package and sales packages should not be misleading – if sales packages are marked or labelled.

³ These marking provisions do not apply to sales packages presented in packages.

<For {name of produce} transported in bulk (direct loading into a transport vehicle) these particulars must appear on a document accompanying the goods, and attached in a visible position inside the transport vehicle.>

Interpretation:

Examples of marking are shown in **Photos {x-y}**.

Photo {x}. Marking printed on a label

Photo {x}. Marking printed on a package

A. Identification

Packer and/or dispatcher/shipper:

Name and physical address (e.g. street/city/region/postal code and, if different from the country of origin, the country) or a code mark officially recognized by the national authority⁴.

Interpretation: For inspection purposes, the “packer” is the person or firm responsible for the packaging of the produce (this does not mean the staff that actually carry out the work, who are responsible only to their employer). The code mark is not a trademark but an official control system enabling the person or firm responsible for packaging to be readily identified. The dispatcher (shipper or exporter) may, however, assume sole responsibility, in which case identification of the “packer” as defined above is optional.

B. Nature of produce

- **“{Name of produce}” if the contents are not visible from the outside.**

Interpretation: The name of the produce may be replaced by a photo or a drawing of the produce.

- **<Name of the variety >**
- **<Name of the variety (optional)>**
- **<The name of the variety can be replaced by a synonym. A trade name⁵ can only be given in addition to the variety or the synonym.>**
- **<Name of the variety. In the case of a mixture of {name of produce} of distinctly different varieties <species>, names of the different varieties <species>.>**
- **<“Mixture of {name of produce}”, or equivalent denomination, in the case of a mixture of distinctly different commercial types and/or colours of {name of produce}. If the produce is not visible from the outside, the**

⁴ 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, and the code mark should be preceded by the ISO 3166 (alpha) country/area code of the recognizing country, if not the country of origin.

⁵ A trade name can be a trade mark for which protection has been sought or obtained or any other commercial denomination.

commercial types and/or colours and the quantity of each in the package must be indicated.>

- **<Name of the commercial type>** {if required by the respective standard}

Interpretation: The following examples are given to explain the indications related to variety, synonym and trade name:

- “*{Name of variety}*” is the name of the variety which can be replaced by its synonym “*{Name of synonym}*”
- “*{trade name}*” is a trade names which must be accompanied by the variety name “*{Name of variety}*”

C. Origin of produce

- **Country of origin⁶ and, optionally, district where grown, or national, regional or local place name.**

Interpretation: Marking must include the country of origin, i.e. the country in which the *{name of produce}* were grown (e.g. “Produce of *{name of a producing country}*”).

The indication must be with the full name or a commonly used name. The term „full“ means that abbreviations or acronyms are not allowed. On the other hand, the full name of a country is the official name of the country (e.g. Kingdom of the Netherlands). The commonly used name is e.g. the Netherlands or Holland for the Kingdom of the Netherlands. A commonly used name is USA for the United States of America. In this context “USA” is the only acronym allowed when indicating the country of origin.

Optionally, district of origin in national, regional *<(e.g. {regional name})>* or local terms may also be shown.

- **<In the case of a mixture of distinctly different varieties <species> of {name of produce} of different origins, the indication of each country of origin shall appear next to the name of the variety <species> concerned.>**
- **<In the case of a mixture of distinctly different commercial types and/or colours of {name of produce} of different origins, the indication of each country of origin shall appear next to the name of the commercial type and/or colour concerned.>**

D. Commercial specifications

- **Class.**

Interpretation: Stating the class is compulsory.

- **Size <(if sized)> <expressed as:>** {provisions of the respective standard}

⁶ The full or a commonly used name should be indicated.

E. Official control mark (optional)

Adopted {year}

Annex I

Summary of classification:

Examples of Classification of different defects are shown in **Slides {x-y}**.

Slide {x}: Classification of defects in shape. Variety: *{name of variety}*. Left to right: typical shape, limit Class I, limit Class II, out of grade.

Slide {x}: Classification of defects in colouring. Left to right: typical colouring, limit Class I, limit Class II, out of grade.

Slide {x}: Classification of skin defects (*{type of skin defect}*). Left to right: limit “Extra” Class, limit Class I, limit Class II, out of grade.

Annex II

UNECE Standard FFV-*{numerical code}* concerning the marketing and commercial quality control of *{name of produce}*

{Full standard text without explanatory notes is annexed.}
