

UNECE STANDARD FFV-45
concerning the marketing and commercial
quality control of

MANGOES
moving in international trade between and to
UNECE member countries

I. DEFINITION OF PRODUCE

This standard applies to mangoes of varieties (cultivars) grown from *Mangifera indica L.* to be supplied fresh to the consumer, mangoes for industrial processing being excluded.

II. PROVISIONS CONCERNING QUALITY

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

A. Minimum requirements

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

- intact
- firm
- fresh in appearance
- sound; produce affected by rotting or deterioration such as to make it unfit for consumption is excluded
- clean, practically free from any visible foreign matter
- practically free from pests
- practically free from damage caused by pests
- free from black stains or trails which extend under the skin
- free from marked bruising
- free from damage caused by low temperature
- free of abnormal external moisture
- free of any foreign smell and/or taste.

Mangoes must be sufficiently developed and display satisfactory ripeness.

Mangoes must be carefully picked at the stage of physiological development so as to enable them:

- to ensure a continuation of the ripening process until they reach the appropriate degree of ripeness corresponding to the varietal characteristics,
- to withstand transport and handling, and
- to arrive in satisfactory condition at the place of destination.

In relation to the evolution of maturing, the colour may vary according to variety.

B. Classification

Mangoes are classified in three classes defined below:

(i) Extra Class

Mangoes in this class must be of superior quality. Shape and colouring must be characteristic of the variety.

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

(ii) Class I

Mangoes in this class must be of good quality. They must be characteristic of the variety.

However, the following slight defects 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 of the skin due to rubbing or sunburn, suberized stains due to resin exudation (elongated trails included) and healed bruises not exceeding 3, 4, 5 cm² for size groups A, B, C respectively.

(iii) Class II

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

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

- defects in shape
- defects of skin due to rubbing or sunburn, suberized stains due to resin exudation (elongated trails included) and healed bruises not exceeding 5, 6, 7 cm² for size groups A, B, C respectively.

In classes I and II it is also allowed:

- scattered rusty lenticels
- a yellowing of green varieties due to exposure to direct sunlight, not exceeding 40 per cent of the surface of the fruit, excluding necrotic stains.

III. PROVISIONS CONCERNING SIZING

Size is determined by the weight of the fruit¹. The minimum weight of mangoes must not be less than 200 g. Mangoes are sized according to the following size groups:

¹ Australia at present determines size of mangoes on the basis of diameter and has placed its reservation on this point ad referendum.

Size code	Weight in grammes	Maximum permissible difference between fruit within the package in grammes
A	200 - 350	75
B	351 - 550	100
C	551 - 800	125

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 mangoes 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 mangoes 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 mangoes satisfying neither the requirements of the class nor the minimum requirements, with the exception of fruit affected by rotting, marked bruising or any other deterioration rendering it unfit for consumption.

B. Size tolerances

For all classes: 10 per cent by number or weight of mangoes conforming to half of the permissible difference of the related size group above or below the range specified on the package, with a minimum of 180 g for those packed in the smallest size range and a maximum of 925 g for those in the largest size range.

V. PROVISIONS CONCERNING PRESENTATION

A. Uniformity

The contents of each package must be uniform and contain only mangoes of the same origin, variety, quality and size.

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

B. Packaging

Mangoes 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 and 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.

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 the produce

- "Mangoes" if the contents are not visible from the outside
- Name of the variety.

C. Origin of the produce

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

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.

D. Commercial specifications

- Class
- Size expressed as minimum and maximum weight
- Size code (optional)
- Number of fruit.

E. Official control mark (optional)

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