

Pineapples

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Definition Of Produce

- This Standard applies to pineapples of varieties (cultivars) grown from *Ananas comosus* (L.) Merr. to be supplied fresh to the consumer, pineapples for ornamental use or industrial processing being excluded.
- Pineapples come in a range of sizes and shapes, such as the following types:
 - Round
 - Oval
 - Conical

Definition of Produce



Smooth Cayenne



Queen Victoria



MD2



Sugar Loaf

Common commercially grown varieties.

Minimum requirements

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

- intact, with or without crown: if present, the crown may be reduced or trimmed
- 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
- free from damage caused by pests affecting the flesh

A. Minimum requirements

- fresh in appearance, including the crown
- free of abnormal external moisture
- free of any foreign smell and/or taste.

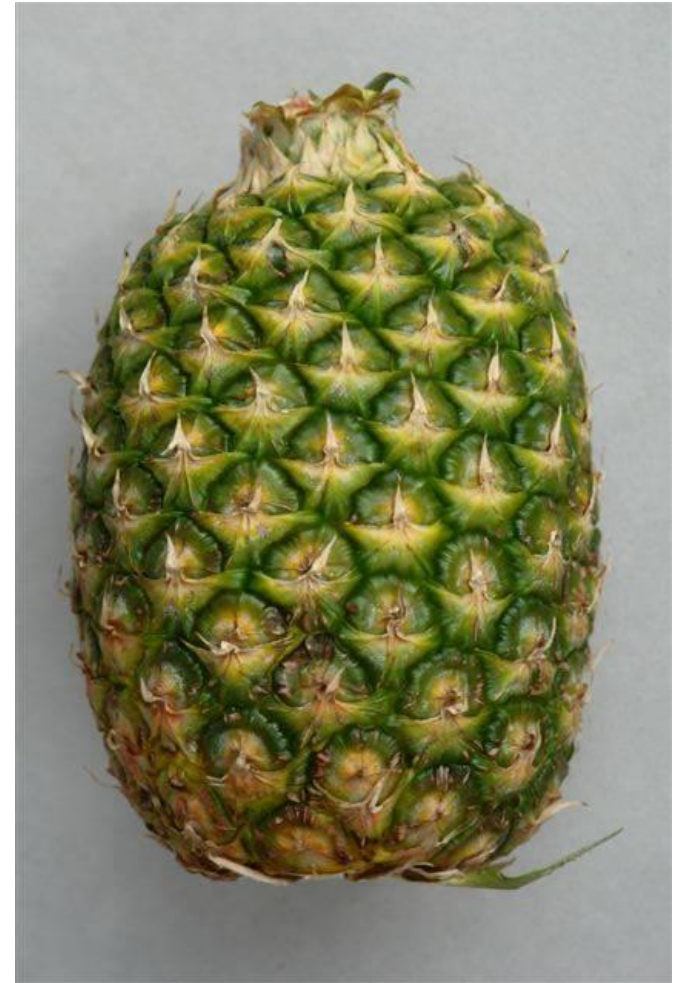
- When a peduncle/stalk/stem is present, it shall be not longer than 2.0cm in length measured from the bottom of the stem, and the cut must be transversal, straight and clean.

A. Minimum requirements

- The development and condition of the pineapples must be such as to enable them:
 - to withstand transportation and handling,
 - to arrive in satisfactory condition at the place of destination.

Minimum Requirements

- Intact, with or without crown; acceptable in all classes.



Split Eyes



Split
bracts/eyes –
not
considered as
defects



Minimum Requirements



Crown reduced by clean cut to remove excess part. Acceptable in all Classes.

Minimum Requirements

Intact

Damage, injury not allowed.



Minimum Requirements



- Intact – injury not allowed.

Minimum Requirements



Not sound. Severe bruising - not allowed

Minimum Requirements



Not sound. Rot - not allowed

Minimum Requirements



Phytophthora
Rot – external
and internal
View
Not allowed.



Minimum Requirements



Not sound –
Internal
discolouration
not allowed



Minimum Requirements



Not sound -
Physiological defects,
multiple crowns - Not
allowed

Minimum Requirements



Gummosis – Not allowed

Minimum Requirements



- Not sound – Chilling injury



Minimum Requirements



Multiple crowns
- Not allowed

Minimum Requirements

- Clean:
- Excessive soiling – Not allowed.



Minimum Requirements

Clean:

Pest
residue at
base - Not
allowed.



Minimum Requirements

- Practically free from pests.
- Pests present - Not allowed.



Minimum Requirements

Free from damage caused by pests affecting the flesh

Damage caused by birds affecting the flesh – Not allowed.



Minimum Requirements



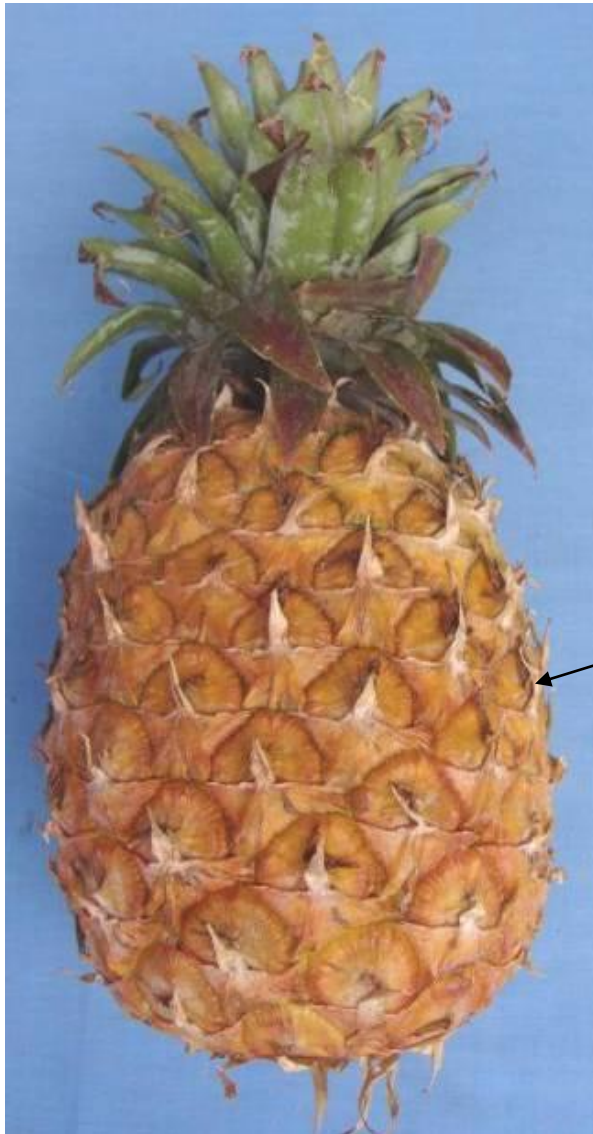
Free from
damage caused
by pests
affecting the
flesh

Pest damage
not allowed

Internal view



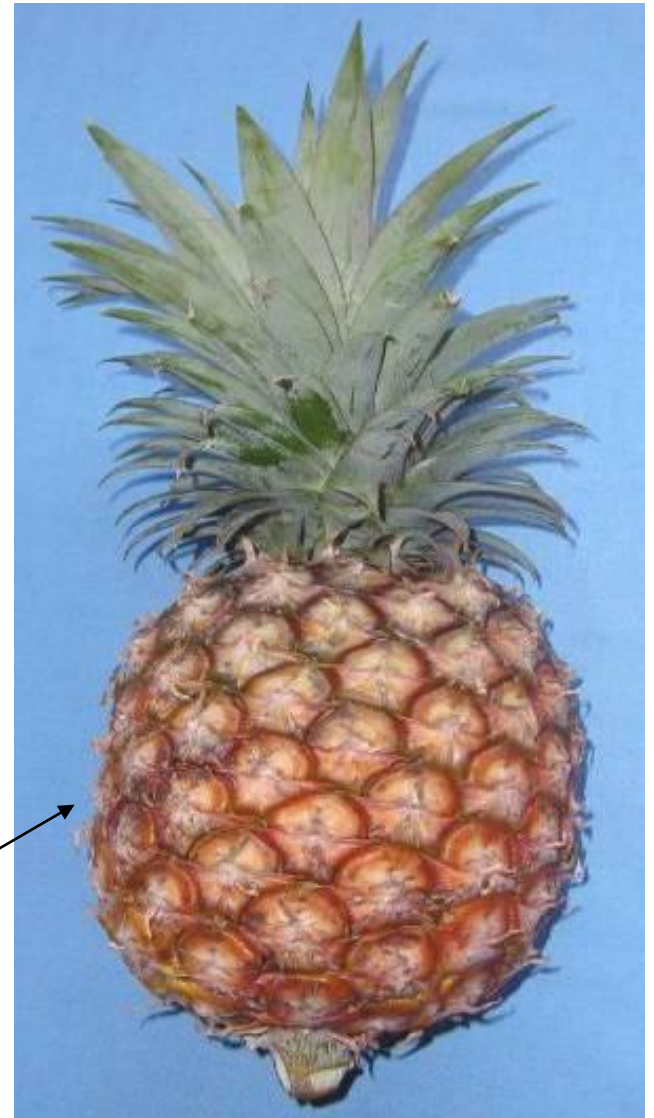
Minimum Requirements



Fresh in
appearance

Shrivelled
fruit - Not
allowed.

Dehydrated
fruit - Not
allowed.



Minimum Requirements

Stalk longer than 2cm. -
Not allowed



Stalk of 2cm. In length. -
Acceptable in all Classes.



Example commercial classification of maturity by external fruit coloration



C0 – Totally green



C1 – Beginning to turn yellow/orange on one quarter of surface



C2 – Yellow/orange on one half of fruit surface



C3 – Yellow/orange on two thirds of fruit surface



C4 – Totally orange/yellow fruit

B. Maturity requirements

- Pineapples must have reached an appropriate degree of maturity and ripeness in accordance with the variety, and area in which they are grown.
- The total soluble solids content of the fruit should be at least 12⁰ Brix, measured on the juice taken from the lower third of the fruit.
- Fruit showing over-ripeness affecting edibility is excluded.
- The skin colour can be green, provided the minimum maturity requirements are met.

Maturity Requirements



Range of colour
and ripeness –
Queen Victoria

Maturity Requirements



Maturity requirements - MD2 Green Fruit – 14.8⁰ Brix

Maturity



Maturity requirements - MD2 Greenish colouration 16.1⁰ Brix

Maturity



Maturity requirements: MD2 full
colour 19.0° Brix

Maturity Requirements



Naturally ripened fruit – No de-greening. Acceptable in all classes.

Maturity Requirements



Overripe –
ethylene
damage-
Not allowed



Classification – “Extra” Class

- Pineapples in this class must be of superior quality. They must be characteristic of the variety.
- 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.
- The crown, if present, must be single and straight with no side shoots, fresh, undamaged and not discoloured.

Crown



Crown more than 150%
of the length of the fruit
- Not allowed in Extra
Class or Class I



Crown less than 50% of
the length of the fruit -
Not allowed in Extra Class
or Class I

The crown if present
must be single and
straight, with no side
shoots and be
undamaged. It must
be between 50 and
150% of the length of
the fruit.

Class I

- The crown if present must be single and with no side shoots, it may be slightly damaged, slightly discoloured and slightly curved with a maximum inclination not exceeding 30° .
- The following slight defects however may be allowed:
 - A slight defect in shape
 - Slight defects in colouring, including sun-scorch
 - Slight skin defects not exceeding 5 per cent or 1/20 of the total surface (i.e. scratches, scars, scrapes, bruises, blemishes and rubbing).
 - Defects must not, in any case, affect the flesh.

Class I



Crown showing slight damage and discolouration due to handling and packaging – limit of Class I

Classification – Class I



Crown:

May be slightly curved with a maximum inclination not exceeding 30° from the longitudinal axis of the fruit –



Class I

Slight defect
in shape

Missing Eye



Skin Defects

Queen Victoria – Winter
Speckles.



Limit of Class I.



Limit of Class II.

Class I



Slight defects in colouring,
including sun-scorch – limit
of Class I

Class II

The following defects may be allowed:

- Defects in shape
- Defects in colouring, including sun-scorch
- Slight skin defects not exceeding 10 per cent or 1/10 of the total surface area (i.e. scratches, scars, scrapes, bruises, blemishes and rubbing).
- The flesh must be free from major defects



Class II

Defect in
shape

Class II



Crown length
exceeding 150% of
fruit – Acceptable in
Class II

Crown
Inclination of
crown
exceeding 30°
from the
longitudinal
axis of the fruit
– acceptable
in Class II

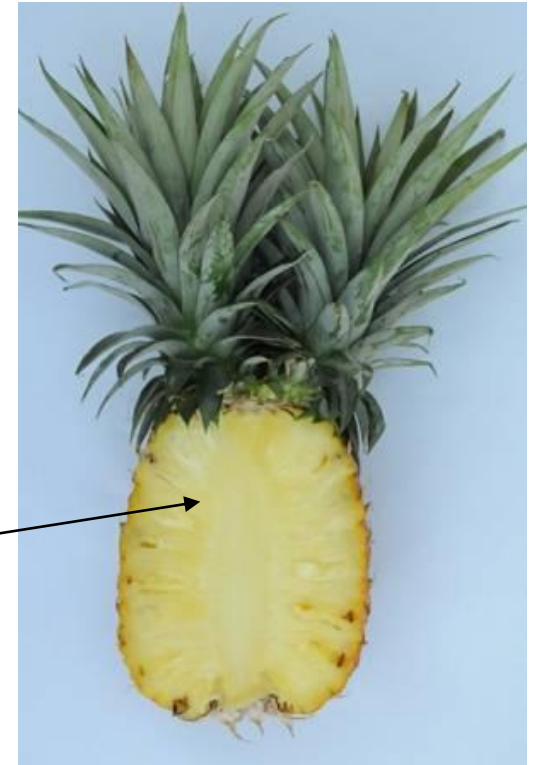


Class II



Crown:
Double crown
– Acceptable
in Class II

Internal view



Defects in colouring



Colour defect - Internal appearance.



External view
Colour defect
– Class II

Classification – Class II

Defect of
colouring,
including sun
scorch - Sun
scorch – Limit
allowed Class II



Class II

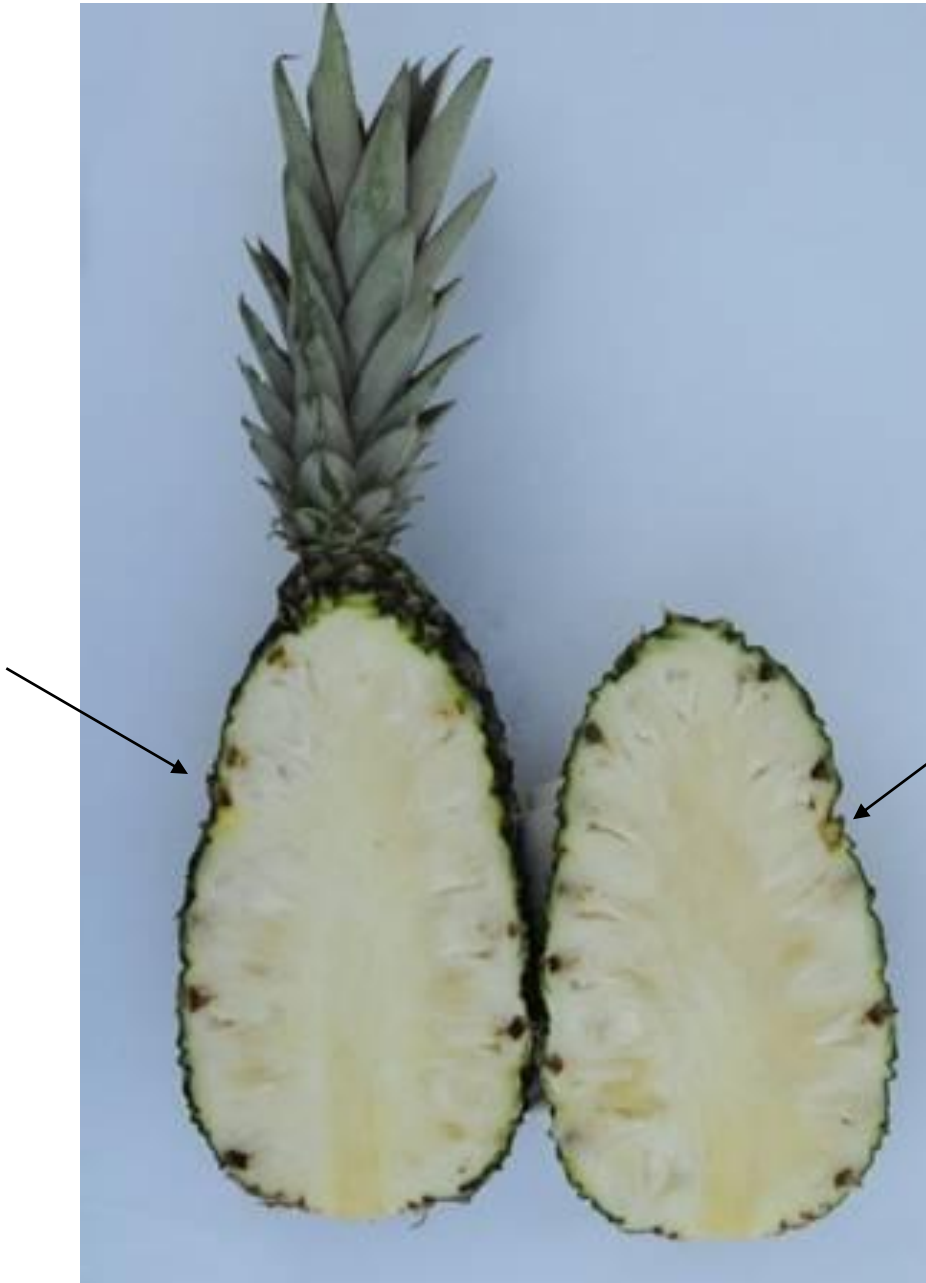
Slight skin defects not exceeding 10 per cent or 1/10 of the total surface area – scar.



Class II

Slight skin defects not exceeding 10 per cent or 1/10 of the total surface area – scar.

The flesh must be free of major defects.



Class II

Slight skin defects not exceeding 10 per cent or 1/10 of the total surface area - bruising.



Provisions concerning sizing

- Size is determined by weight.
- To ensure uniformity in size, the range between fruit in the same package shall not exceed:
 - 100 grams for fruit less than or equal to 1000 grams,
 - 300 grams for fruit exceeding 1000 grams.

Quality tolerances

- “Extra” Class
- A total tolerance of 5 per cent, by number or weight, of pineapples 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.

Quality tolerances

- Class I
- 10 per cent, by number or weight, of pineapples 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 or the minimum requirements, or of produce affected by decay.

Class II

- 10 per cent, by number or weight, of pineapples 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.

Size tolerances

- For all classes: a total tolerance of 15 percent by number or weight, of pineapples not satisfying the requirements as regards sizing but meeting the size immediately above and/or below that indicated on the package is allowed.

Presentation

Uniformity

- The contents of each package must be uniform and contain only pineapples, with or without crowns, of the same origin, variety or commercial type, quality and size.
- In addition, for “Extra” Class and Class I, uniformity in colouring, maturity, and length of crown is required.
- The visible part of the contents of the package must be representative of the entire contents.

Uniformity in colouring and maturity



MD2 Fruit not uniform in colour – not allowed
in Extra Class or Class I

Presentation



Extra Class – Smooth Cayenne

Presentation



Class I – Queen Victoria

Presentation



Presentation Class II. Queen Victoria – Variation in colouring - allowed provided minimum Brix level of the lot is acceptable.

Presentation



Crownless fruit

Marking

- **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 authority

Marking

Nature of produce

- “Pineapples” If the contents are not visible from the outside:
- Name of the variety for “Extra” Class and Class I.
- “Without crown” or equivalent denomination, where appropriate.

Marking



Marking – fruit with crowns removed

Marking

Origin of produce

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

Commercial specifications

- Class
- Number of fruits.
- Size expressed as minimum and maximum weight
- Size code (optional),
- Colour code (optional),
- The indication “Should not be stored below 8⁰C” (optional).
- **Official control mark (optional)**

Marking



Marking - Box end label. This does not show min/max weight. *Full variety name should be shown. Add other box end labels.*

