



*Tonga*

# **FRUIT EXPORT (BUTTERCUP SQUASH) REGULATIONS**

**Chapter 19.01.01**

**2020 Revised Edition**





## FRUIT EXPORT (BUTTERCUP SQUASH) REGULATIONS<sup>1</sup>

*Made under section 3 of the Fruit Export Act and continued in force under  
section 15 of the Agricultural Commodities Act*

Commencement [3rd August 1993]

1. (1) These Regulations may be cited as the Fruit Export (Buttercup Squash) Regulations.
- (2) Squash is hereby declared as a fruit for the purposes of Section 2 of the Fruit Export Act.
  
2. In these Regulations, unless the context otherwise requires —
  - “adequate time” means a period which is considered to be —
    - (i) in the case of door off dry container shipment : a minimum of 48 hours with strong recommendation for 72 hours from harvest to shipment;
    - (ii) in the case of reefer vessel shipment : a minimum of 96 hours with a strong recommendation for 192 hours from harvest to shipment;
  
  - “clean” means free from dirt, soil, grease, excretor, abnormal external moisture and foreign smell;
  
  - “cured” means that at the time of loading into the export sea container or vessel the squash has been held for an adequate time period to allow —

	<ul style="list-style-type: none"><li>(i) the cut surface of the stalk to be dry;</li><li>(ii) all the skin on the stalk to be dry;<sup>2</sup></li><li>(iii) during the curing and holding process all squash must be stored to allow maximum ventilation and have a minimum of 10 cm between rows of stacked bins;</li></ul>
<b>“field bins”</b>	means bins used during harvest and transport of squash from fields to pack houses;
<b>“mature”</b>	means the squash has reached a minimum maturity at harvest as indicated by — <ul style="list-style-type: none"><li>(i) the development of prominent brown flecks on the stalk;</li><li>(ii) the development of a dull dark green colour to the skin, with the loss of the glossy sheen on the skin;</li><li>(iii) a full orange colour in the flesh; and</li><li>(iv) that all seed display kernel formations are firm;</li></ul>
<b>“skin on stalk”</b>	means the skin around the stem of the squash;
<b>“sound”</b>	means free from any progressive decay, rots (including small shallow rots even if dry and calloused), breakdown freezing or chilling injury, damage and similar defects which may cause rapid loss of condition or rapid decay;
<b>“squash”</b>	means the fruit of buttercup squash grown from varieties of <i>Cucurbita maxima</i> ;
<b>“storage defects”</b>	means decay, fungal rots, wilt or other injury as a result of storage;
<b>“sunburn”</b>	means injury from exposure to the sun which results in sunken white areas of damaged flesh;
<b>“trimmed”</b>	means the stem is cut cleanly and is not longer than 10mm or does not protrude above the shoulder of the squash;
<b>“whole”</b>	means the whole squash intact.

3. The squash must be —

- (a) free from pest and diseases and meet any quarantine and other legal requirements of the importing country;
- (b) whole;
- (c) sound;
- (d) clean;
- (e) mature;
- (f) trimmed;
- (g) cured;
- (h) of good quality with similar varietal characteristics including shape and colour and without distortion due to abnormal development;
- (i) capable of withstanding handling, storage and transport, and arriving at the destination in sound condition;
- (j) free from sunburn and scald;
- (k) shipped within 14 days of harvest, unless this period is extended by the Director of Agriculture and Forestry upon receipt of a written submission provided that the squash complies with all other conditions referred to in this regulation during the extended period.

## 4.

- (1) Subject to any other provisions of these Regulations the minimum size for export in bulk packs is 1.2kg and the maximum size is 2.7kg, and shall be marked as Grade 1.
- (2)
  - (a) Squash in the range below 1.2kg may only be exported if the exporter gets approval in writing from the Minister of Agriculture and Forestry to export undersized squash.
  - (b) Undersized squash must be packed and marked accordingly.

## 5.

- (1) Any one package shall not contain more than 5 percent of squash by weight outside the branded size range.
- (2) The contents of each package shall be squash of the same origin, quality, degree of maturity, size and variety.
- (3)
  - (a) The squash must be packed in clean unused packages which are free of fungi and all other foreign material and in a way that ensures they are suitably protected.
  - (b) Field bins shall not be used for the export of squash.

- (4) All export squash are to be packed in wooden bins that meet the specifications and dimensions as set out in these Regulations.
- (5) Packed bins for export shall be clearly labelled to show —
  - (a) Exporter's identification;
  - (b) Grower's number;
  - (c) Name of crop and variety;
  - (d) Country of origin;
  - (e) Nett weight of squash; and
  - (f) “Pass Quarantine” label.

## 6.

- (1) No individual squash shall have:
  - (a) soil bleaching (ground spot) on more than 15 percent of its surface;
  - (b) a brown or bronze colour dominant in any area affected as a result of exposure to the sun. Where the colour of the affected area is still predominantly green the squash will be acceptable;
  - (c) vine marks that substantially distort the outline or shape of the squash. A vine mark substantially distorts the outline or shape if it is,
    - (i) deeper than 20mm from the normal surface of the squash at the deepest point,
    - (ii) wider than 20mm at its widest point on any squash, or
    - (iii) longer than 100mm;
  - (d) non-raised areas of surface callousing exceeding 4 square centimetres in aggregate on any squash from 1.2kg to 2.0kg in weight and 6 square centimeters in aggregate on any squash over 2kg in weight.
  - (e) callousing with raised areas such as “pimples” and oedema (warts) exceeding 2 square centimetres in aggregate or 5mm in height above the normal surface at any point;
  - (f) marks or bruising resulting from pressure if they:
    - (i) have broken the skin, or
    - (ii) exceed 2 square centimetres in aggregate area;
  - (g) cuts which break the skin whether caused by cutting or impact on a sharp edge;
  - (h) a height greater than its width and each squash shall be typical of its variety;
  - (i) external moisture prior to storage for export shipment.
- (2) There shall be an allowance for shrinkage (weight loss) of 7 percent of nett weight of each individual squash at the time of dispatch.

7.

- (1) The packaging to be used for export of squash must be —
  - (a) Reefer vessel bins; or
  - (b) Door off dry container bins.
- (2) The reefer vessel bins shall be constructed with the following timber measurements —
  - (a) timber lengths for front and back 1.18m
  - (b) timber lengths for pallet base 1.22m
  - (c) timber lengths for bin caps 1.22m
  - (d) timber lengths for sides 1.02m
  - (e) timber lengths for comers .920m
  - (f) timber lengths for base bearers 1.02m
- (3) All door off dry container bins shall be of a size that allows twenty bins of the same dimensions per twenty foot dry sea container.
- (4)
  - (a) All bins must be manufactured with timber from Pine, Douglas Fir, Tanekaha or local timber suitable for the purpose, clean, unused, bark free and either air seasoned (maximum of 25% moisture content) or antisap stain treated.
  - (b) Any timber treated with inorganic arsenical compounds is not allowed for construction of any type of squash bins.
- (5) All bins must be constructed to the following specifications, in a tight, square and uniform way:
  - (a) Construction of side boards:
    - (i) Minimum thickness 18mm or if constructed with vertical stays, 15mm.  
If vertical stays are used, there must be four with a minimum size of 15mm by 50mm and all must be bevelled.
    - (ii) Width 90 to 95mm
    - (iii) Knots No greater than 50% of board width.
    - (iv) Bevelling Compulsory if timber is multi-ripped.
    - (v) Number of boards Six on each of the four sides.
  - (b) Base of pallet board (door off dry container bins):
    - (i) Thickness 15 to 18 mm;
    - (ii) Width 90 to 95 mm;
    - (iii) Knots No greater than 50% of board width;
    - (iv) Bevelling Compulsory if timber is multi-ripped;

- (v) Number of boards Eight.
- (c) Base of pallet board (reefer vessel bins):
- (i) Thickness 15 to 18 mm;
- (ii) Width 90 to 95 mm;
- (iii) Knots No greater than 50% of board width;
- (iv) Bevelling Compulsory if timber is multi-ripped;
- (v) Number of boards Seven to eight.
- (d) Base of pallet bearers:
- (i) Size 100 mm x 50 mm;
- (ii) Number Three, spaced evenly over pallet.
- (e) Cap rails:
- (i) Thickness 15 to 18 mm;
- (ii) Width 90 to 95 mm;
- (iii) Knots No greater than 50% of board width;
- (iv) Bevelling Compulsory if timber is multi-ripped.
- (f) Comer stays:  
Minimum dimensions 100 mm x 50 mm diagonally cut
- (g) Fastenings - Nails or staples shall be as follows:
- (i) Type of nails Rink shank, angular groove, or equivalent;
- (ii) Length of nails 55 mm for all 18 mm boards, 51 mm for all 15 mm boards;
- (iii) Number of nails Two nails per joint and four where bottom side boards join base. Total number of nails: for bins constructed of 18 mm boards = 182 for bins constructed of 15 mm boards = 230;
- (iv) Staple lengths Q23-55 mm for all 18 mm boards Q21-50 mm for all 15 mm boards.
- (v) Number of staples Three staples per joint and six where bottom side boards join base. Total number of staples: for bins constructed of 18 mm boards = 273 for bins constructed of 15 mm boards = 345.



## ENDNOTES

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<sup>1</sup> **GS 2 of 1993**

<sup>2</sup> Substituted by GS 5 of 1994