

# TONGA GOVERNMENT GAZETTE SUPPLEMENT EXTRAORDINARY

No. 10

SEPTEMBER 29

1992

## FRUIT EXPORT ACT STANDARD GRADE FOR THE EXPORT OF BUTTERCUP SQUASH REGULATIONS 1992

In exercise of the powers conferred by section 3 of the Fruit Export Act (Cap 116) the Prime Minister with the consent of Cabinet hereby makes the following Regulations:-

1. Title These Regulations may be cited as the Standard Grade for the Export of Buttercup Squash Regulations 1992 and it is hereby declared that Buttercup Squash is Fruit for the purposes of section 2 of the Fruit Export Act.

2. Application of Regulations These Regulations determine the standard grade for the export of buttercup squash from Tonga.

2.1 Title and grade The grade mark assigned to this standard grade shall be grade I (hereinafter referred to as "the grade")

2.2 Definition of produce This grade applies to buttercup squash grown from varieties of *Cucurbita maxima* to be supplied fresh to the customer.

2.3 Provisions concerning quality The purpose of this standard is to define the quality requirements for buttercup squash at the dispatching stage, after preparation and packing.

### Refer Schedules:

One- Definition of terms

Two-Provisions concerning sizing, tolerance and presentation.

Three-Allowance for defects.

2.4 Provisions concerning packaging (refer Schedule Four).

2.5 General information (refer Schedule Five).

### Schedule One

3. Definition of terms:

3.1 "Colour" means typical of the variety.

3.2 "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:

(a) The cut surface of the stalk to be dry.

(b) The remainder of the stalk to have commenced shrivelling to a firm texture with a brown withered surface.

(c) During the curing/holding process all produce must be stored to allow maximum ventilation, and have a minimum of 10cm between rows of stacked bin.

3.3 An adequate time period is considered to be:

(a) in the case of dry/door off container shipment:

a minimum of 48 hours with strong recommendation for 72 hours from harvest to shipment.

(b) in the case of reefer vessel shipment:

a minimum of 96 hours with a strong recommendation for 192 hours from harvest to shipment.

3.4 "Mature" means that the squash has reached a minimum maturity at harvest as indicated by:

(a) the development of prominent brown flecks on the stalk; and

(b) the development of a dull dark green colour to the skin, with the loss of a glossy sheen on the skin;

(c) A full orange colour in the flesh; and

(d) that all seed display kernel formation that is firm.

3.5 "Sound" 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.

3.6 "Storage Defects" means decay, fungal rots, wilt or other injury as a result of storage.

3.7 "Sunburn" means injury from exposure to the sun which results in sunken white areas of damaged flesh.

3.8 "Trimmed" means the stalk is cut cleanly and is not longer than 10mm or does not protrude above the shoulder of the squash.

3.9 "Skin on Stem" means the skin around stem

4. The buttercup Squash must be:

4.1 Free from pest and diseases and meet any quarantine and other legal requirements of the importing country;

4.2 Intact, whole;

4.3 Sound, free from storage defects or any other defects which may impair their general appearance or keeping quality.

4.4 Clean

4.5 -Free from abnormal external moisture

4.6 -Free from foreign smell or taste

4.7 -Mature

- 4.8 -Trimmed (stem length should be not more than 10mm)
- 4.9 -Cured (all skin around the stem must be removed and the stem must be dried)
- 4.10 -Of good quality with similar varietal characteristics including shape and colour and without distortion due to abnormal development (for shape see under allowance)
- 4.11 -capable of withstanding handling, storage and transport, and arriving at the destination in sound condition.
- 4.12 -free from sunburn and scald.
- 4.13 Buttercup squash should be shipped within 14 days of harvest.

#### Schedule Two

##### 5. Provisions concerning sizing tolerance and presentation:

##### 5.1 Provisions concerning sizing

Sizing is determined by weight at the time of packing. The minimum size for export in bulk packs is 1.2 kg to 2.7 kg, which should be marked as Grade I.

Note: Squash in the range below 1.2 kg are only permitted if the importer gets approval in writing from the Minister of Agriculture and Forestry to export undersize squash. Undersize squash must be packed and marked accordingly.

##### 5.2 Tolerance

Any one package shall not contain more than 5 percent of buttercup squash by weight outside the branded size range.

##### 5.3 Presentation

- (a) Uniformity The contents of each package should be uniform; each package should contain only buttercup squash of the same origin, quality, degree of ripeness, size and must be of the same variety (*Cucurbita maxima*)

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

- (b) Packaging The squash must be packed in clean new packages substantially free of fungi and all other foreign material and in such a way as to ensure that they are suitably protected. Packages must be free of all foreign matter. (Note field bins are not allowed for export).
- (c) Export bin specifications, All export squash are to be exported in wooden bins that meet the specifications and dimensions, as set out in the Fourth Schedule to this notice.

#### Schedule Three

##### 6. Allowance for defects:

6.1 Soil bleaching (groundspot) – No more than 15 percent of the surface area on individual squash.

6.2 Discolouration (bronzing) – The result of exposure to the sun. Where the colour of the affected area is still predominantly green the squash is acceptable. Where a brown or bronzed colour is dominant in the affected area the squash is unacceptable.

6.3 Vine marks – The vine must not have substantially distorted the outline or shape of the squash. A vine mark must be:

- (a) No deeper than 20mm from the normal surface of the squash at the deepest point.
- (b) No wider than 20mm at the widest point.
- (c) No longer than 100mm.

6.4 Callousing – surface callousing (ie. non-raised areas) is not to exceed 4 square cm in aggregate on all fruit from 1.2 kg up to 2 kg in weight, and 6 square cm in aggregate on all export fruit above 2 kg. Callousing with raised areas such as "pimples" or odema ("warts") is not to exceed 2 square cm in aggregate area and 5mm in height at any point.

6.5 Bruising – Marks resulting from pressure must not:

- (a) Have broken skin.
- (b) Exceed 2 square cm in aggregate area.

6.6 Cuts are not acceptable on squash – cuts are broken skin which may be caused by cutting (knives, Secateurs) or impact on a sharp edge (stalks, timber, metal).

6.7 Dirty fruit, soil, grease, bird droppings or other foreign matter on the fruit is not acceptable.

6.8 Shape – The squash must be wider than it is high, and typical of the variety.

6.9 Shrinkage (weight loss) – Shrinkage allowance of 7 percent of nett weight at the time of despatch is to be provided for.

6.10 External moisture – All fruit are to be substantially free of external moisture (water from washing procedures) prior to stowage for export shipment.

#### Schedule Four

7. Provisions concerning packaging:

7.1 Reefer vessel bins

- (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 corners	.920m
(f) Timber lengths for base bearers	1.02m

To be manufactured in compliance with clause 7.4

**7.2** Door off dry container bin All bins to be of a size that allows twenty bins of the same dimensions per twenty foot dry sea container.

To be manufactured in compliance with clause 7.4

**7.3** Reefer container bins.

To be manufactured in compliance with clause 7.4

**7.4** Bin and timber specifications for all bins.

**7.4.1** Timber

Pine, Douglas Fir, Tanekaha and local timber suitable for the purpose new (clean, unused), bark-free, air seasoned (maximum of 25% moisture content) or anti-sap stain treated.

Note, timber treated with chemicals such as CCA is not allowed

**7.4.2** Construction side boards:

- (a) Minimum thickness 18mm or 15 mm with vertical stays.  
(Vertical stays, four at minimum of 15mm by 50mm. All must be bevelled).
- (b) Minimum width 90 to 95 mm
- (c) Knots No greater than 50% of board width.
- (d) Bevelling Compulsory if timber multi-ripped.
- (e) No. of Boards Six on each of the four sides

**7.4.3.** Base of pallet board (door off dry container bins):

- (a) Minimum thickness 15 to 18 mm
- (b) Minimum width 90 to 95 mm
- (c) Knots No greater than 50% of board width
- (d) Bevelling Compulsory if timber multi-ripped
- (e) No. of boards Eight

**7.4.4.** Base of pallet board (reefer vessel):

- (a) Minimum thickness 15 to 18 mm
- (b) Minimum width 90 to 95 mm
- (c) Knots No greater than 50% of board width

- (d) Beveling                      Compulsory if timber multi-ripped
- (e) No. of boards                Seven to Eight
- Base of pallet bearers:
- (a) Size                            100 mm x 50 mm
- (b) Number                        Three spaced evenly over pallet.
- 7.4.6. Cap rails:
- (a) Minimum thickness        15 to 18 mm
- (b) Minimum width            90 to 95 mm
- (c) Knots                         No greater than 50% of board width
- (d) Beveling                      Compulsory if timber multi-ripped
- 7.4.7. Corner stays:
- (a) Minimum dimensions        100 mm x 50 mm)  
75 mm x 75 mm) diagonally cut.
- 7.4.8. Fastenings—Nails or staples to be used as follows:
- (a) Nails                         Rink shank, angular groove or equivalent.
- (b) Length                        55 mm for all 18 mm bins  
51 mm for all 15 mm bins
- (c) No. of nails                 Two nails per joint and four where bottom side boards join base. Total of nails: for 18 mm bins = 182/15 mm bins = 230
- (d) Staples length              Q23-55 mm for all 18 mm bins  
Q21-50 mm for all 15 mm bins
- (e) No. of staples                Three staples per joint and six where bottom side boards join base. Total of staples: for 18 mm bins = 273/15 mm bins 345

#### 7.4.9 Construction

All bins must be constructed in accordance with these specifications using sound practices, in a tight, square and uniform way.

#### Schedule Five

##### B. General Information:

The following explanatory notes do not form part of these regulations, but are presented for the information of growers, packers and exporters.

8.1 It is the responsibility of the exporter to ensure the produce exported meets the legal requirements of the Importing country and the specification of the importer and that the produce be substantially free of pest and disease.

**8.2 Handling and packing:**

**8.3** Packing of shipping bins in the field is not acceptable.

**8.4** Buttercup squash should not be cut or harvested in rain or damp conditions. Full crates should be protected from inclement weather.

**8.5** Avoid the possibility of sunburn following cutting and during harvesting. Packed crates should be protected from the sun at all times.

**8.6** After harvesting it is desirable to hold squash in a shaded airy place for a minimum of 48 hours prior to export packing.

**8.7** Squash should be harvested at optimum maturity. Over mature squash has a greater loss of colour and higher levels of post-harvest decay during and after shipping.

**8.8** The curing process is to be completed prior to exporting.

**9.** Identification: Registered mark of grower and packing establishment and exporters identification.

**9.1** Nature of produce: Kind of variety.

**9.2** Country of origin: Tonga

**9.3** Commercial specification: Grade contents

**9.4** Official control mark: Inspection stamp or similar identification (passed quarantine sticker) and a code or inspection date.

Note: Size ranges may also be included on bin labels.

**10. Exemptions:**

Exemptions to the export marketing strategy in relation to the packaging specification or the 14 days harvesting to shipment period may be considered on receipt of a submission in writing to the Maf QQMD.

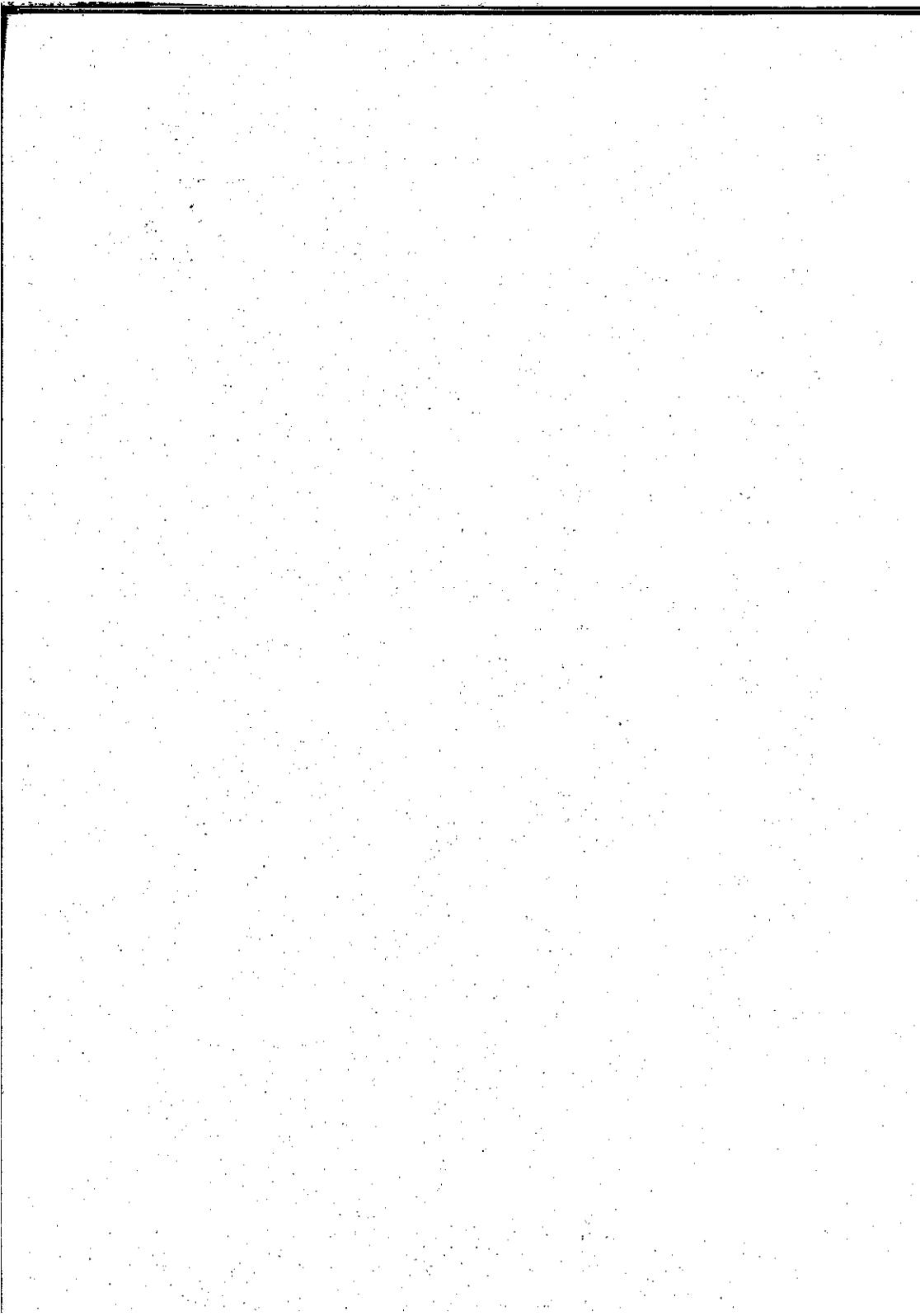
**11. Offences**

Non compliances with these regulations may lead to the following:

MAF - Quarantine and Quality Management Division may not issue a Phytosanitary Certificate.

Dated this 27th day of August 1992.

PRIME MINISTER.



# FAKALAHKI KI HE KASETE 'A E PULE'ANGA KASETE MAKEHE

Fika 10

SEPTEMA 29

1992

## LAO KI HE FAKAHU KI TU'A 'O E NGAahi FUA'TAKAU NGAahi TU'UTU'UNI KI HE TU'UNGA 'E HU 'AKI 'E HE HINA PATAKAPU KI TU'APULE'ANGA

'I hono ngaue'aki 'a e ngaahi mafai kuo foaki 'e he kupu 3 'o e Lao ki he Fakahu ki tu'a 'o e Ngaahi Fua'i'akau (Vahe 116) 'oku fai ai 'e he Palemia 'i he loto ki ai 'a e Kapineta 'a e ngaahi Tu'utu'uni ni:-

1. Hingoa. 'E ui 'a e ngaahi Tu'utu'uni ni ko e Ngaahi Tu'utu'uni ki he Tu'unga 'e Hu 'aki 'e he Hina Patakapu ki Tu'apule'anga 1992 pea 'oku fakaha ai heni ko e Hina Patakapu ko e fua'i'akau ia fakatatau ki he ngaahi taumu'a 'o e Lao ni.

2. Ngaahi Me'a 'Oku kau ki ai 'a e Ngaahi Tu'utu'uni ni 'Oku fakapapau'i 'e he Ngaahi Tu'utu'uni ni 'a e tu'unga 'o e hina patakapu 'e hu atu mei Tonga ni ki tu'apule'anga.

2.1 Hingoa mo e Tu'unga. Ko e tu'unga kuo tu'utu'uni ke 'i ai kuopau ko e kalasi 1 ('a ia 'oku ui heni ko e "tu'unga")

2.2 Fakamatala 'o e fo'i'akau 'Oku kau 'a e tu'unga ko 'eni ki he hina patakapu 'oku ma'u mei he kalasi kehekehe 'o e Cucurbita maxima 'a ia 'oku 'atu fakahangatonu mei natula ki he kasitoma.

2.3 Ngaahi Tu'utu'uni fekau'aki mo e 'ulungaanga 'o e hina. Ko e taumu'a 'o e fakatu'utu'unga ko 'eni ke ne fakapapau'i 'a e ngaahi 'ulungaanga 'oku tonu ke ma'u 'e he hina patakapu 'i he taimi 'oku fakauta atu ai, hili hono teuteu'i mo hono fa'oaki.

### Vakai ki he Ngaahi Tepile:

'Uluaki - 'UHINGA 'o e ngaahi lea

Ua - Ngaahi tu'utu'uni fekau'aki mo hono fuo, fakangatangata 'o e mamafa mo e fotunga 'oku 'atu 'aki.

Tolu - Faka'ataa 'o e hina 'oku maumau.

2.4 Ngaahi Tu'utu'uni fekau'aki mo hono fa'oaki (vakai ki he Tepile Fa).

2.5 Fakamatala Fakalukufua (vakai ki he Tepile Nima).

### Tepile 'Uluaki

3. 'UHINGA 'o e ngaahi lea:

3.1 "lanu" 'oku 'uhinga ki he lanu fakanatula 'o e hina.

3.2 "fakama'a" 'oku 'uhinga ia ki he tuku 'o e hina 'i ha vaha'a taimi fe'unga kimu'a pea fakauta ki he vaka tahi kae'oua ke:

- (a) momoa 'a e tu'usi'anga 'i he kau.
- (b) kamata mingi' 'a e toenga 'o e kau 'o fefeka pea melomelo hono lanu.
- (c) ma'u 'ea fe'unga 'a e fo'i hina kotoa pe, pea 'ikai toe vaofiangē hono tuku 'o e puha mei he puha 'aki 'a e 10 cm, 'i he taimi 'oku tuku/fakama'a ai.

**3.3 Ko e vaha'a taimi fe'unga ko e :**

- (a) kapau ko e uta koniteina momoa/ta'etapuni:

houa 'e 48 pe lahi hake pea ke matu'aki tokanga'i ke toki fakaheka hili ha houa 'e 72 mei hono toli.

- (b) kapau ko e puha uta fakamokomoko 'oku tapuni:

houa 'e 96 pe lahi ange pea ke matu'aki tokanga'i ke toki fakaheka hili ha houa 'e 192 mei hono toli.

**3.4 "Motu'a" 'oku 'uhinga ia ki he a'u 'a e fo'i hina ki he motu'a fe'unga 'e ala toli ai 'a ia 'e faka'ilonga 'aki 'a e :**

- (a) ngaahi fo'i 'ila lanu melomelo 'i he kau; mo e
- (b) lanu mata fakapopo'uli 'a e kili pea 'ikai ke kei ngingila 'a e kili;
- (c) lanu moli malohi 'a e kakano; pea
- (d) fefeka 'a e tenga'i hina.

**3.5 "Haohaoa" 'oku 'uhinga ia ki he 'ikai kamata ke pala, 'aunga (kau ai 'a e fanga ki'i pala iiki 'oku 'ikai ke loloto neongo kuo momoa mo patu), maumau 'i hono tuku'aisi, lavea pe maumau tatau mo ia 'a ia te ne ala fakatupu ha'ane kovi vave pe 'aunga vave.**

**3.6 "Maumau 'i hono tuku fuoloa" 'oku 'uhinga ia ki he pala, tu'unga fulufulua, mae pe maumau kehe tupu mei hono tuku fuoloa.**

**3.7 "Fohia" 'oku 'uhinga ki he maumau tupu mei hono tuku 'i he la'aa 'e iku ai 'o lanu hinehina 'a e kakano 'o e fo'i hina kuo maumau.**

**3.8 "Mutuki" 'oku 'uhinga ia ki he tu'usi 'o e kau 'o 'ikai to e loloa ange 'a e tuke 'i he 10mm pe e'a hake ki 'olunga 'i he fo'i hina.**

**3.9 "Kili 'i he kau" 'oku 'uhinga ia ki he kili 'oku takatakai ki he kau.**

Kuo pau ki he Hina patakapu ke :

**4.1 Hao mei he fili 'o e 'akau mo e mahaki pea kuo pau ke fakatatau ki he ngaahi tu'utu'uni fakakolonitini mo fakalao 'a e pule'anga 'oku nau hu mai;**

**4.2 'Oua 'e maumau, kakato;**

**4.3 Haohaoa, 'ikai ke maumau tupu mei hono tuku fuoloa pe toe maumau kehe 'a ia te ne ala uesia hono fotunga mo 'ene tolonga.**

- 4.4 Ma'a
- 4.5 'Ikai ke fu'u hauhau hono kili
- 4.6 'Ikai ke nanamu pe ifo kehe mei hono nahula totonu
- 4.7 Motu'a
- 4.8 Mutuki ('oua 'e loloa ange 'a e tuke 'i he 10mm)
- 4.9 Fakama'a (to'o 'a e kili 'oku takatakai ki he kau pea kuo pau ke momoa 'a e kau)
- 4.10 Lelei pea ke potupotu tatau honau ngaahi fotunga 'o kau ai 'a e fuo mo e lanu pea ke 'oua 'e fuo kehe tupu mei he 'ikai ke lelei 'enau tupu (vakai ki he tu'utu'uni fekau'aki mo e fuo 'i lalo 'i he Faka'ataa)
- 4.11 Ne matu'uaki hono fetuku holo, fa'oaki mo hono uta, pea ke tu'uta ki he fonua 'oku uta ki ai 'oku kei 'i he tu'unga lelei.
- 4.12 'Ikai vela 'i he la'aa pe fohia
- 4.13 'Oku totonu ke uta leva 'a e hina patakapu 'i loto 'i he 'aho 'e 14 hili hono toli.

#### Tepile Ua

5. Ngaahi tu'utu'uni fekau'aki mo e fuo, fakangatangata 'o e mamafa mo e fotunga 'oku 'atu 'aki:

##### 5.1 Ngaahi tu'utu'uni fekau'aki mo e fuo

'Oku fakapapau'i 'a e fuo 'aki 'a e mamafa 'i he taimi 'oku fa'oaki ai. Ko e fuo si'isi'i taha ki he hina 'oku fa'oaki ke uta ki tu'apule'anga ko e 1.2kg ki he 2.7kg, 'a ia kuopau ke faka'ilonga'i Kalasi I ia.

Fakatokanga'i ange: 'E toki faka'ataa pe 'a e hina 'oku fuo iiki ange 'i he 1.2kg kapau 'e ma'u 'e he taha 'oku ne hu mai ha tohi ngofuia mei he Talekita 'o e Ngoue mo e Vaota ke hu ki tu'apule'anga ha hina fuo iiki. Kuo pau ke fa'oaki 'a e hina fuo iiki mo faka'ilonga'i ke mahino ko e hina fuo iiki.

##### 5.2 Fakangatangata 'o e Mamafa

Kuo pau 'e 'ikai toe mamafa ange 'a e puha hina patakapu 'e taha 'aki 'a e peseti 'e 5 'o e mamafa kuo tu'utu'uni ki he fa'ahinga fuo ko ia.

##### 5.3 Fotunga

(a) Tatau Kuo pau ke tatau 'a e hina 'i he puna kotoa pe;

kuo pau ke 'i he puha takitaha 'a e hina 'i he fa'ahinga tatau, 'ulungaanga tatau, motu'a tatau, fuo tatau pea kuo pau ko e hina pe 'i he kalasi ko e (Cucurbita maxima)

Kuo pau ke tatau pe 'a e hina 'a ia 'oku lava 'o fai ki ai 'a e mamata mo e toenga 'o e hina 'i he puha ko ia.

(b) Ngaahi Puha Kuo pau ke fa'oaki 'a e hina 'i he ngaahi puha 'oku ma'a mo fo'ou pea hao foki mei he limulimua mo e me'a kehe pehee 'i he founga 'oku fakapapau'i 'e malu ai 'a e fo'i hina.

Kuo pau ke hao 'a e puha mei he me'a kotoa pe 'oku 'ikai alaa anga mo e hina. (Fakatokanga'i ange 'oku 'ikai tali ke hu ki tu'apule'anga 'a e ngaahi puha 'oku ngaue'aki 'i he ngoue'anga).

- (c) Ngaahi Tu'utu'uni ki he ngaahi puha ke hu ki tu'apule'anga. Kuopau ke uta ki tu'apule'anga 'a e hina kotoa pe 'i he puha papa 'o fakatatau ki he ngaahi tu'utu'uni mo e ngaahi fua, 'oku ha 'i he Tepile Fa 'o e Fanongonongo ni.

### Tepile Tolu

6. Faka'ataa 'o e ngaahi fo'i hina 'oku ki'i maumau:

6.1 'Ilonga 'o e tokoto'anga 'o e fo'i hina 'i he kekelele - Ke 'oua 'e lahi hake 'a e fo'i 'ilonga 'i he peseti 'e 15 'o e 'elia' 'o e kili 'o e fo'i hina takitaha.

6.2 Lanu Memelo (bronzing) - Tupu mei hono tuku 'i he la'aa. Kapau 'oku lahilahi lanu mata 'a e tafa'aki 'oku uesia, 'e kei tali pe 'a e fo'i hina ko ia. Kapau 'e lahilahi ke lanu memelo 'a e tafa'aki 'oku uesia, 'e 'ikai tali 'a e fo'i hina ko ia.

6.3 'Ilonga 'a e totolo 'a e fu'u hina 'i he fo'i hina - Kuo pau 'e 'ikai fakafuokehe 'i 'a e fo'i hina 'e he sino 'o e fu'u hina. Ko e 'ilonga 'a e sino 'o e fu'u hina 'i he fo'i hina kuopau:

- (a) ke 'oua na'a loloto ange 'a e poini loloto taha 'i he 20mm mei he kili 'o e fo'i hina.
- (b) ke 'oua na'a laulahi ange 'a e poini laulahi taha 'i he 20mm.
- (c) ke 'oua na'a loloa ange 'i he 100 mm.

6.4 Patu - Ko e laulahi fakakatoa 'o ha patu 'i he kili ki tu'a ('a ia 'oku 'ikai fakatafungofunga ki 'olunga) ke 'oua 'e lahi hake 'i he sikuea 4cm 'i he fo'i hina kotoa pe 'oku mamafa 1.2kg ki he 2kg pea ke 'oua 'e lahi hake 'i he sikuea 6cm 'i he fo'i hina kotoa pe 'e hu ki tu'apule'anga 'a ia 'oku mamafa ange 'i he 2kg. Ko e laulahi fakakatoa 'o ha patu 'a ia 'oku fakatafungofunga ki 'olunga 'o hange ko e "tunga" pe "tona" 'e 'ikai lahi hake ia 'i he sikuea 2cm pea 'e 'ikai toe ma'olunga ange 'i he 5mm.

6.5 Lavea - Kapau 'oku 'ilonga 'i he fo'i hina ha'ane langomia kuopau:

- (a) 'e 'ikai lavea ai hono kili.
- (b) ko e laulahi fakakatoa 'o e 'ilonga ko ia 'e 'ikai lahi hake ia 'i he sikuea 2cm.

6.6 Kuopau 'e 'ikai lavea 'a e fo'i hina - Ko e lavea ko ha maumau 'i he kili 'o tupu mei ha fakalavea'i ('e ha hele, me'a tutu'u) pe pakia 'i ha me'a masila (va'akau, va'apapa, ukamea).

6.7 Fo'i hina 'oku 'ikai ma'a - 'Oku 'ikai tali ke pipiki ki he fo'i hina ha kekelele, lolololo, te'e'i manupuna pe ha me'a kehe pehee.

6.8 Fuo - Kuopau ke lahi ange 'a e maukupu 'o e fo'i hina 'i hono ma'olunga, mo faitatau mo e 'ulungaanga 'o e kalasi hina ko ia.

6.9 Mingi – (holo 'a e mamafa) – Ke 'ova 'aki 'a e peseti 'e fitu 'i hono mamafa totonu 'i he taimi 'oku fakaheka ai na'a holo hono mamafa 'i ha'ane mingi.

6.10 Hauhau – Kuopau ke matu'aki hao 'a e fua'i'akau kotoa pe mei he hahau (vai mei hono fufulu) kimu'a pea fa'oaki ke uta ki tu'apule'anga.

#### Tepile Fa

7. Ngaahi Tu'utu'uni felave'i mo hono fa'o:

7.1 Ngaahi puha. 'aisi:

(a) Loloa 'o e papa ki mu'a mo mui	1.18m
(b) Loloa 'o e Papa ki he faliki 'o e paleti	1.22m
(c) Loloa 'o e papa ki he tapuni 'o e puha	1.22m
(d) Loloa 'o e papa ki he ongo tafa'aki	1.02m
(e) Loloa 'o e papa ki he ngaahi tuliki	.920m
(f) Loloa 'o e papa ki he faliki 'o e puha	1.02m

Kuopau ke ngaahi 'o fakatatau ki he kupu 7.4

7.2 Ngaahi puha uta ta'e tapuni. Kuopau ke lalahi tatau 'a e 'u puha kotoa ke fe'unga ha fo'i puha 'e uofulu 'i he puha uta ta'e tapuni fute 'e uofulu kotoa pe 'a e vaka tahi.

Kuopau ke ngaahi fakatatau ki he kupu 7.4

7.3 Ngaahi koniteina fakamokomoko tapuni.

Kuopau ke ngaahi 'o fakatatau ki he kupu 7.4

7.4 Ngaahi tu'utu'uni ki he puha kotoa pe mo e papa ke ngaahi 'aki.

#### 7.4.1 Papa

Paini, (Douglas Fir), Tanekaha mo ha papa fakalotofonua 'e taau mo ia fo'ou (ma'a, te'eki ngaue'aki), to'o 'a e kili, fakamomoa ('ikai lahi 'ene hauhau 'i he 25%) pe 'osi to'o 'a e to'i.

Fakatokanga'i ange, 'oku 'ikai tali ha papa kuo faito'o 'aki 'a e kemikale hangee ko e CCA.

7.4.2 Fa'u 'o e ngaahi laupapa:

(a) Matolu si'isi'i taha 18mm pe 15mm mo hano va'e ki 'olunga (va'e 'e fa pe lahi ange 15mm x 50mm)

Kuopau ke tele 'a e ngaahi va'e kotoa)

(b) maaukupu si'isi'i taha 90 ki he 95 mm

(c) Ngaahi hoko 'oua 'e lau lahi ange 'i he 50% 'o e maaukupu 'o e la'i papa

- (d) Tele Pau ke tele kapau 'oku kei fulufulu 'a e papa
- (e) La'i papa 'e fiha Taki ono 'a e ngaahi tafa'aki 'e fa.
- 7.4.3. Papa Faliki 'o e Paleti (Ngaahi puha uta ta'e tapuni):
- (a) Matolu lausi'i taha 15mm ki he 18mm
- (b) Maaukupu lausi'i taha 90 ki he 95mm
- (c) Ngaahi hoko 'Oua 'e toe laulahi ange 'i he 50% 'o e maaukupu 'o e la'i papa
- (d) Tele Pau ke tele kapau 'oku kei fulufulu 'a la'i papa
- (e) La'i papa 'e fiha Valu
- 7.4.4. Papa Faliki 'o e Paleti (puha fakamokomoko tapuni):
- (a) Matolu lausi'i taha 15 ki he 18mm
- (b) Maaukupu lausi'i taha 90 ki he 95mm
- (c) Ngaahi hoko 'Oua 'e lahi ange 'i he 50% 'o e maaukupu 'o e la'i papa
- (d) Tele Pau ke tele kapau 'oku kei fulufulu 'a e la'i papa
- (e) La'i papa 'e fiha Fitu ki he Valu
- 7.4.5. Papa Hili'anga 'o e Paleti:
- (a) Lahi 100 mm x 50 mm
- (b) 'E fiha tolu pea tuku vahavaha lelei 'i he paleti
- 7.4.6. Papa tapuni:
- (a) Matolu lausi'i taha 15 ki he 18mm
- (b) Maaukupu lausi'i taha 90 ki he 95mm
- (c) Ngaahi hoko 'oua 'e toe lahi ange 'i he 50% 'o e maaukupu 'o e la'i papa
- (d) Tele Pau ke tele kapau 'oku kei fulufulu 'a e papa
- 7.4.7. Ngaahi va'e tuliki:
- (a) Fua si'isi'i taha 100 mm x 50 mm  
75 mm x 75 mm) tutu'u fakataiakonali
- 7.4.8. Fakama'u - Ngaue'aki 'a e fa'o mo e pine 'o pehee ni:
- (a) Fa'o Fa'o fana (Rink shank, angular groove) pe fa'o tatau mo ia

- (b) Loloa 55mm ki he puha 18mm kotoa pe  
51mm ki he puha 15mm kotoa pe
- (c) Fo'i fa'o 'e fiha Fo'i fa'o 'e ua ki he hoko pea fa ki  
he hoko 'o e la'i papa 'i he tafa'aki  
'oku taupotu taha ki he faliki mo e papa  
faliki. Fo'i fa'o kotoa 'e fiha: ki he  
ngaahi puha 18mm=182/ngaahi puha  
15mm = 230
- (d) Loloa 'o e Pine Q23-55mm ki he puha 18mm kotoa pe  
Q21-50mm ki he puha 15mm kotoa pe
- (e) Pine 'e fiha Pine 'e tolu ki he hoko pea ono ki he  
hoko'i 'o e laupapa taupotu ki lalo mo  
e faliki. Fo'i pine kotoa 'e fiha: ki he  
puha 18mm = 273/ ki he puha 15mm  
= 345

#### 7.4.9 Anga hono fa'u

Kuopau ke fa'u 'a e puha kotoa pe 'o fakatatau ki he ngaahi tu'utu'uni ni  
pea ke matu'aki lelei hono fa'u, ma'u, mo tapafa lelei.

#### Tepile Nima

##### 8. Fakamatala Fakalukufua:

Ko e ngaahi fakamatala fakamahino 'i lalo 'oku 'ikai ko ha kongia ia 'o e  
ngaahi Tu'utu'uni, ka 'oku 'atu ia ke mea'i 'e he kau ngoue, kau fa'oaki  
mo e kau hu hina ki tu'apule'anga.

8.1 Ko e fatongia ia 'o e taha hu hina ki tu'apule'anga ke fakapapau'i 'oku  
hu atu ki tu'apule'anga 'a e hina 'o fakatatau ki he ngaahi tu'utu'uni fakalao  
'a e pule'anga 'oku ne hu mai 'a e hina mo muimui pau ki he ngaahi fiema'u  
'a e taha 'oku ne hu mai pea mo fakapapau'i 'oku hao 'aupito 'a e hina  
mei he fili 'o e 'akau mo e mahaki.

8.2 Fetuku mo Fa'oaki:

8.3 'Oku 'ikai tali ke fa'oaki ha hina ke uta 'i he ngaahi ngoue'anga.

8.4 Kuo pau 'e 'ikai paki pe toli 'a e hina patakapu lolotonga 'oku 'uha  
pe hauhau. Kuopau ke malu'i 'a e ngaahi puha kuo 'osi fa'oaki mei he ngaahi  
'alotamaki fakanatula.

8.5 Malu'i mei he vela 'i he la'a hili hono paki pehee ki he lolotonga 'a  
e taimi toli. Kuopau ke malu'i 'a e ngaahi puha kuo fa'oaki mei he la'aa  
'i he taimi kotoa pe.

8.6 'I he hili hono toli, 'oku totonu ke tuku 'a e hina 'i he feitu'u 'oku  
malumalu mo 'ea lelei 'o 'oua na'a toe si'i ange 'i he houa 'e 48 kimu'a  
pea fa'oaki ke uta ki tu'apule'anga.

8.7 Kuopau ke toli 'a e hina 'i he'ene motu'a lelei. 'Oku mole vave ange 'a e lanu 'o e hina kuo fu'u motu'a pea 'oku vave ange 'ene pala lolotonga hono uta hili 'a e a'u 'a e uta ko ia.

8.8 Kuopau ke kakato 'a e ngaue ki hono fakama'a kimu'a pea toki uta ki tu'apule'anga.

9. Faka'ilonga: Faka'ilonga 'o e taha ngoue hina 'a ia kuo lesisita mo e faka'ilonga 'o e kautaha na'a ne fa'oaki mo e faka'ilonga 'o e kautaha hu hina ki tu'apule'anga.

9.1 Natula 'o e hina - Kalasi 'o e hina.

9.2 Pule'anga 'oku uta mei ai - Tonga.

9.3 Ngaahi Faka'ilonga Fakakomesiale: Tu'unga 'o e hina kuo fa'oaki

9.4 Faka'ilonga Fakapule'anga: Sitapa ki he sivi pe faka'ilonga tatau mo ia (faka'ilonga 'a e kolonitini 'oku fakapipiki 'i ha hina kuo paasi) mo ha fika fakapulipuli pe 'aho 'oku fai ai e sivi.

Fakatokanga'i ange: 'E tohi'i 'a e fua 'o e folahi 'o e hina 'i he faka'ilonga 'i he puha.

10. Ngaahi Faka'ataa:

'E fakakaukau'i ha faka'ataa mei he tu'utu'uni fekau'aki mo e fa'oaki mo e vaha'a taimi 'aho 'e 14 mei he taimi toli ki he fakauta 'i hono fakamaketi'i ki tu'apule'anga 'o e hina 'o ka 'atu ha tohi kole fekau'aki mo ia ki he va'a kolonitini 'a e Potungaue Ngoue mo e Vaota.

11. Ngaahi Hia

Kapau 'e 'ikai muimui pau 'e ha taha ki he ngaahi tu'utu'uni ni:

'e 'ikai 'atu 'e he va'a Pule 'o e Kolonitini 'a e Potungaue Ngoue mo e Vaota ha Tohi Faka'ataa.

Na'e fakahoko 'i he 'aho 27 'o 'Akosi, 1992.

PALEMIA.

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