



SAMOA 'AVA STANDARD

2018



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PHAMA
**Pacific Horticultural & Agricultural
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AECOM



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INTRODUCTION

In the Samoan culture and traditions, 'ava plays an important role in ceremonies and way of life or the fa'asamoa. Conducted to mark important milestones, the 'ava ceremony is one of Samoa's most important chiefly customs and is a very formal tradition.

From an economic perspective, the 'ava is also an important agricultural commodity for the people of Samoa and the Pacific Island Countries. Domesticated for around 3000 years, the 'Ava is being traded within and outside of the region in significant quantities and value.

The 'ava (*Piper methysticum*) is a native species of the south-western Pacific where it is consumed by Pacific Island Countries for centuries. The traditional preparation of 'ava involves the extraction of 'ava roots and/ or rhizome with cold water and consumed fresh, which is facilitated through this standard.

The purpose of this standard is to provide guidance on minimum requirements for 'ava quality, to all

participants of the 'ava value chain, including consumers. It stipulates guidelines for health and safety measures, including information on approved cultivars.

1

SCOPE

1.1.

This standard applies to 'ava as defined in Section 2. The standard applies to 'ava products used as food or beverage or other products, intended for human consumption.

2

DESCRIPTION

2.1. Definition of 'Ava

'Ava is defined as the plant species *Piper methysticum* Frost consisting of known noble 'ava varieties and the traditional and ceremonial

beverage 'ava extracts made by mixing water and the plant's organs such as roots, peeled rhizome or stump or peeled stems.

The noble 'ava varieties in Samoa are:

- i. 'Ava Le'a
- ii. 'Ava La'au
- iii. 'Ava Loa
- iv. 'Ava Talo
- v. 'Ava Mumu

'Ava products which are offered for direct consumption and have a history of safe traditional use in Samoa are:

- Roots unpeeled (uso)
- Stump or rhizomes - always peeled (aano fisi)
- Basal stem - always peeled (aka fisi)

2.2. Types of 'Ava products

'Ava products covered by this standard include the following:

2.2.1. Fresh 'Ava

Fresh 'ava is 'ava that has just been harvested,

been thoroughly cleaned with water, and is devoid of visible soil and dirt.

2.2.2. Dried 'Ava

Dried 'ava is the dried root of 'ava in the form of chips when it is sun-dried, hot air-dried or dried using other recognised methods. It includes any peeled main stump, peeled basal stems or unpeeled lateral roots that are sliced or powdered.

2.2.3. 'Ava extracts

'Ava extracts are made when soluble components of fresh and dried 'ava are extracted using water and served as a drink at ceremonial or social settings. Also used in value-added products or for further processing, the 'ava extracts may be presented in powdered form through spray-drying, freeze-drying or ground-dried.

3

QUALITY FACTORS

3.1. Colour

'Ava products have a characteristic light brown or grey colour.

3.2. Maturity

'Ava plants should be mature (generally a minimum of 3 years of age) before being harvested.

3.3. Aroma

'Ava products have the characteristics of a plant-based aroma. The aroma will be free of extraneous aromas which indicate contamination with other plant material, solvents or other volatile matter.

3.4. Filth

Using standard methods, heavy filth will not exceed 0.63% of dry-weight content. Heavy filth exceeding 0.63% but less than 0.7% will be considered to be second grade. Heavy filth exceeding 0.7% will be re-washed and re-dried.

3.5. Moisture

The moisture content will not exceed 12.5% when dried to constant weight at 105°C. Moisture content exceeding 12.5% but less than 12.9% will be considered second grade 'ava. 'Ava samples with moisture content in excess of 12.9% will be re-dried to inhibit any mould or other materials growing on them.

3.6. Powdered type

The residual humidity for powdered type to be no more than 10.0%.

3.7. Ash

The ash content will not exceed 6.0% when organic matter is removed at 440°C. Samples exceeding 6.0% but less than 6.5% will be considered second grade 'ava. Samples with ash content in excess of 6.5% will be washed and re-dried and will be considered second grade 'ava.

3.8. 'Ava lactones

Standards under the Annexure A of the Codex 295R-2009 (Codex) apply. Noble varieties are those

in which the ratio of kavain: methysticin reaches a minimum of 250%.

Noble varieties covered under this standard contain a chemo-type in which the first three components are 2, 4 and 6 (in any order). Any variety not having this chemo-type is considered undesirable and excluded from this standard.

3.9. Defects

The following defects must apply to the dried 'ava;

- a. **Insect-damaged 'ava:** 'ava that is visibly damaged by insects or contains dead insects;
- b. **Mouldy 'ava:** 'ava that is visibly affected by mould;
- c. **Off- aroma 'ava:** 'ava that has a noticeable off or foul aroma.

3.9.1. Classification of defectives and acceptable quality of 'ava

A container of 'ava or 'ava products that fail to meet one or more of the applicable quality requirements shall be considered defective. Where not already specified in

Section 3.0, applicable thresholds and/ or tolerances for the quality requirements may be specified in specific standards under the recognised legislation.

4

CONTAMINANTS

'Ava or 'ava products must comply with the maximum levels of the Codex General Standard for Contaminants and Toxins in Foods (CODEX/STAN 193-1995).

The 'ava product must also comply with the maximum residue limits for pesticides established by the Codex Alimentarius Commission.

5

HYGIENE

5.1.

The following International Codes of Practice are recommended:

- a. General Principles of Food Hygiene (CAC/RCP 1-1969);
- b. Good Manufacturing Practices and
- c. Good Agricultural Practices.

5.2.

The 'ava and 'ava products must comply with any microbiological criteria established under the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997), including any amendment to these principles.

6

TRACEABILITY & LABELLING

6.1. Traceability

'Ava and 'ava products shall be established at all stages of the production, processing and distribution of 'ava and 'ava products. 'Ava business operators shall establish systems and procedures which allow information to be available to the competent authorities on demand.

The requirements for traceability and labeling of 'ava products are outlined in the relevant sections of the Food Regulations 2017.

6.2. Name of the product

The village or place of cultivation, the island of origin, the product type - peeled basal stems (aka fisi), peeled stumps (aano fisi), or peeled roots (uso) - must be appear on the labels and the bags.

The date when the 'ava is processed and packaged must be stated and clearly identified on the labels and bags containing 'ava and 'ava products.

6.3. Name of the 'ava species

Scientific or common name of the 'ava that is used as raw material must appear on the label of all 'ava or 'ava products.

6.4. Labelling of non-retail containers

Information about non-retail containers must be on the container or in enclosed documents, but the name of the 'ava product, lot identification and the name and address of the manufacturer, packer or distributor, as well as storage instructions, must appear on the container.

6.5. Other labelling requirements

Except otherwise specified by other national legislation, the 'ava products should have a clear marking to indicate that they are not intended for medicinal purposes, and are prepared for human consumption as food or beverage.

7

METHODS OF ANALYSIS & SAMPLING

7.1. Determination of moisture

The determination of moisture must be in accordance with the Association of Official Analytical Chemists (AOAC).

7.2. Determination of solid

The determination of solid must be in accordance with the AOAC and calculated by subtracting the content of water from 100%.

7.3. Determination of ash

The determination of ash must comply with the AOAC 923.03.

7.4. Determination of 'ava lactones

The determination of 'ava lactones must comply with the method described in Annex A of the Codex.

8

INSPECTION

8.1.

Food safety inspectors shall conduct inspections of producers, handlers, processors and exporters of 'ava to ensure compliance with the Act and relevant Regulations.

The requirements for labelling and traceability are outlined in the relevant sections of the Food Regulations 2017.

APPENDIX 1

GUIDELINES: PRODUCT TRACEABILITY

1. Purpose:

- i. Consistent with the Food Act, appropriate operators must establish and implement a system to enable businesses to identify

a person who supplied or to whom the business supplied any food or substance intended to be eaten or expected to be incorporated into any other food;

- ii. Traceability of the 'ava shall be established at all stages of production, processing and distribution;

2. Scope:

The scope applies to all lots of 'ava sold by the farm or farmer. This also applies to 'ava manufacturers and or exporters receiving 'ava raw materials for processing;

3. Responsibility:

Businesses, including farmer and farm food safety manager, are responsible for making certain that the traceability process is functioning on a day-to-day basis. The farm owner is responsible for responding to any problems that the farm food safety manager is unable to resolve;

4. **Materials:**

- i. System for labelling lots or batches (lot numbers, varieties, labelling stickers, etc.);
- ii. System for organising lot number (database, logs, etc.);
- iii. A map of the farm and fields to identify locations and varieties;
- iv. Names and crew number designations (if applicable) of workers harvesting and packing produce;

5. **Procedure:**

This procedure should result in the labelling of every lot or batch that is sold by the farm or received by the manufacturer or exporter:

- i. Assign each commodity with a unique lot of batch numbers;
- ii. Create a unique coding system that identifies the 'ava type, origin of lot or batch (Island, village, farmer etc.), and harvest date;

iii. If the product is already ground into powder, the following information must be provided to facilitate the process of traceability:

- a. HACCP facility location, registration number and contact details;
- b. Plant parts (peeled basal stems (aka fisi), peeled stumps (aano fisi), or peeled roots (uso) must appear on the labels and the bags.

APPENDIX 2

GUIDELINES: INSPECTION & ANALYSIS

1. **Purpose:**

- i. Consistent with the Food Act, inspections will be an essential component of the system to ensure the products are received, handled, processed, packaged and stored to comply with food hygiene requirements;
- ii. An inspection may be located at the farm site, packhouse, processing facility or other establishments deemed appropriate by the

Regulatory Authority. An inspection is a formal process that has legal implications if non-compliance with the regulations is found;

- iii. A regulatory inspection is often “notified”, however, there are exceptions if the responsible ministry or Competent Authority (CA) has concerns relating to safety or grounds to suspect that improper practices are occurring at a site;

2. Scope:

The scope applies to all producers, processors, manufacturers and exporters of 'ava and 'ava products;

3. Responsibility:

- i. Businesses, including the farmer, business owner, food safety manager and facility manager, are responsible for making certain that their processes relating to training, food safety and traceability are rigorous, well documented and can be provided to the Food Safety officer upon request for verification;
- ii. Staff involved in the handling and processing of the 'ava may be asked to

explain their activities to confirm their understanding of their roles and purposes;

4. Required materials

For the farm operations:

- i. A map of the farm and fields to identify locations and varieties;
- ii. A documented process for harvesting, cleaning, drying and packing will be required. If some level of cleaning is carried out onsite, a source of clean water will also need to be documented;
- iii. A documented process for grading, inspection and management of waste products to avoid any opportunities of mixing and contaminating the good samples;
- iv. A record of staff training;

For the accredited facilities or packhouses etc.:

- v. A map layout of the premises to identify the areas for receiving the product, washing and grading will be required. The management of waste will also need to be part of this documentation;

- vi. A record of any breaches and corrective actions must be documented;

5. Procedure:

The inspection procedures should result in strengthening the processes on-farm and in accredited facilities or packhouses to meet their requirements as stipulated in the Act:

- i. Up to 2 inspections may be carried out per year. Additional follow-up inspections may be necessary depending on the level of non-compliance;
 - a. inspection will be announced and organised ahead with the operator. The remaining inspection may be unannounced, however, it must be carried out during normal business hours at the premises;
 - b. The cost of the inspection will be met by the owner of the farm, facility or packhouse.
- ii. The approved officer (Food Safety Officer) must perform his or her duties in accordance with the Act;

- iii. All inspection should start with an entry meeting to explain the purpose and scope of the inspection. This will allow the manager or owner to provide an overview of their operations, staff training, breaches and corrective actions, and present documentation;
- iv. The inspection should end with a closing meeting at which the summary of the findings will be discussed with the operator;
- v. For any non-compliance and depending on the nature of the breach, the operator must be granted the opportunity to make corrective actions and agree to a follow-up visit, if necessary;
- vi. A copy of the inspection report must be provided to the operator for their record.

