



**JOINT FAO/WHO FOOD STANDARDS PROGRAMME
FAO/WHO COORDINATING COMMITTEE FOR ASIA
Twenty-second Session
Virtual
12, 13, 14, 17, 18 and 21 October 2022**

**REVISED PROPOSED DRAFT REGIONAL STANDARD FOR COOKED RICE
WRAPPED IN PLANT LEAVES**

(Prepared by the chair of the Electronic Working Group (China) taking into account the comments in response to CL 2022/54/OCS-ASIA (CX/ASIA 22/22/9 Add.1))

1. Scope

This standard applies to products as defined in Section 2, which are intended for direct consumption.

2. Description

2.1 Product definition

Cooked Rice Wrapped in Plant Leaves is prepared from rice, to which fillings such as meat, poultry, eggs, fruits and vegetables, beans, nuts, and their derived products etc. may or may not be added ~~(the filling), with and then the filling being~~ completely wrapped with plant leaves (indocalamus leaves, reed leaves, banana leaves, lotus leaves etc.) used as food contact materials and not for consumption. The product may or may not be bundled up before steaming or boiling and packaging.

2.2 Product types

2.2.1 Quick frozen product

The product that is steamed or cooked before being quickly frozen and stored in freezing temperature.

2.2.2 Commercial sterilized product

The product that is sterilized to meet the requirements of commercial sterility.

2.3 Process definition

2.3.1 Plant leaves

The plant leaves as described in Section 2.1 should be carefully selected, soaked, cleaned and drained before using. The leaves shall not be soaked in chemical reagents to change their colour.

2.3.2 Cooking

The product may be cooked using steam and other appropriate cooking methods and/or under certain pressure, temperature and time, before being quickly frozen.

2.3.3 Quick-freezing process

The quick-frozen product (Section 2.2.1) is the product subject to a freezing process as outlined in the *Code of Practice for the Processing and Handling of Quick Frozen Foods* (CXS 8 – 1976). In particular this freezing operation shall be carried out in such a way that the range of temperature of maximum crystallization is passed quickly. The quick-freezing process shall not be regarded as complete unless and until the product temperature has reached -18°C at the thermal center after thermal stabilization. The recognized practice of repacking quick frozen products under temperature-controlled conditions is permitted.

2.3.4 Vacuum packing

The commercial sterilized product as described in Section 2.2.2 shall be processed in an appropriate manner, before or after being sealed in a container, so as to prevent spoilage and to ensure product stability in normal storage conditions at ambient temperature. The product shall not leak or swell after sterilization.

2.3.5 Packaging

Packaging used for cooked rice wrapped in plant leaves shall:

(a) protect the organoleptic and other quality characteristics of the product;

(b) protect the product against microbiological and other contamination;

(c) protect the product, as far as practicable, against dehydration, heat accumulation by radiation, and, where appropriate, leakage;

(d) not pass on to the product any odor, taste; color or other foreign characteristic, throughout the processing (where applicable) and distribution of the product up to the time of final sale.

3. Essential composition and quality factors

3.1 Ingredients

3.1.1 Basic ingredients

a) glutinous rice, rice, millet, oat, barley, or etc.

b) plant leaves

3.1.2 Optional ingredients

a) fruits and vegetables (including edible fungi, pulses and legume vegetables)

b) nuts and seeds

c) preserved fruits

d) edible fungi

e) meat

f) poultry

fg) aquatic products

gh) eggs

hi) edible fats and oil

ij) beans

jk) derived products of a) to ji)

kl) sugar

lm) edible salt

mn) spices and culinary herbs

o) seasonings

op) other ingredients as appropriate

3.2 Quality criteria

3.2.1 Quality factors

Products with animal and nuts derived fillings shall meet the Peroxide value $\leq 19.7\text{mEq/kg}$.

3.2.2 General requirements

Cooked rice wrapped in plant leaves should have the following qualities:

0 have their appropriate shape;

0 be uniform in size;

0 be properly wrapped;

0 have the characteristic smell and taste of the basic and/or optional ingredients.

3.2.3 Defects and Allowances

Cooked rice wrapped in plant leaves should be substantially free from following defects:

- 0 broken wrapper and leaking filling;
- 0 foreign taste;
- 0 visible foreign matters outside and inside the product.

3.3 Classification of “defectives”

A container that fails to meet the quality requirements set out in Section 3.2 shall be considered a “defective”.

3.4. Lot acceptance

A lot shall be considered as meeting the requirements of this standard when:

- the number of “defectives” as defined in Section 3.3 does not exceed the acceptance number (c) of an appropriate sampling plan with an AQL of 6.5.
- ~~—the number of “defectives” as defined in Section 7.1.1 does not exceed the acceptance number (c) of an appropriate sampling plan with an AQL of 6.5.~~

4. Food additives

Acidity regulators, antioxidants, colors, preservatives and stabilizers used in accordance with Tables 1 and 2 of the *General Standard for Food Additives* (CXS 192-1995) in food category 06.7 “Pre-cooked or processed rice products, including rice cakes (Oriental type only)” and ~~certain~~ acidity regulators, antioxidants, colors, preservatives, stabilizers, emulsifiers, flavor enhancers and thickeners, as indicated in Table 3 of the *General Standard for Food Additives* (CXS 192-1995) are acceptable for use in foods conforming to this Standard.

5. Contaminants

5.1 The product covered by this standard shall comply with the maximum levels of the *General Standard for Contaminants and Toxins in Food and Feed* (CXS 193-1995).

5.2 The products covered by this standard shall comply with the maximum residue limits for pesticides established by the Codex Alimentarius Commission.

5.3 The products covered by the provisions of this Standard shall be free from heavy metals in amounts which may represent a hazard to human health.

6. Hygiene

6.1 It is recommended that the product covered by the provisions of this standard be prepared and handled in accordance with the appropriate sections of the *General Principles of Food Hygiene* (CXC 1-1969), and other Codes of Practice recommended by the Codex Alimentarius Commission which are relevant to this product.

6.2 The product should comply with any microbiological criteria established in accordance with the Principles and *Guidelines for the Establishment and Application of Microbiological Criteria Related to Foods* (CXG 21-1997).

6.3 Quick frozen product should comply with the *Code of Practice for the Processing and Handling of Quick Frozen Foods* (CXC 8-1976).

6.4 Commercial sterilized products should meet the requirements of commercial sterility.

7. Weights and measures

7.1 Net weight

The weight of the product covered by the provisions of this Standard shall be indicated in accordance with the *General Standard for the Labeling of Prepackaged Foods* (CXS 1-1985).

7.1.1 Classification of “defectives”

A container that fails to meet the net weight declared on the label should be considered as a “defective”.

7.1.2 Lot acceptance

A lot shall be considered as meeting the requirements of this standard when:

- the number of “defectives” as defined in Section 7.1.1 does not exceed the acceptance number (c) of an appropriate sampling plan with an AQL of 6.5.

8. Labelling

8.1 The product covered by the provisions of this Standard shall be labelled in accordance with the *General Standard for the Labeling of Prepackaged Foods* (CXS 1-1985). ~~The labelling of non-retail containers should be in accordance with the *General Standard for the Labelling of Non-Retail Containers of Foods* (CXS 346-~~

~~2021). In addition, the following specific provisions apply:–~~

8.4.2 Name of the product

The name of the product shall be “Cooked rice wrapped in plant leaves”. The product shall be labelled with the corresponding name described in Section 2.2. Other names¹ may be used in accordance with the law and custom of the country in which the product is sold and in such a manner as to not mislead consumers.

8.3 Labelling of non-retail containers

The labelling of non-retail containers should be in accordance with the *General Standard for the Labelling of Non-Retail Containers of Foods (CXS 346-2021)*.

9. Methods of analysis and sampling

For checking the compliance with this standard, the methods of analysis and sampling contained in the *Recommended Methods of Analysis and Sampling (CXS 234-1999)* relevant to the provisions in this standard, shall be used.

9.1 Determination of peroxide value²

9.1.1 Extraction of oils from the product

9.1.1.1 Apparatus

- (a) Rotary evaporator
- (b) Water bath

9.1.1.2 Extraction

Remove the product package and plant leaves, etc., take out the edible part of the representative sample, crush it and put it in a homogenizer or glass mortar, and grind it continuously to make the sample fully mashed and mixed well, and then put it in the wide-mouth bottle, and add 2 to 3 times the sample volume of petroleum ether (boiling range: 30°C-60°C). After fully mixing, stopper the bottle and leave for more than 12 hours. Filter all the solution with a funnel filled with anhydrous sodium sulfate into a round-bottom flask. Rinse the residue in the wide-mouth bottle with petroleum ether. Repeat the filtration once with a new anhydrous sodium sulfate funnel, if the filtrate is not clear enough. Evaporate the petroleum ether in the round-bottom flask under reduced pressure on a rotary evaporator at below 40°C, and the residue is the test sample. A sufficient number of representative samples should be selected to ensure that not less than 8 grams of the test sample can be obtained. The test sample should be tested as soon as possible.

9.1.2 Determination

According to ISO 3960 or AOCS Cd 8b-90 (03) (Type I Titrimetry (Colorimetric))

¹ Other names for example, Zongzi, Chimaki, Ba-Jang, Khao Tom Mat, lotus leaf rice, Ketupat, Ma-chang and et c.

² Section 9.1 will be considered by CCMAS and this section will be removed from the final published standard.