

Raw Dried Seaweeds

Foreword

The Philippine National Standards for Raw Dried Seaweeds was prepared as part of the project of the Bureau of Agriculture and Fisheries Products Standards (BAFPS) with the Bureau of Agricultural Research (BAR) entitled "Quality Standardization on Selected Fishery Products". A technical working group (TWG) was created through Special Order Number 100 Series of 2006 identifying members and experts that shall be involved in the formulation the draft standards for fishery products.

In collaboration with the industry and the regional offices of the Bureau of Fisheries and Aquatic Resources (BFAR), the TWG presented the draft standards for public consultation in Zamboanga and circulated the standards for comments to the concerned stakeholders.

The PNS for Raw Dried Seaweeds aims to provide common understanding on the scope of the standard, product description, classifications, essential composition and quality factors, hygiene and handling, packaging requirements, labeling and methods of analysis and sampling.

Raw Dried Seaweeds

1 Scope

This standard prescribes quality specifications and safety requirements of raw dried seaweeds obtained from the class *Rhodophyceae* (red seaweeds) such as *Euchema*, *Chondrus* and *Gigartina*.

2 References

The titles of the standards and publications referred to in this standard are listed on the inside back cover.

3 Definitions

For the purpose of this standard, the following definitions shall apply:

3.1**Clean**

Seaweed is free from dirt or other foreign matter

3.2**clean, reasonably**

seaweed exhibits unavoidable dirt and other foreign matters

3.3**cleaning**

means the removal of soil, food residues, dirt, grease or other objectionable matter from surfaces

3.4**Contaminants**

any biological or chemical agent, foreign matter, or other substances that are not intentionally added to food, which may compromise food safety or suitability.

3.5**damage/defect**

any defect, which materially affects the appearance, or the edible or shipping quality of seaweeds

3.6**Dehydration**

loss of moisture from the frozen product through evaporation

Raw Dried Seaweeds

3.7**extraneous matter**

soil, residues and other dirt adhering on the seaweeds that impairs its quality.

3.8**mature**

presence of the fourth to fifth thallus.

4 Definition of Defectives

4.1 Ice-ice disease – characterized by general paling or loss of color in the early stages of infection.

4.2 Epiphytism/ “Fouling” – presence of epiphytic or parasitic organisms which are attracted to the seaweeds for food requirements. This include algae, larval stages of mollusks, and other epiphytes

4.3 Pitting– formation of cavity penetrating the cortex in one place and expanding in the medullar region.

4.4 Tip darkening– manifested by dark blackish tips.

4.5 Tip discoloration – change in tip color to pinkish which eventually soften, further discolor, become white and dissolve away

4.6 Enlargement of the Thallus tips– tips have larger diameter than the mid portion of the thallus, making the tips heavier than the usual weight.

4.7 Mud envelope – hardened mud wrapping of the thallus usually containing polychate worms inside the hardened mud

4.8 Pests – presence of micro-grazers which include *Tripheustes* and *Ophiodesma spectabilis*; macro grazers like mollusks, sea urchin, starfish, milkfish, rabbitfish, sea turtle

5 Minimum Requirements

5.1 Raw Dried Seaweeds must be free of debris and epiphytes.

5.2 Raw Dried Seaweeds must be of one species only.

5.3 Raw Dried Seaweeds must be mature, having the presence of the 4th to 5th thallus.

5.4 Raw Dried Seaweeds must meet the following criteria as shown in Table 1.

Raw Dried Seaweeds

Table 1. Specifications for Raw Dried Seaweeds

Criteria	Requirement (%)
Moisture	40% max.
Clean Anhydrous Weed (CAW)	35 % min.
Tie-ties	0 (not present)
Extraneous Weed	0 (not present)
Loose Foreign Materials	1% max.
Sand and Salt	24 % max.
Maturity	presence of the 4 th to 5 th thallus

6 Grading

Seaweeds shall be graded according to its variety, general appearance, quality and condition.

6.1 Grade 1 – Similar varietal characteristics, free from decay, damages/ caused by pests, staining, dirt or foreign material,

6.2 Grade 2 – Similar varietal characteristics, reasonably free from decay, damages/ caused by pests, staining, dirt or foreign material.

6.3 Grade 3 – Similar varietal characteristics, slightly free from decay, damages/ caused by pests, staining, dirt or foreign material.

7 Tolerances

Tolerances shall be allowed in each package for product not satisfying the requirements of the grade indicated.

7.1 Grade I – Five percent of the total weight of package of seaweeds is allowed for color and not more than 1% by count or weight of sea weeds for other defects shall fail to meet the requirements but shall conform to the requirements of the next lower grade

7.2 Grade II – Ten percent of the total weight of package of seaweeds is allowed for color and not more than 2% by count or weight of sea weeds for other defects shall fail to meet the requirements but shall conform to the requirements of the next lower grade

7.3 Grade III – Ten percent of the total weight of package of seaweeds is allowed for color and not more than 5% by count or weight of sea weeds for other defects shall fail to meet the requirements but shall conform to the requirements of the next lower grade.

Raw Dried Seaweeds

8 Sampling

Sampling method to be used for ascertaining conformance to the requirements of this specification shall be in accordance with PNS ISO 874.

9 Packing

Seaweeds shall be packed in appropriate containers that will adequately protect the product from normal hazards of transportation and handling.

10 Marking or labeling

Each container shall be legibly labeled with the following information:

- 10.1** Name of the product;
- 10.2** Grade, variety name;
- 10.3** Net weight in kilograms;
- 10.4** Brand name (if any);
- 10.5** Name of producer; and
- 10.6** The words "Product of the Philippines".

11 Contaminants

The product shall comply with those maximum residue levels established by the Codex Alimentarius Commission and/or authority for this commodity.

12 Hygiene

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 Recommended International Code of Practice – General Principles of Food Hygiene (CAC/RCP 1 – 1969, Rev. 3-1997, Amd. (1999) and other relevant Codex texts such as Codes of Hygiene Practice and Codes of Practice.

REFERENCES

Palma, Hector A. Seaweed Farming Systems. 2nd Mindanao Seaweed Congress. Zamboanga City. April 25-26, 2001

Philippine Fisheries Profile.

Aqua Farm News. SEAFDEC Publication Volume IX No. 6. November-December 1991.

Raw Dried Seaweeds

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Standard of Raw Dried Seaweeds**

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