

PHILIPPINE NATIONAL STANDARD

PNS/BAFPS 42-1:2008
ICS 67.060

Organic milled rice – Specification
Part 1: Post harvest operations

Foreword

The Philippine Development Assistance Programme, Inc. (PDAP), in its implementation of the ‘Promotion of Participation in Sustainable Enterprises’ (PPSE) vigorously pursued the marketing and production of organic rice as this has the highest potential of becoming a full-scale industry.

The PDAP experience has shown that supporting industry-oriented enterprises, in particular the organic rice industry would increase income of organic farmers and their communities. This was validated during the series of consultations conducted in Cagayan de Oro, Quezon City, and North Cotabato which were all attended by organic rice producers, NGOs, marketing groups and concerned government agencies. There was unanimous agreement among participants to aggressively promote and strengthen the organic rice industry. The commitment was concretized through the creation of the Organic Rice Industry Technical Working Group (ORI-TWG).

Philippine National Standards Specification for Organic Agriculture was initially prepared by the ORI-TWG and was adopted by the Department of Agriculture through the Bureau of Agriculture and Fisheries Product Standards (BAFPS). The requirements in the standard on organic rice were culled from the series of regional orientation and training conducted by the ORI-TWG for the installation of Internal Quality Control Systems (IQCS). Outputs during the orientation and training were consolidated and included in the draft national standards on organic rice. Drawn from the general principles of the Philippine National Standard on Organic Agriculture, this standard on organic milled rice attempts to cover aspects on rice postharvest operations, and on packaging, labeling and quality standards in order to be confidently labeled organic. The on-farm production practices and conversion requirements for organic agriculture for organic rice shall follow the Philippine National Standards for Organic Agriculture.

Organic standards define the process of production and processing. They are merely a quality status that can be measured in the final product. These organic standards are expected to build a mutual trust between the organic rice farmers and the consumers. In this manner, consumers are assured of genuine organic rice. At the same time, farmers are protected from unfair competition of other producers who use the term “organic” in a fraudulent way.

These Standards for Organic Milled Rice cultivation have been prepared for the purpose of providing a uniform approach to the requirements, which is the basis of the following: postharvest operations, packaging, labeling, and consumer information.

Organic milled rice – Specification**Part 1: Post harvest operations**

1 Scope

This standard establishes a system within organic agriculture mainly for post harvest operations of organic milled rice.

2 References

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

3 Definitions

For purposes of this standard, the following definitions apply.

3.1**drying**

the process of removing excess available water from the grain through evaporation by the application of heat

3.2**harvesting**

The process of cutting and collecting the crop from the field, either with the hand tools or with the use of machines and, bundling and piling of the crop in a dry place in preparation for threshing

3.3**post harvest operations**

series of activities that grain crops undergo which include harvesting, threshing, hauling, drying, milling, storage, handling and packaging

3.4**preparation**

the operation of preserving and/or processing of agricultural products; packaging and/or changes made to the label concerning the presentation of organic production method of the raw and/or processed products

3.5**production**

the operations on the agricultural land holding that includes producing, packaging and initial labeling of agricultural products produced therein

3.6

raw materials

all ingredients other than additives

3.7

restricted inputs

inputs for which there are conditions for use imposed by the certification program

3.8

rice milling

refers to the process of

a) dehulling (or dehusking)

removing the hull (or husk) from the palay grain, in order to get brown rice

b) polishing (or whitening)

removing the bran, pericarp, testa and aleurone layers from the brown rice

3.9

storage

the provision of a place or space for the grain to preserve its quality while waiting for a better market or for future use

3.10

threshing

the process of removing the paddy grains from the panicles by means of rubbing, impact and stripping actions

3.11

volcani cube

An envelope made from a flexible PVC liner specially made for the purpose of storing dry foods. The liner of the Cube is UV – resistant waterproof, has a limited permeability to gases and keeps away rodents.

4 Minimum requirements

4.1 Post harvest operations

4.1.1 Harvesting

There should be no sources of pollution that shall affect the quality of organic products.

4.1.1.1 Harvesting of organically grown palay should not coincide with the harvesting of conventionally grown palay. An appropriate buffer zone shall be employed in farms which have a higher risk of contamination from chemicals. However, the crops harvested in the buffer zones should be considered non-organic

4.1.1.2 Harvesting could be done in two conditions:

- At least 85 % to 100 % mature panicle during favorable condition
- 85 % during unfavorable (climatic and infestations) conditions

4.1.1.3 Palay harvest from organic farms should be put into designated sacks.

4.1.2 Threshing

➤ Threshers and other accessories should be thoroughly cleaned before threshing of organic palay. The first two sacks obtained from the thresher should be segregated and shall be considered as conventional.

4.1.2.1 Use new or cleaned sacks; do not use sacks from synthetic fertilizers even if they are clean or have undergone washing. Sacks of feeds can be used provided they are clean and used exclusively for rice.

4.1.2.2 Sacks should be properly labeled (variety, organic) to avoid mixing of organic and conventional products. ID Code is required on the sacks if they are marketed as palay.

4.1.3 Drying

4.1.3.1 Rice should have a maximum moisture content of 14 % as received when tested by properly calibrated moisture meters in accordance with PNS ISO 712

4.1.3.2 Drying facilities like concrete pavement should be properly cleaned and must be free from oil spill, manure, dung and other residues before drying. There should be physical separation of organic and conventional palay.

4.1.3.3 Mechanical driers should be cleaned every time organic materials are to be dried. Organic and conventional palay should not be dried at the same time.

4.1.3.4 Practice judicious watching of the drying process by keeping stray animals away from the drying areas. Personnel in charge of drying should ensure that birds are kept away from the drying area to avoid contamination of grains.

4.1.3.5 Sacks should be new or cleaned

4.1.3.6 Proper labeling of sacks should be observed (varieties, organic) to avoid mixing of organic from conventional products.

4.1.3.7 Personnel in charge of drying palay should observe proper hygiene (no spitting, drinking, eating and smoking).

4.1.3.8 When using mechanical dryers, rice hulls or other biomass, or electricity driven facilities should be used.

4.1.3.9 Solar drying is allowed however drying in highways and roads is strictly prohibited.

4.1.4 Hauling

4.1.4.1 There should be physical separation of organic and conventional products and they should not be hauled at the same time.

4.1.4.2 Proper labeling of organic products should be observed.

4.1.4.3 Clean transport facilities every time organic products are to be hauled.

4.1.5 Milling

4.1.5.1 To avoid contamination, all milling equipment should be properly cleaned before milling of organic rice.

4.1.5.2 Milling personnel should observe proper hygiene.

4.1.5.3 Organic and conventional product should not be milled at the same time.

4.1.5.4 Use of new and unused sacks is required.

4.2 Storage and transportation

The storage should be free from pests and insects appropriate to the organic product. Storage areas should be thoroughly cleaned using methods appropriate to the organic product.

4.2.1 Warehousing and stocking

4.2.1.1 Palay should be stored at 14 % moisture content (MC) or less.

4.2.1.2 Organic products should be stocked in a designated warehouse. If organic products are to be stored in a warehouse where conventional products are being stored, these should be kept under hermetic condition using a volcani cube.

4.2.1.3 Observe proper piling, labeling and coding system (variety, date of harvest, milling date).

4.2.1.4 Observe proper hygiene or proper cleaning of warehouse. Cleanliness and sanitation should always be practiced.

4.2.1.5 There should be proper waste disposal of biodegradable and non-biodegradable materials.

4.2.1.6 Use of botanical sprays are allowed but it should not be sprayed directly to the organic product.

4.2.1.7 Observe a policy on warehousing by first-in, first-out system.

4.2.1.8 Chemically treated pallets should not be used in the warehouse.

4.2.2 Transportation of organic products

4.2.2.1 The transportation should be appropriate to the certified organic product. Rough treatment should be avoided.

4.2.2.2 Vehicles and other equipment used during transport should be properly cleaned prior to loading of organic products.

4.2.2.3 Avoid hauling and stocking of organic products together with potential sources of contaminants such as oil and chemicals.

4.2.2.4 Use of pallets during transport should be observed. However, chemically treated pallets shall not be used. The use of “hooks” are prohibited.

4.2.2.5 During transport, tarpaulins and other uncontaminated covering materials should be used.

4.2.3 Pest control in storage

4.2.3.1 Fumigation with pesticides and other chemical treatment of plant and storage facilities shall not be allowed. If no alternative solution can be found, farmer/group should request from the certifying body to approve exceptional application prior to storage of the product.

4.2.3.2 There shall never be direct or indirect contact between organic products and prohibited substances (e.g. pesticides). When any doubt arises, it shall be ensured that no residue in the organic product is detected.

4.2.3.3 The use of irradiation of the organic product for pest and disease control is prohibited.

4.2.3.4 In case there is suspicion of traces of pesticides in the storage facilities, these have to be cleaned by soap and water.

4.2.3.5 Proper cleaning of the storage and warehouses should be done. Use of botanical sprays is allowed but it should not be directed towards the organic products. Operators should always make a record on the amount and kind of botanical sprays used.

References

PNS/BAFPS 42-1:2008

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

Bureau of Agriculture and Fisheries Product Standards. 2003. PNS/BAFPS 03:2003, Philippine National Standards for Organic Agriculture. Quezon City, Philippines.

National Food Authority. NFA Criteria on the Quality Standards for Milled Rice. Manila, Philippines.

Philippine Development Assistance Program.2005. Quality Standards for Organic Rice, Quezon City, Philippines

Philippine Development Assistance Program. 2006. Organic Rice Industry Analysis and Plan. Quezon City, Philippines.

ISO 712:1985. Determination of Moisture Content of Degermed Maize (Corn) Meal and Maize (Corn) Grits

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