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Organic Crop Production, Postharvest, and Processing — Code of Practice

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Foreword

In 2022, the Bureau of Agriculture and Fisheries Standards-Department of Agriculture (BAFS-DA) initiated the revision of sections on crop production, postharvest and processing of the PNS/BAFS 07:2016 (Organic Agriculture). This is in response to the result of the harmonization assessment of the Association of Southeast Asian Nations Expert Working Group on Organic Agriculture (ASEAN EWG – OA) of the national standards of the ASEAN Member States (AMS) against the ASEAN Standard on Organic Agriculture (ASOA). The revision aims to align the PNS to ASOA and update it based on industry practices to facilitate the trade of organic produce and products.

The Technical Working Group (TWG) tasked to develop the PNS was created through the Special Order (SO) No. 103, series of 2022 (Creation of TWG for the development of the PNS for agriculture and fishery products, machineries, and infrastructures) and SO No. 350, series of 2022 (Addendum to SO No. 103, series of 2022 entitled “Creation of TWG for the development of PNS for agriculture and fishery products, machineries, and infrastructures”). The TWG was composed of representatives from the relevant competent authority agencies, academe, private sector, and Civil Society Organizations (CSO). The draft PNS underwent a series of TWG meetings, stakeholder consultations, and writeshops conducted physically and via online platforms before its endorsement to the DA Secretary for approval.

This Standard cancel all the provisions related to crop production, postharvest, and processing under PNS/BAFS 07:2016 (Organic Agriculture). Provisions of PNS/BAFS 07:2016 related to animal production remain valid unless otherwise revoked.

This PNS is drafted in accordance with the BAFS-Standards Development Division (SDD) Standardization Guide No. 1: Writing the PNS.

1 Scope

This Standard defines the seed and crop production (including mushrooms), wild harvest (excluding honey), post-harvest, processing, handling, storage, and transport of organic produce and processed products to ensure their organic integrity.

2 Normative References

The following documents are referred to in the text in such a way that some or all their contents constitute requirements of this document. The latest edition of the referenced documents (including any amendments) applies.

An Act for Salt Iodization Nationwide (ASIN), Republic Act No. 8172. (1995). https://www.officialgazette.gov.ph/1995/12/20/republic-act-no-8172/

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DA. (2022). Guidelines for the accreditation of the core Participatory Guarantee System Groups (PGS) and its operations as OCB (DC No. 03, series of 2022). https://www.da.gov.ph/wp-content/uploads/2022/07/dc03_s2022.pdf

Department of Health (DOH). (2017). Philippine National Standards (PNS) for drinking water of 2017 (DOH-Administrative Order [AO] 2017-0010). https://www.fda.gov.ph/wp-content/uploads/2021/08/Administrative-Order-No.-2017-0010.pdf

Ecological Solid Waste Management Act of 2000, Republic Act 9003. (2001). https://www.lawphil.net/statutes/repacts/ra2001/ra_9003_2001.html

Food and Drug Administration (FDA)-DOH. (2004). Current Good Manufacturing Practices (GMP) in manufacturing, repacking, or holding food (FDA AO No. 153, s.2004). https://www.fda.gov.ph/wp-content/uploads/2020/03/General-Standard-for-Food-Hygiene-Repealing-Administrative-Order-No.-153-s.-2004.pdf

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Philippine Food Fortification Act, Republic Act 8976. (2000). https://www.lawphil.net/statutes/repacts/ra2000/ra_8976_2000.html

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3 Terms and Definitions

3.1
annual crop
crop produced by a plant whose entire life cycle is completed within a single growing season (BAFS-DA, 2016)

3.2
biodegradable inputs
inputs composed of natural materials that can be decomposed by bacteria or other biological means and includes compost, green manure, and plant and animal wastes (ASOA, 2014, *modified*)

3.3
biodiversity
variety of life forms and ecosystem types on earth. It includes genetic diversity (i.e., diversity within species), species diversity (i.e., the number and variety of species), and ecosystem diversity (total number of ecosystem types) (ASOA, 2014, *modified*)

3.4
breeding
selection of plants (including hybridization) to produce and/or to further develop desired varieties/strains/breeds (ASOA, 2014, *modified*)

3.5
buffer zone
clearly defined and identifiable boundary area bordering an organic production site that is established to prevent the introduction of, or contact with, prohibited substances from an adjacent area (ASOA, 2014, *modified*)

3.6
certification
the procedure by which a competent authority agency or an OCB provides written or equivalent assurance that farms, or production and

processing systems, conform to organic standards as mandated by the amended Organic Agriculture Act of 2010 (Republic Act 11511, 2020)

3.7
commingling
intentional or unintentional mixing together or the physical contact between organic and non-organic products which are unpackaged or permeably packaged, which leads to a loss of integrity of the organic product during production, processing, transportation, storage, or handling (BAFS-DA, 2016, *modified*)

3.8
contamination
contact of organic crops, land, or products with substance that would compromise organic integrity (ASOA, 2014, *modified*)

3.9
conventional
any material, production, or processing practice that is not certified organic (ASOA, 2014, *modified*)

3.10
conversion period
time between the start of organic management and certification of the crop production system or site as organic (ASOA, 2014, *modified*); also known as transition period

3.11
crop rotation
practice of alternating the species or families of annual and/or biennial crops grown on a specific field in a planned pattern or sequence to break weed, pest, and disease cycles and to maintain or improve soil fertility and organic matter content (ASOA, 2014, *modified*)

3.12
desertification
process of land degradation in arid, semi-arid and dry humid areas resulting from various factors, including climatic variations (e.g., drought) and human activities (e.g., over exploitation of drylands) (United Nations [UN], 1997)

3.13
disinfecting
to reduce, by physical or chemical means, the number of potentially harmful microorganisms in the environment to a level that does not compromise food safety or suitability (ASOA, 2014)

3.14
farm unit
total area of land under the control of one farmer or collective of farmers, including all the farming activities or enterprises (ASOA, 2014, *modified*)

3.15
food additive
any substance not normally consumed as a food by itself and not normally used as typical ingredient for the food, whether or not it has nutritive value, the intentional addition of which to food or a technological (including organoleptic) purpose in the manufacture, processing, preparation, treatment, packaging, transport, or holding of such food results, or may reasonably be expected to result, (directly or indirectly) in it or its by-products becoming a component of or otherwise affecting the characteristics of such foods. The term does not include contaminants or substances added to food for maintaining or improving nutritional qualities (ASOA, 2014, *modified*)

3.16
Genetically Modified Organisms (GMOs)
organisms made with techniques that alter the molecular or cell biology of an organism by means that are not possible under natural conditions or processes. Genetic engineering includes recombinant DNA, cell fusion, micro-, and macro- encapsulation, gene deletion and doubling, introducing a foreign gene, and changing the positions of genes. It shall not include breeding, conjugation, fermentation, hybridization, in-vitro fertilization, and tissue culture (BAFS-DA, 2016)

3.17
green manure
crop that is grown and then incorporated into the soil for the purpose of soil improvement, prevention of erosion, prevention of nutrient loss, mobilization and accumulation of plant nutrients, and balancing soil organic matter. Green manure may include spontaneous crops, plants, or weeds (ASOA, 2014)

3.18
habitat
area over which a plant species naturally exists. It is also used to indicate types of habitat (e.g., ocean, seashore, riverbank, woodland, and grassland) (ASOA, 2014, *modified*)

3.29
herb
plant that is not woody and with no persistent parts above ground level (BAFS-DA, 2016)

3.20
high conservation value areas
areas that have been identified as having outstanding and critical importance due to their environmental, cultural, socioeconomic, biodiversity, or landscape values (ASOA, 2014)

3.21
ingredient
any substance, including an additive, used in the manufacture or preparation of food and present in the final product although possibly in a modified form (ASOA, 2014, *modified*)

3.22
inspection
the examination of farms, food and non-food products, food control systems, raw materials, materials, processing, distribution and retailing, including in-process and finished product testing, in orders to verify that they conform to the requirements for being organic. Inspection includes the examination of the reproduction and processing systems (RA 11511, 2020)

3.23
irradiation
technology using high-energy emissions from radio-nucleotides, such as gamma rays, x-rays, or accelerated electrons, capable of altering a product's molecular structure for the purpose of controlling microbial contaminants, pathogens, parasites, and pests in products (generally food), preserving products, or inhibiting physiological processes such as sprouting or ripening. Irradiation does not include low-level radiation sources such as the use of X-rays for foreign body detection (ASOA, 2014, *modified*)

3.24
isolated nutrients
individual and separate forms of nutrients (ASOA, 2014)

3.25
labeling
any written, printed, or graphic representation that is present on the label of a product, accompanies the product, or is displayed near the product at the point of sale, for the purpose of promoting its sale or disposal (ASOA, 2014, *modified*)

3.26
organic agriculture
holistic production management system which promotes and enhances agroecosystem health, including biodiversity, biological cycles, and soil biological activity; emphasizes the use of management practices over the use of off-farm inputs; and utilizes cultural, biological, and mechanical methods as opposed to synthetic materials. Organic agriculture

combines tradition, innovation, and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved (CAC, 1999)

3.27
organic integrity
adherence to the principles, objectives, and standards for organic production (ASOA, 2014)

3.28
organic produce
any agricultural produce from organic management systems or gathered from nature, and/or handled with post-harvest management (ASOA, 2014)

3.29
organic product
product from organic management systems that have been processed for the use as food or feed (ASOA, 2014, *modified*)

3.30
organic soil conditioner
any product n solid or liquid form, derived from plants or animals that have undergone substantial decomposition that can supply available nutrients to plants with a total Nitrogen (N) - Phosphorus (P2O5) - Potassium (K2O) content of 5% to 10% (BAFS-DA, 2020)

3.31
parallel production
situation where the same operation is producing visually indistinguishable products in both organic and non-organic systems. A situation with “organic” and “in conversion” production of the same product may also be parallel production. Parallel production is a special instance of split production (ASOA, 2014, *modified*)

3.32
perennial crop
any crop, other than a biennial crop, that can be harvested from the same planting for more than one crop year, or that requires at least one year after planting before harvest (BAFS-DA, 2016)

3.33
processing aid
any substance or material, not including apparatus or utensils, and not consumed as a food ingredient by itself, intentionally used in the processing of raw materials, foods, or its ingredients, to fulfill a certain technical purpose during treatment or processing and which may result in the non-intentional, but unavoidable presence of residues or derivatives in the final product (ASOA, 2014)

3.34
sanitizing
any treatment that is effective in destroying or substantially reducing the number of vegetative cells of microorganisms of public health concern and other undesirable microorganisms (ASOA, 2014, *modified*)

3.35
salinization
increase in salt concentration in an environmental medium, notably soil (UN, 1997)

3.36
seed
plant material used for the production of food, forage, fibers, industrial crops, oil, flowers, grasses, herbs, and aquatic plants, including but not limited to meristem, and clonal propagules such as tubers, corms, and micro-propagated plantlets (Seed Industry Development Act of 1992, 1992).

3.37
split production
situation where only part of the farm or processing unit is certified as organic. The remainder of the property can be non-organic or in conversion. It is a special case of parallel production (ASOA, 2014, *modified*)

3.38
synthetic
substance that is formulated or manufactured by a chemical process or by a process that chemically changes a substance extracted from naturally occurring plant, animal, or mineral sources. Substances created by naturally occurring biological processes are not considered synthetic (ASOA, 2014, *modified*)

3.40
wild harvest
plants or portions of plants and mushrooms that are collected or harvested from defined sites which are maintained in a natural state and are not cultivated or otherwise managed (ASOA, 2014, *modified*)

4 Crop Production Management

4.1 Conversion to organic crop production

4.1.1 The operator shall follow and meet the minimum requirements of this Standard from the beginning of the conversion period onwards. The start of the conversion period shall be calculated from the date of the documented start of organic management and the filing of the application for certification to the competent authority agency or an

organic certification body (OCB).

4.1.2 An exemption to this requirement, which is the reduction of the conversion period, may be approved by the competent authority agency or an OCB, when there is verifiable evidence of no use of non-permitted inputs or implementation of activities or practices allowed in organic agriculture.

4.2 Length of crop conversion period

4.2.1 There shall be a period of at least 12 months before the start of the production cycle of organic management for annuals and 18 months before the first harvest for perennials that meet all the requirements of this Standard before the resulting product can be considered organic.

4.2.2 The conversion period can be extended based on the identification and evaluation of the competent authority agency or an OCB on the relevant issues and risks such as, but not limited to, pesticides, heavy metals, and nitrate accumulation.

4.2.3 Any of the following written evidence is required to be submitted to grant reduction of the prescribed conversion period:

a) Official attestation from the competent authority agency (national or local) or research institution on non-application of prohibited inputs for the past two years; and
b) Notarized affidavit from two neighbors as proof that the land was cultivated under practices allowed for organic agriculture for the past two years.

4.3 Maintenance of Organic Management

Converted areas and production areas should not be switched back and forth from organic and non-organic management. Exceptions to this may only be made in cases where compelling reasons to cease organic management on the certified organic land are present. In these cases, conversion requirements shall apply.

4.4 Split production and parallel production

If there is a presence of parallel/split production in the unit, the operator shall ensure that:

a) proper demarcation and identification of organically managed production areas are in place. Organically managed production areas shall be inspected for compliance with organic certification;
b) there is a clear boundary between organic and non-organic units including for similar and indistinguishable varieties;
c) organically managed production areas are identifiable and should be inspected for certification; and

d) all farm records and accounting are identifiable for both farming systems.

4.5 Contamination management

4.5.1 Buffer zones shall be established to prevent contamination from non-organic farms. These shall be sufficient in size or other features (e.g., windbreaks or a diversion ditch) to prevent contact by prohibited substances applied to adjacent land areas. These may include but are not limited to, multi-purpose tree species of sufficient density and height, runoff diversions, water filtration ponds and/or diversion systems, and open space.

4.5.2 Products from buffer zones shall not be sold as organic.

4.5.3 In cases of reasonable suspicion of contamination to production areas, crop or produce, soil and/or water analysis of the soil, crop, and/or water shall be done.

4.5.4 All organic produce shall be adequately identifiable throughout the whole process until final labeling.

4.5.5 Farm tools and equipment should be used exclusively in organic farms. If not possible, measures shall be taken to prevent contamination from the use of equipment, including cleaning and keeping and maintaining cleaning records. Cleaning records shall be kept and maintained.

4.5.6 Methods for pollution control and contamination management shall comply with Chapter 3, Articles 1 to 6 of Republic Act (RA) 9003 (The Solid Waste Management Act of 2001*)*.

4.5.7 If wastes and pollutants have been identified, a plan shall be developed and implemented to avoid or reduce wastage and pollution by recycling wastes. Non-recyclable wastes such as batteries, foils, plastics, and others shall be properly disposed to avoid contaminating the organic farm.

4.5.8 Organic management systems shall not use any material and/or products produced from GMO in all stages of organic production and processing.

4.6 Land, soil fertility, and water management

4.6.1 Organic production systems, being soil-based, shall take care of the soil and surrounding ecosystems, in support of increased diversity of species while encouraging nutrient cycling and mitigating soil and nutrient losses.

4.6.2 Tillage and cultivation implements shall be selected and used in a

manner that maintain or improve the physical and biological qualities of the soil and minimize erosion.

4.6.3 The fertility and biological activities of the soil shall be maintained, enhanced, or increased, where appropriate, through:

a) cultural management practices such as incorporating manure and other biodegradable inputs, and/ or by nitrogen fixation from plants;
b) soil fertility management through recycling of organic materials within the production system where possible (e.g., green manuring and composting); and
c) organic soil fertility management through the use of naturally occurring mineral fertilizers, which should only be a supplement to biologically based fertility methods such as green manures and compost.

4.6.4 Organic soil amendments (OSA), as listed in Section A.2 of the DC No. 09, series of 2020 (National list of permitted substances for organic agriculture), shall be the basis of the fertilization program, provided that these follow proper composting methods (if applicable). Any revision/amendment of the list from the competent authority shall be adopted in accordance with the criteria established in DC No. 7, series of 2020 (Guidelines for the establishment, maintenance, and amendment of the national list of the permitted substances for organic agriculture*).*

4.6.5 When the supplementary application of organic fertilizer is needed, the materials shall be certified as organic in conformance with the requirements of the PNS/BAFS 183:2020 (Organic soil amendments).

4.6.6 Application of raw or undecomposed manure shall not be allowed. Manure should undergo proper decomposition methods following PNS/BAFS 291:2019 (Code of practice of the production organic soil amendment).

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4.6.7 Organic crop production systems shall enhance soil primarily by employing cultural management practices, incorporating properly decomposed manure and other biodegradable inputs, and/ or by nitrogen fixation from plants.

4.6.8 Organic and mineral (naturally mined) soil amendments, particularly those with high risk for contamination, shall be applied in such a way that it will have minimum adverse effects on the environment (e.g., on ground and surface waters). Mineral fertilizers shall be applied in their original form and shall not be rendered more soluble by a chemical treatment.

4.6.9 Storage places of manure and compost sites shall be covered or sheltered to prevent the leaching of nutrients and pollution of water.

4.6.10 Organic soil amendment ingredients, which may have a considerable content of heavy metals and/or other toxic substances, shall not be used.

4.6.11 The dyes and growth regulators used shall be prepared from plants, animals, and microorganisms listed in Section A.4 of the DC No. 09, series of 2020 (National list of permitted substances for organic agriculture). These shall only be used for the growth, quality, and development of crops.

4.6.12 Relevant measures shall be taken to prevent soil erosion and ensure water conservation. Appropriate conservation measures, including management practices such as grass waterways, contour strips, diversion canals, catch/filtration ponds, buffers, windbreaks, mulch, and cover crops to prevent wind and water erosion, shall be established.

4.6.13 Reasonable water conservation measures shall be taken to avoid excessive exploitation and depletion of water resources.

4.6.14 Appropriate measures shall be taken to prevent salinization and desertification.

4.6.15 Operators shall not practice land clearing through burning, in compliance with RA 8749 (Philippine Clean Air Act of 1999).

4.7 Choice of crops and varieties

4.7.1 Operators should preserve the genetic integrity of varieties and traditional ecotypes. Use of locally sourced or native varieties should be encouraged. Use of GMO varieties shall be prohibited.

4.7.2 Organic crop production shall use seeds that come from organic agriculture systems when available. The operator shall establish appropriate actions to obtain untreated and organic planting materials through documentation.

4.7.3 Materials allowed for the treatment of seeds include the substances listed in Section A.1 of DC No. 09, series of 2020 (National list of permitted substances for organic agriculture).

4.7.4 Treated seeds shall only be used when required by competent authority authorities as part of phytosanitary regulations necessary to prevent the spread of seed-borne diseases or when natural disasters like floods, drought, earthquakes, pest outbreaks, or other unanticipated circumstances have occurred that may cause the destruction of organic seed supply.

4.7.5 If untreated seeds are not available, only then shall the use of treated seeds be allowed. Prohibited treatments shall be removed from seeds

and planting materials before use. Exemptions shall have time limitations and subject to review.

4.7.6 Seeds derived from tissue culture may be used for the production of organic and disease-free planting materials.

4.7.7 Organic seeds sourced from other countries shall comply with statutory requirements set by the competent authority agency.

4.8 Diversity in crop production

4.8.1 The diversity of crops and cropping systems on organic farms should sustain and promote diversity suited to the local agro-ecosystem. Crop diversification systems should be used such as crop rotation, intercropping, alley cropping, relay cropping, and multi-story cropping.

4.8.2 Organic management shall only engage in actions that do not create any negative impacts in officially recognized high conservation value and heritage areas such as forests wildlife protection areas and watershed areas.

4.8.3 Organic management should maintain and/or enhance biodiversity on the farm holding the crop and where applicable, in non-crop habitats.

4.8.4 Organic crop production should include diversification as an integral part of the farm management system. For perennial crops, this includes the use of plant-based ground cover. For annual crops, this includes the use of crop rotation practices, cover crops (green manures), integrated crop management, intercropping, or other diverse plant production with comparable achievements. Organic crop production systems should produce terrestrial crops in soil-based systems.

4.9 Pest, disease, and weed management

4.9.1 Organic crop production management shall employ interrelated positive processes and mechanisms for the management of pests, diseases, and weeds. These should include but are not limited to site- and crop-adapted fertility management and soil tillage, crop cultural practices, choice of appropriate varieties, and enhancement of functional biodiversity (e.g., planting host plants for beneficial organisms, mulching to control weeds). In case additional measures are required, the operator shall employ thermal controls, use of certified organic crop protectants, and biological control agents and substances included in Section A.3 of the DC No. 09, series of 2021 (National list of permitted substances for organic agriculture).

4.9.2 If preventive methods are inadequate, mechanical/physical, and biological methods should be preferred.

4.9.3 The use of synthetic pesticides (e.g., herbicides, fungicides, insecticides, molluscicides, nematicides, rodenticides, acaricides etc.) shall be prohibited.

4.9.4 Use of natural enemies and predators shall be subject to appropriate existing phytosanitary regulations and measures, as well as national registration requirements.

4.9.5 Physical methods for pest, disease, and weed management shall be allowed. Thermic sterilization of soils to combat pests, disease, and weeds should be restricted in circumstances where a proper rotation or renewal of soil cannot take place.

5 Seed Production

5.1 The operators of organic seed production and nursery management shall comply with the applicable requirements of Clause 4 of this Standard.

5.2 The soil used for potted or container-grown seeds should be from a certified organic production farm. If not, the conversion period in 4.1 of this Standard applies.

5.3 All the organic soil amendments and other planting media used (e.g., carbonized rice hull, coco coir, peat, etc.), shall be in accordance with the PNS/BAFS 183:2020 (PNS on OSA) and Section A.2 of DC No. 09, series of 2020 (National list of permitted substances for organic agriculture).

5.4 Organic management systems shall not use any materials and/or products produced from GMO in all stages of organic seed production and processing.

5.5 The operators of organic seed production should only use organic seeds of good quality.

5.6 In the case of asexual propagation, the source of planting materials used shall be from an organic origin. If there are no organic sources of planting materials available, such shall undergo conversion requirements under 4.1 of this Standard.

5.7 Pest, disease, and weed control for seed production shall comply with the requirements of 4.8 of this Standard. The organic seed production management systems should follow the hierarchy of practices based on this order:

a) preventive methods (e.g., using resistant crop varieties, cultural management, etc.);

b) if preventive methods are inadequate, the next choice for pest control should be mechanical/ physical and biological methods; and
c) if mechanical/physical and biological methods are inadequate for pest control, substances accepted for use in handling, storage, transportation, or processing facilities by the competent authority shall be used and shall not come in contact with the organic seed.

5.8 Appropriate measures shall be practiced to prevent the contamination of the seeds and soil.

5.9 Seed should be harvested at the right maturity. Non-organic and non-distinguishable varieties shall be harvested, processed, and stored separately.

5.10 Only substances included in Section A.1. of DC No. 09, series of 2020 (National list of permitted substances for organic agriculture) shall be used as a seed treatment.

5.11 Seed storage should have the appropriate environmental conditions (e.g., temperature, humidity, etc.) to maintain the quality of the seeds.

5.12 The packaging, storage, and transportation containers shall not contaminate the organic seeds. For example, packaging materials or storage containers that contain a synthetic fungicide, preservative, or fumigant shall be prohibited as well as the use of reused bags or containers that have been in contact with any substance likely to compromise the organic integrity of the seeds.

5.13 Use of packaging materials from biodegradable, recycled, or recyclable sources should be encouraged.

5.14 The practices (e.g., cleaning of the storage facility, pest control in seed storage, etc.) and materials (e.g., organic soil amendments, cleaning agents, tools and equipment, etc.) used in seed production shall be properly documented through record.

6 Mushroom Production

6.1 The operator should use organically produced spawn. Otherwise, non-organically produced spawn may be used provided it has only been treated with substances in DC No. 09, series of 2020 (National list of permitted substances for organic agriculture) and its future amendments and has not been raised on a GMO substrate.

6.2 The operator shall not use chemically treated construction materials for new installations or replacement purposes in contact with the growth substrate.

6.3 The operator shall maintain a production environment that prevents contact between organically produced mushrooms and prohibited substances throughout the entire growing cycle, harvesting and post-harvesting process.

6.4 Substrates shall be composed of any of the following components:

a) products of agricultural origin from farms produced according to organic production methods. If not available, products should only be exposed to substances permitted in DC No. 9, series of 2020 (National list of permitted substances for organic agriculture) and its future amendments;
b) sawdust, logs, or other materials derived from wood used as a growth substrate which have not been treated with wood preservatives after tree harvest;
c) mineral products allowed in DC No. 9, series of 2020 (National list of permitted substances for organic agriculture), water, and soil; and
d) Only sanitizers and disinfectants included in the DC No. 9, series of 2020 (National list of permitted substances for organic agriculture) and its future amendments shall be used for mushroom production.

6.5 In cases of pest infestation, chemical sanitizers and fumigants should be allowed in the farm is as long as it does not have contact with the substrate and the mushroom. The operators shall follow the label instructions on the withholding period and safety precautions.

7 Wild Harvest

7.1 Organic wild harvest operators shall ensure that harvesting does not exceed the sustainable yield of the harvested species or threaten the local ecosystem.

7.2 Organic operators shall harvest produce only from within the boundaries of the clearly defined wild harvest area. The wild harvest area should not have been used for agricultural purposes or have been applied with prohibited substances for at least 18 months.

7.3 Organic wild harvest operators shall exclude systems that are officially protected or endangered species or where the harvest is prohibited by law.

7.4 Wild harvest areas shall be at an appropriate distance from conventional farming, pollution, and other potential sources of contamination.

8 Post-harvest Management

8.1 Post-harvest management shall take measures to prevent contamination and commingling of organic with non-organic produce, for example in the threshing, peeling, cleaning, cooling, cutting, drying, and on-farm packing.

8.2 All organic produce shall be adequately identifiable throughout the whole process until final labeling.

8.3 Post-harvest management, including the use of tools, equipment, and area, should be exclusive to organic produce. If not possible, tools, equipment, and area shall be cleaned to prevent contamination. Cleaning records shall be kept and maintained.

8.4 Post-harvest management should follow the applicable Good Agricultural Practice (GAP) standards and the PNS/BAFS 233:2018 (Code of hygienic practice for fruits and vegetables).

8.5 Only natural ripening agents are allowed, for as long as their application will not deceive consumers of the nature, substance, and quality of the product. Substances listed in DC No. 9, series of 2020 (National list of permitted substances for organic agriculture), where use is explicitly stated as ripening agent, may be used.

9 Processing and Handling of Organic Products

9.1 The integrity of the organic product shall be maintained throughout the processing phase and shall be identifiable throughout the whole process until final labeling.

9.2 Only food additives listed under Section D of DC No. 09, series of 2020 (National list of permitted substances for organic agriculture) shall be used. The level of use shall comply with the latest edition of the CXS 192-1995 (General standard for food additives).

9.3 Compliance with the current FDA AO No. 153, series of 2004 (Current GMP in manufacturing, packing, repacking, or holding food) and its future amendments shall be met in conjunction with the requirements of this Standard.

9.4 The provisions for organic agriculture for processing shall meet the following:

9.4.1 Use of Ingredients

9.4.1.1 Organic processing should only use ingredients from organic agriculture production and postharvest except when they are not available and subject to the labeling requirements of RA 11511 (An act

amending the Republic Act No. 10068 or the Organic Agriculture Act of 2010). The operator shall establish that appropriate actions were undertaken to obtain untreated and organic ingredients through documentation. The same ingredient in a product shall not be derived from both organic and non-organic sources. These ingredients shall not be genetically modified.

9.4.1.2 Organic processing should only use minerals (including trace elements), vitamins, essential fatty acids, essential amino acids, and other isolated nutrients when their use is legally required or strongly recommended by the competent authority in the food products in which they are incorporated.

9.4.1.3 If fortification is required, the use of vitamins and minerals shall be in accordance with RA 8976 (Philippine Food Fortification Act of 2000).

9.4.2 Use of Food Additives and Processing Aids

9.4.2.1 Substances used as processing aids are listed in the DC No. 09, series of 2020 (National list of permitted substances for organic agriculture) and shall be used in accordance with noted conditions. Any revision/amendment of the list from the standard-setting bodies shall be adopted in accordance with the criteria established in DC No. 7, series of 2020 (Guidelines for the establishment, maintenance, and amendment of the national list of the permitted substances for organic agriculture*).*

9.4.2.2 Only natural ripening agents are allowed as long as their application will not deceive consumers of the nature, substance, and quality of the product.

9.4.2.3 The salt and water to be used shall comply with RA 8172 (An act on promoting salt iodization nationwide) and for related purposes, DOH AO 2017-0010 (PNS for drinking water of 2017), and the FDA Circular 2013-007 (Updated standards for iodine level of salt).

9.4.2.4 The use of GMO and its by-products shall be prohibited.

9.4.3 Processing Methods

9.4.3.1 Methods that will be used to process organic products may be biological, physical, and/or mechanical in nature, as may be appropriate.

9.4.3.2 Filtration equipment shall not contain asbestos or utilize techniques or substances that may contaminate the product. Only filtration agents and adjuvants considered as processing aids listed in the DC No. 09, series of 2020 (National list of permitted substances for organic agriculture) shall be used.

9.4.3.3 The use of irradiation shall not be allowed for any ingredient or the final product.

9.4.3.4 Substances and methods should not be used to reconstitute properties lost by the processing and storage of organic products.

9.4.4 Packaging

9.4.4.1 The packaging, storage, and transportation containers used for organic products shall not contaminate the organic product. For example, packaging materials or storage containers that contain a synthetic fungicide, preservative, or fumigant shall be prohibited as well as the use of reused bags or containers that have been in contact with any substance likely to compromise the organic integrity of a product or ingredient placed in those containers.

9.4.4.2 Use of packaging materials from biodegradable, recycled, or recyclable sources should be encouraged.

9.4.5 Pest control

Pest control for organic processing management systems shall follow the hierarchy of practices based on this order:

a) preventive methods;
b) if preventative methods are inadequate, the next choice for pest control should be mechanical/physical and biological methods; and
c) If mechanical/physical and biological methods are inadequate for pest control, substances accepted for use in handling, storage, transportation, or processing facilities by the competent authority agencies shall be used and shall not come in contact with the organic product.

9.4.6 Cleaning, disinfecting, and sanitizing of food processing tools, equipment, and processing facilities

9.4.6.1 Organic management should employ systems for cleaning and disinfecting surfaces, machinery, tools, equipment, and processing facilities that prevent contamination of the organic product.

9.4.6.2 Disinfecting and sanitizing substances that may come into contact with organic products shall be composed of water and substances that are listed in the DC No. 09, series of 2020 (National list of permitted substances for organic agriculture). In cases where these substances are ineffective and other substances are used, these should not come in contact with any organic products.

9.4.6.3 Operations that use cleaners, sanitizers, and disinfectants on food contact surfaces shall use them in a way that maintains the organic integrity of the food. Unless otherwise indicated in the DC No. 09, series

of 2020 (National list of permitted substances for organic agriculture), the operator is required to perform an intervening event between the use of any cleaners, sanitizers, or disinfectant and the contact of the organic food on that surface. Acceptable intervening events include a hot-water rinse, a sufficient flush of organic product that is not sold as an organic product, or adequate time for the substances to volatilize.

9.4.6.4 Operators shall prevent the residues of boiler water additives from direct contact with organic food by using entrained water, filters, traps, or other means that prevent steam in contact with organic foods from carrying such compounds.

9.4.6.5 Operators shall plan and maintain a record of cleaners, cleansers, disinfectants, and sanitizers used in the organic processing management.

10 Storage and Transport

10.1 Measures to prevent contamination with prohibited substances or co-mingling with non-organic produce/product shall be taken during storage and transport, including clear identification and physical separation.

10.2 Pest control for storage shall comply with the requirements of 4.8 of this Standard. The organic produce/product should follow the hierarchy of practices based on the following order of preference:

a) preventive methods;
b) if preventative methods are inadequate, the next choice for pest control should be mechanical/physical and biological methods; and
c) if mechanical/physical and biological methods are inadequate for pest control, substances accepted for use in handling, storage, transportation, or processing facilities by the competent authority shall be used and shall not come in contact with the organic produce/product.

11 Traceability and Recordkeeping

11.1 Each separate production site shall be identified by a name or code. The name or code is placed on the site and recorded on a property map. The site name or code is recorded on all documents and records that refer to the site.

11.2 Operators shall maintain purchase, handling, and processing records, and inventory of all materials used for organic production, processing, and handling as well as finished products.

11.3 Documentation and records shall clearly identify the source, movement, use, and inventory of organic from non-organic materials at all stages of production and/or processing.

11.4 Records, documentation, and accounts shall provide traceability and be made available to the competent authority and certifying bodies for audit trail and traceback verification at any time.

11.5 Abovementioned records (including those related to the use of sub-contractors) shall follow a retention period of at least five years.

12 Labeling

The labeling of organic crops should generally comply with the requirements of the Codex General Standard for the Labelling of Prepackaged Foods (CXS 1-1985, rev. 2018) and General Standard for the Labelling of Non-Retail Containers of Foods (CXS 346-2021). All organic food labeling shall meet additional requirements established by the competent authorities including the following and their future amendments:

a) Republic Act 10068 (Organic Agriculture Act of 2010);
b) Republic Act 11511 (An act amending the Republic Act 10068 or the Organic Agriculture Act of 2010);
c) DC No. 01, series of 2018 (Revised guidelines for the official accreditation of organic certifying bodies); and
d) DC No. 03, series of 2022 (Guidelines for the accreditation of the core PGS and its operation as OCB).

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