

## 1 Scope

This Standard establishes the recommended practices for the organic beekeeping including conversion requirements, colony, and hive management, bee health and welfare management, pest and disease management, harvesting, postharvest, packaging, storage, transport, labeling and recordkeeping to ensure 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 the requirements of this document. The latest edition of the referenced documents (including any amendments) applies:

Bureau of Agriculture and Fisheries Standards (BAFS)-Department of Agriculture (DA). (2016). PNS on Code of Good Beekeeping Practices (PNS/BAFS 186:2016)

BAFS-DA. (2022). Organic crop production, postharvest, and processing (OCPPP) — Code of Practice (COP) (PNS/BAFS 337:2022).

Codex Alimentarius Commission (CAC). (2018). General standard for the labeling of prepackaged foods (CXS 1-1985, rev. 2018).  
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CAC. (2021). General standard for the labelling of non-retail containers of foods (CXS 346-2021, rev. 2021). [https://www.fao.org/fao-who-codexalimentarius/sh-proxy/en/?Ink=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252FStandards%252FCXS%2B346-2021%252FCXS\\_346e.pdf](https://www.fao.org/fao-who-codexalimentarius/sh-proxy/en/?Ink=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252FStandards%252FCXS%2B346-2021%252FCXS_346e.pdf)

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[https://www.da.gov.ph/wp-content/uploads/2022/07/dc03\\_s2022.pdf](https://www.da.gov.ph/wp-content/uploads/2022/07/dc03_s2022.pdf)

Wildlife resources conservation and protection act, Republic Act No. 9147 (2001). [https://lawphil.net/statutes/repacts/ra2001/ra\\_9147\\_2001.html](https://lawphil.net/statutes/repacts/ra2001/ra_9147_2001.html)

3 Terms and Definitions

3.1

**apiary**

bee yard, an area of a collection of hives or colonies of bees kept for their products or pollination services (BAFS-DA, 2016)

3.2

**bee bread**

natural product obtained from the fermentation of bee pollen mixed with bee saliva and flower nectar inside the honeycomb cells of a hive (Bakour et al., 2022)

3.3

**bee pollen**

mixture of bee secretion and pollen collected from the flower (Aylanc et al., 2023)

3.4

**beeswax**

wax secreted from glands on underside of bee abdomen, molded to form honeycombs (BAFS-DA, 2016)

3.5

**colony**

complex society of bees that live together in a nest made of combs; made up of one queen bee, as the only reproductive female in the colony, a few hundred drone bees, and thousands of worker bees. (Food and Agriculture Organization [FAO], 2004, *modified*)

*admitted term: bee colony*

3.6

**comb**

structure manufactured by bees out of beeswax and consisting of circular or hexagon-shaped cells fitted side by side and used by bees to raise brood and store honey and pollen (BAFS-DA, 2016)

*admitted term: pot pollen, pot honey, honeycomb*

3.7

**competent authority**

official government organization/agency having jurisdiction (CAC, 1999). In the context of the DA, competent authority refers to the bureau or agency mandated by law with responsibility and competence for ensuring and supervising the implementation of Sanitary and Phytosanitary (SPS) measures regulations, or standards (BAFS-DA, 2022)

3.8

**conversion**

time between the start of organic management and certification of beekeeping production system as organic (Association of Southeast Asian Nation [ASEAN], 2014, *modified*)

*admitted term: transition period*

**3.9**

**harvesting**

process of collecting bee products from the nest or hive

**3.10**

**labeling**

any written, printed or graphic matter that is present on the label, accompanies the produce/product, or is displayed near the food, including that for the purpose of promoting its sale or disposal (CAC, 2013; ASEAN, 2014)

**3.11**

**organic integrity**

adherence to the principles, objectives, and standards for organic production (ASEAN, 2014)

**3.12**

**pollen**

fine dust-like substances that are the male reproductive cells of flowering plants. Collected by bees as a food source (FAO, n.d.)

**3.13**

**postharvest**

activities performed after the collection of bee products from the nest or hive

**3.14**

**propolis**

resinous substances collected by bees from plant buds, sap flows, or other botanical sources used by them as sealant for unwanted open spaces in the hive (BAFS-DA, 2016)

**4 General Requirements**

The organic beekeeping shall adhere to the following (CAC, 2013):

- a) treatment and management of hives should respect the principles of organic farming;
- b) collection and foraging areas of bees shall be large enough to provide adequate and sufficient nutrition and access to water;
- c) sources of natural nectar, honeydew and pollen shall consist essentially of organically produced plants and/or spontaneous (wild) vegetation;
- d) health of bees should be based on prevention such as adequate selection of breeds, favorable environment, balanced diet and appropriate apiary and colony management practices;
- e) hives shall consist basically of natural materials presenting no risk of contamination to the environment or the bee products; and
- f) when bees are placed in wild areas, consideration should be given to the indigenous insect population, particularly native pollinators.

**5 Specific Requirements**

**5.1 Conversion period**

- 5.1.1** The conversion period shall be 12 months for hived bee colonies (CAC, 2013).
- 5.1.2** The colony with newly introduced queen from non-organic production shall undergo a two-month conversion period.
- 5.1.3** During the conversion period, the wax shall be replaced by organically produced wax or propolis (CAC, 2013). However, in cases where organic beeswax is not available, non-organic beeswax may be used provided that it comes from the cap or from areas where no prohibited materials have been used or is free from any harmful substances.
- 5.1.4** When it is not possible to replace all of the wax during a 12-month period, the certification body or competent authority may extend the conversion period (CAC, 2013).
- 5.1.5** Where no prohibited products have been previously used in the hive, replacement of wax should not be necessary (CAC, 2013).

## **5.2 Origin, choice of species, and selection of bee stock**

- 5.2.1** Introduced bee colonies or queen should come from organic production units when available. In the absence of an organic bee colony or queen, they shall undergo the required conversion period specified in 5.1 of this Standard (CAC, 2013).
- 5.2.2** In the case of feral colonies, only 30% is allowed to be taken from the wild, leaving 70% to conserve genetic resources and the bees. Collecting colonies from the wild may be allowed in accordance with Republic Act No. 9147 (Wildlife Resources Conservation and Protection Act). Proper documentation from the competent authority shall be secured.
- 5.2.3** When choosing the starter colonies, the following shall be taken into account (CAC, 2013):
- a) capacity of bees to adapt to local conditions;
  - b) vitality of bees; and
  - c) resistance of bees to disease.
- 5.2.4** The bee species preferred for use in organic beekeeping may include one or any of the following:
- a) Asian Honeybees:
    - i. *Apis dorsata*;
    - ii. *Apis breviligula*;
    - iii. *Apis cerana*; and
  - b) Stingless bees:
    - i. *Tetragonula* spp.;
    - ii. *Lepidotrigona* spp.; and
    - iii. *Heterotrigona* spp.
  - c) Exotic honeybee species, *Apis mellifera*, may also be considered.
- 5.2.5** The starter colonies shall be sourced from apiaries that are free from pests (e.g., mites, hive beetles) and diseases (e.g., American Foul Brood, European Foul Brood, Virus diseases, fungal diseases).

5.2.6 Importation of *Apis mellifera* queens may be allowed from countries with no known Africanized Honeybee (AHB) populations and colony collapse disorder (CCD).

5.2.7 Importation of *Apis cerana*, stingless bees, and solitary bee species shall be prohibited.

### 5.3 Hive material and design

5.3.1 The hives shall consist primarily of natural materials (non-chemical treated timber).

5.3.2 Corrugated or metal plates may be used for the external hive covers.

5.3.3 The use of synthetic chemicals, paints, or varnishes on the internal surfaces of the hive shall be prohibited. Non-toxic, food-grade coatings may be used on external surfaces to protect against weathering, provided they do not affect the bees or bee product quality.

5.3.4 Recycled materials may be used only if they are free from pathogenic spores and contaminants such as paints, varnish, and wood treatment chemicals.

5.3.5 Hive design shall support natural bee behaviors, allowing space for brood, honey and bee pollen or bee bread storage, and ventilation. Proper ventilation is essential to prevent moisture build-up and reduce disease risks.

5.3.6 Hives shall be designed to allow easy inspection, maintenance, and honey harvesting without disturbing the colony excessively.

5.3.7 The hive entrance and structure shall minimize the risk of pests or predators and allow easy access for bees.

5.3.8 Regular hive maintenance shall be required to ensure structural integrity and prevent contamination from damage, moisture build-up, and pest infestation, with immediate corrective actions taken as necessary.

### 5.4 Location of colonies or apiaries

5.4.1 Hives should be positioned in a manner that protects them from direct exposure to extreme weather conditions while allowing access to adequate sunlight and partially shaded, depending on the climate.

5.4.2 Hives should be placed in areas where there is a minimal disturbance from human activity, noise, or artificial lighting, which may stress the bees.

5.4.3 Regular hive maintenance shall be free of prohibited chemicals

5.4.4 Hived colonies shall be located in organically managed fields and/or wild natural areas within a three (3) kilometer radius away from fields or other areas where prohibited chemicals (such as chemical pesticides and herbicides) are used, and Genetically Modified Organisms (GMO) crops are cultivated. For stingless bees and giant honeybees, a 500-meter radius and 5 km radius, respectively, shall be recommended away from inorganic farms.

**5.4.5** The distance between hives and rows should be considered to prevent robbing of stores.

**5.4.6** Only “warm” (yellow colored) light bulbs shall be used in the apiary sites and foraging areas.

## **5.5 Colony or apiary management**

### **5.5.1 Mutilations and other invasive practices**

**5.5.1.1** Mutilations, such as clipping of the wings of queen bees, shall be prohibited (CAC, 2013).

**5.5.1.2** Other practices that disrupt natural bee behavior or compromise welfare shall be prohibited in organic beekeeping. This includes the marking queens with harmful substances. While marking queens with non-toxic, safe paint is permitted, the use of potentially harmful or toxic substances for marking is prohibited.

### **5.5.2 Supplemental feeding**

**5.5.2.1** Hives shall be left with reserves of honey and bee pollen at the end of the production season for the colony to survive the dormancy period (CAC, 2013).

**5.5.2.2** Supplemental feeding with honey, pollen, or organic sugar should be done during dearth period or when pollen and nectar are not sufficient and temporary feed shortages due to climatic or other exceptional circumstances (CAC, 2013).

**5.5.2.3** The feed shall come from organic sources such as reserves of honey and pollen left during harvesting. In cases that organic sources are not available, the certification body or competent authority may permit the use of non-organically produced honey or sugars (CAC, 2013).

### **5.5.3 Colony conservation and stability**

Beekeepers shall retain a minimum of 20% of the honeycomb or stored food as reserves to ensure adequate nutrition for the bees during forage scarcity or dearth period.

## **5.6 Bee health and welfare management**

**5.6.1** The health of bee colonies should be maintained by good agricultural practices, with emphasis on disease prevention through the following breed selection and hive management (CAC, 2013):

- a) use of hardy breeds that adapt well to the local conditions;
- b) replacement of queen bees, if necessary;
- c) regular cleaning and disinfecting of equipment;
- d) regular replacement of comb;
- e) availability of sufficient pollen and honey in hives;
- f) systematic inspection of hives to detect any anomalies;
- g) systematic control of male broods in the hive; and
- h) moving diseased hives to isolated areas, if necessary, or destruction of contaminated hives and materials.

- 5.6.2** Beekeepers shall use preventive health measures to reduce the likelihood of disease and pests, prioritizing management practices that promote natural resilience and immunity in bee colonies. Preventive measures may include providing diverse and organic forage resources, regular hive maintenance, and hygiene practices.
- 5.6.3** The use of synthetic chemicals and antibiotics in organic beekeeping shall be strictly prohibited.
- 5.6.4** Beekeepers should prioritize non-chemical methods for pest and disease control, such as maintaining hive cleanliness, genetic selection for resilience, and fostering favorable environmental conditions.
- 5.6.5** Approved organic treatments shall be used if preventive measures are inadequate, provided that these treatments do not compromise the organic integrity of the hive products.
- 5.6.6** The use of practices that disrupt colony stability, such as excessive hive inspections or other intrusive methods, shall be limited to what is necessary for colony health and product quality.
- 5.6.7** Regular cleaning of hives and equipment shall be required to prevent disease spread and support colony health. Only permitted cleaning agents listed in DC 09, series of 2020 (National list of permitted substances for organic agriculture) shall be used, and residues shall not compromise hive product quality. Cleaning records shall be kept, maintained, and updated.

## **5.7 Pest and disease control**

- 5.7.1** Pest control shall follow the hierarchy of practices based on this order (BAFS-DA, 2022):
- a) preventive methods (e.g., cultural 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, the following measures to control pest and diseases shall be allowed (CAC, 2013):
    - i) lactic acid, formic acid;
    - ii) oxalic acid, acetic acid;
    - iii) sulfur;
    - iv) natural essential oils (e.g., menthol, eucalyptol, camphor);
    - v) *Bacillus thuringiensis*; and
    - vi) steam, direct flame, and caustic soda for hive disinfection.
  - d) Where the allowed substances listed above are inadequate, veterinary medicinal products may be used provided that (CAC, 2013):
    - i) preference is given to phytotherapeutic and homeopathic treatment;
    - ii) treated hives shall be placed in isolation and undergo a conversion period of 12 months. All the wax shall be replaced with organically produced wax; and

- iii) every veterinary treatment shall be clearly documented and recorded.
    - e) Other substances accepted for use in facilities by the competent authority shall be used and shall not come in contact with the organic bee products.
- 5.7.2** The practice of destroying the male brood should be permitted only to contain infestation with *Varroa jacobsoni* and *Tropilaelaps* spp.(CAC, 2013).

## 5.8 Harvesting

- 5.8.1** Harvesting of bee products shall be in conformance with the following subclauses of PNS/BAFS 186:2016 (PNS on Code of Good Beekeeping Practices):
- a) 4.5.5 (Honey harvesting and storage);
  - b) 4.5.6 (Harvesting of bee pollen)
  - c) 4.5.7 (Harvesting of beeswax);
  - d) 4.5.8 (Harvesting of propolis); and
  - e) 4.5.9 (Harvesting of royal jelly).
- 5.8.2** The use of chemical synthetic repellents and destruction of bees in the combs as a method of harvesting of bee products shall be prohibited (CAC, 2013).
- 5.8.3** Acceptable smoking materials shall be natural or from materials that may not cause any contamination to the hive colonies and bee products such as coconut husk, dried leaves, and wood chips (CAC, 2013).
- 5.8.4** Harvested honey shall conform with the PNS/BAFS 185:2022 (Honey — Product Standard — Specification) and its future amendments.

## 5.9 Postharvest

- 5.9.1** Organic management shall employ systems for cleaning and disinfecting surfaces, tools, equipment, and the postharvest facilities that prevent contamination of the organic bee products.
- 5.9.2** Disinfecting and sanitizing substances that may come into contact with organic bee 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 shall not come in contact with any organic products.
- 5.9.3** Postharvest tools and equipment shall be sterilized or thoroughly cleaned with hot water prior to processing.
- 5.9.4** Surfaces in direct contact with the organic bee products shall be sterilized.
- 5.9.5** Beekeepers and traders shall ensure that organic and non-organic products are handled separately at every stage of post-harvest activities to avoid commingling and cross-contamination.

## 5.10 Packaging, storage, and transport



- 5.10.1 The packaging, storage, and transportation containers used for organic products shall not contaminate the organic bee product.
- 5.10.2 Packaging materials shall be food-grade, non-toxic, and protective of the product’s organic integrity.
- 5.10.3 Packaging materials and storage containers that contain a synthetic fungicide, preservative, or fumigant 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 shall be prohibited.
- 5.10.4 Use of preservatives, synthetic additives, or colorants that could affect the organic nature of the product shall be prohibited.
- 5.10.5 Use of packaging materials from biodegradable, recycled, or recyclable sources should be encouraged, provided that they maintain integrity of organic bee products.
- 5.10.6 The integrity of the organic bee products shall be maintained and identifiable throughout the duration from storage to transportation. Measures to prevent contamination with prohibited substances or commingling with non-organic shall be taken during harvest up to transport to processing facility of organic bee products, including clear identification and separation (i.e., physical and time-based).
- 5.10.7 Storage facilities should maintain stable conditions, protecting the products from extreme temperature, and pest exposure.
- 5.10.8 Any chemicals, cleaning agents, or substances that could compromise organic integrity shall be kept away from storage areas.
- 5.10.9 Organic bee products shall be transported in sealed, clearly labeled containers, ensuring traceability throughout the supply chain.
- 5.10.10 Vehicles used for transport of organic bee products shall be cleaned prior to loading to eliminate any residues from prohibited substances.

## 6 Labeling

- 6.1 The labeling of organic bee products should generally conform with the requirements of PNS/BAFS 384:2024 (Packaged primary and postharvest foods — Product standard — General standard labelling) and its future amendments.
- 6.2 All organic food labeling shall meet additional requirements established by the competent authorities including the following and their future amendments:
  - a) Republic Act No. 11511 (An act amending the Republic Act 10068 or the Organic Agriculture Act of 2010);
  - b) Republic Act 10068 (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)

**7      Record keeping and Traceability**

- 7.1**      Recordkeeping and traceability of organic beekeeping and its products shall be in conformance with Item a of the 4.5.10 (Records and traceability) of PNS/BAFS 186:2016 (PNS on Code of Good Beekeeping Practices) and its future amendments.
- 7.2**      Each apiary site and/or colony shall be designated by a unique name or code, clearly displayed on-site and documented on a property map. The site name or code shall be recorded on all documents, and records related to the apiary to ensure traceability.
- 7.3**      Beekeepers shall maintain records of purchase, handling, harvesting, processing, packaging, transport, repair and maintenance of hives, and inventory of all materials used for organic production as well as finished products.
- 7.4**      Beekeepers shall maintain detailed records of all health management practices, such as pests and diseases, preventive measures, any treatments, including dates, methods, and substances used as identified in 5.6 (Bee health and welfare management) of this Standard. Records shall be maintained and be made available for inspection and verification to ensure compliance with organic standards.
- 7.5**      All records (including those related to the use of sub-contractors) shall follow a retention period of at least 5 years.

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