Standard

SKIM ORGANIK MALAYSIA (SOM)

Malaysian Organic Scheme

Department Of Agriculture

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Contents

INTRODUCTION

Organic agriculture is one of the many methodologies that are supportive of the environment. It is a holistic production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles and soil biological activity. Certified organic production is based on specific and precise standards of crop production which aim at achieving optimal agro-ecosystems which are socially, ecologically and economically sustainable. One of these standards is the Standard for Skim Organik Malaysia (SOM), which is published by the Department of Agriculture Malaysia.

The SOM standard is a standard that sets out the requirements for the production of, the labelling and claims for organically produced foods. The requirements cover all stages of production, including farm operations, preparation, storage, transport and labelling.

STANDARD

The standard of Organic Agriculture for Skim Organik Malaysia (SOM) is based on the **Malaysian Standard MS 1529:2001** – ***The production, processing, labelling and marketing of plant based organically produced foods.*** In addition to this, the SOM Standard also encompasses rules or criteria which are derived from specific legal provisions of national laws to control hazards that impact the environment, food safety and workers' health and safety.

SCOPE

The SOM standard applies to farms of unprocessed plants and plant products which are intended to carry a descriptive labelling referring to organic production methods. It does not cover the downstream processed products which are derived from the unprocessed plants and plant products.

Certification for organic production under SOM is attained if the farm conforms to the requirements of the SOM Standard. The requirements of the SOM Standard are listed in this document.

DEFINITIONS

The following definitions are used in this document.

TERM	DEFINITION
Biodiversity	The variety of life form and ecosystem types on Earth. 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)
Buffer zone	A clearly defined and identifiable boundary area bordering an organic production site that is established to limit application of, or contact with, prohibited substances from an adjacent area
Certification	The procedure by which the certification body gives written assurance that a clearly identified production and handling processes have been methodically assessed, such that adequate confidence is provided that specified products conform to specified requirements
Conversion period	The time between the start of the organic management and the certification of crops as organic
Farm unit	The total area of land under the control of one farmer or collective of farmers, and including all the farming activities or enterprises
Genetic engineering	Genetic engineering is a set of techniques from molecular biology (such as recombinant DNA) by which the generic material of plants, animals, micro-organisms, cells and other biological units may be altered in ways or with result that could not be obtained by methods of natural mating and reproduction of natural recombination. Techniques of genetic modification include, but are not limited to: recombination DNA, cell fusion, micro and macro injection, encapsulation, gene deletion and doubling. Genetically engineered organisms do not include organisms resulting from techniques such as conjugation, transduction and natural hybridization
Genetically Modified Organism (GMO)	A crop, animal, or microbe that is transformed by genetic engineering
Green manure	A crop that is incorporated into the soil for the purpose of soil improvement. May include spontaneous crops, plants or weeds

TERM	DEFINITION
Operator	An individual or business enterprise, responsible for ensuring that products meet the certification requirements
Organic	Organic refers to the farming system and products described in these standards and not to “organic chemistry”
Organic product	A product which has been produced, processed, and/or handled in compliance with organic standards
Organic seed and plant material	Seed and planting material that is produced under certified organic management
Parallel production	Any production where the same unit is growing or handling the same products in both a certified organic system and a non-certified or non-organic system. A situation with “organic” “and in conversation” production of the same product is also parallel production. Parallel production is a special instance of partial production
Partial conversation or split production	Where only part of farm or unit is certified as organic. The remainder of the property may be (a) non-organic, (b) in conversion or (c) organic but not certified
Synthetic	Manufactured by chemical and industrial processes. May include products not found in nature, or simulation of products from natural sources (but not extracted from natural raw materials)

SOM Standard

NO.	ELEMENTS
1	**Traceability**
	Organic produce shall be traceable to the farm where it has been originally produced
2	**Record Keeping**
	All records kept by the farm shall be up to date and maintained, with all essential elements captured as provided for in the farm record required by the SOM Secretariat
3	**General Production Management**
3.1	**General Ecosystem Management**
3.1.1	Cultivation shall be carried out in accordance to land, soil, water, fertility and pesticide management to minimize negative impact on crops, land quality and the environment
3.1.2	Clearing and encroachment of gazetted forest reserve ecosystems or cultural heritage areas for organic agriculture production are prohibited
3.1.3	Measures to maintain natural habitats inclusive of watercourses, wetlands and lakes to improve landscape and enhance biodiversity quality should be taken. For holdings more than 50 ha, operators should set aside areas for habitats of diverse plants and animals
3.1.4	For the opening up of new areas of more than 50 ha, operators shall submit an approved EIA report to the SOM Secretariat
3.1.5	Plastics, scrap metal, paper and other non biodegradable wastes shall not be incorporated into the soil
4	**Responsibility for Organic Integrity**
4.1	Operators are responsible for the integrity of their organic production and products throughout the entire chain of custody within the scope of their management
4.2	Operators shall train and inform workers as well as all involved parties about compliance to applicable standards and certification requirements
5	**Conversion**
5.1	**Conversion Period**
5.1.1	Farms must undergo a conversion period of at least two years of organic production from conventional farming and at least one year for virgin jungle and organic farming. It may only begin once a production unit has been placed under an inspection system. The period may be extended or reduced in the light of previous use of the land. Reduction shall not reduce conversion period to less than 12 months

NO.	ELEMENTS
5.1.2	The conversion period may be extended for land, according to the history of land use, e.g. intensive use of chemicals, on a case by case basis
5.1.3	Operators shall comply to all applicable requirements of this standard during the conversion period
5.1.4	Production during the conversion period shall not be sold as organic
5.1.5	The application date for certification shall be the starting date of the conversion period
5.2	**Partial Conversion**
5.2.1	Partial conversion shall only be permitted where all fields, i.e. conventional, in-conversion and organic fields, shall be clearly separated with a buffer zone and identified at all times and there is a management system in place to ensure the integrity of the organic fields and products
5.3	**Parallel Production**
5.3.1	Similar crops shall not be cultivated in a conventional field, an in-conversion field and an organic field on the same holding unless the varieties differ in such a way that they are easily distinguished, e.g. different shape/form, color, etc
5.3.2	Exception to 5.3.1 shall be made, subject to the following criteria: a) The organic and non-organic crops are harvested at different times or dates, and control measures to ensure no mixing is possible b) The organic and non-organic products are handled separately and control measures to ensure no mixing is possible c) Clear separate accounting and audit trail for the organic and non-organic products are maintained
5.4	**Switching Between Organic and Conventional Production**
5.4.1	Changing or switching fields or lands between organic and conventional production can only be allowed with the written permission from the certification body
5.4.2	Changing or switching fields or lands between organic and conventional production is prohibited except in cases where a) Previous registered organic fields are no longer under the management of the operator, or b) There are compelling reasons to cease organic management on the registered organic field/land in question, and c) The change or switching of fields will allow better management of the organic part of the holding
6	**Buffer Crop and Buffer Distance**
6.1	Operators shall take action to prevent or minimize the risk of contamination of prohibited or undesirable materials used on lands next to registered organic fields or crops
6.2	Where the risk of contamination of prohibited materials from an adjoining land is evident, the operator shall establish a buffer area or crop to prevent contamination

NO.	ELEMENTS
6.3	Where applicable, the buffer distance (width) between an organic field and non-organic field shall be established according to the following: a) The nature of the potential contamination b) The nature of the life or built barrier, drainage and land altitudes and c) Location between the operator and a neighbor's boundary or within the operator's holding (partial conversion)
6.4	The certifying authority shall be contacted to determine the applicable buffer distances between an operator and a neighbor's field
6.5	Operators shall be required to extend the buffer distance in cases of exceptional risk of contamination
6.6	Buffer areas within the operator's boundary shall be managed according to these standards. Buffer crops shall not be sold as organic products
6.7	Similar crops shall not be cultivated in buffer areas and an organic field on the same holding. The choice of buffer crop should be suitable to prevent potential contamination such as pesticide spray drift
7	**Land and Soil Management**
7.1	A farm layout shall be prepared for production planning
7.2	Farms shall take reasonable and appropriate measures to minimize loss of topsoil through minimal tillage, contour plowing, crop selection, maintenance of cover crops and other management practices that conserve soil
7.3	Land clearing and preparation through burning vegetation, e.g. slash and burn, shall only be allowed and restricted to the minimum when other measures are not feasible
7.4	Burning of crop residues, e.g. straw burning is prohibited except in case of need to control a serious insect or disease infestation
7.5	The fertility and biological activity of the soil should be maintained or increased, using appropriate methods by a) cultivation of legumes, green manures or deep-rooting plants in an appropriate multi-annual rotation programme, b) incorporation in the soil of organic material, composted or not, from holdings producing in accordance with this standard
7.6	The farm management shall demonstrate that it has legal rights to the cultivation of the land and all necessary regulatory approvals
8	**Water Management**
8.1	Operators shall take reasonable and appropriate measures to prevent excessive and improper use of water
8.2	Operators shall take reasonable and appropriate measures to prevent the pollution of ground and surface water
8.3	Organic handlers shall install systems that permit the responsible use and recycling of water without pollution or contamination either by chemicals, or by animal or human pathogens. Water shall be analysed at least once in two years

NO.	ELEMENTS
8.4	Untreated sewage water is prohibited for use
9	**Crop Production**
9.1	**Seeds and Planting Material**
9.1.1	Use of genetically modified organisms (GMOs) and products thereof is prohibited in all aspects of organic production and handling without exception
9.1.2	Seeds and vegetative reproductive material should be from plants grown in accordance with the provisions of this standard for at least one generation or in the case of perennial crops, two growing seasons
9.1.3	Use of conventional seed and planting material is only allowed where there is no organic seed or propagation material of the appropriate sort available
9.1.4	Seeds and propagation material shall not be treated with prohibited substances. Exceptions should be allowed where there is no untreated seed or propagation material of the appropriate sort available
9.1.5	Where varieties protected under the Plant Variety Protection Act are used, the farm shall respect intellectual property right legislation
9.2	**Fertility Management**
9.2.1	Crop production systems shall return nutrients, organic matter and other resources removed from the soil through harvesting by recycling, regeneration and addition of organic matter and nutrients with respect to the nutrient requirement of crops and the nutrient balance of the soil
9.2.2	Operators shall plan their fertility management to maximize the use of plant and animal organic matter produced within the farm and minimized the use of brought-in organic materials or mineral fertilizers
9.2.3	Where applicable in annual crop production, an appropriate green manure crop shall be included in the crop rotation plan to maintain organic matter content and soil fertility
9.2.4	Organic materials and mineral fertilizers shall not be used if their production and use have an unacceptable impact on the environment
9.2.5	Allowance on the maximum amount of brought-in organic materials and mineral fertilizers used in the farm, shall be established on a case by case basis taking into account local conditions and the nature of the crop
9.2.6	Imported microbial innoculum used for enhancing soil fertility shall undergo quarantine procedures before used
9.3	**Soil Conditioners and Fertilization Material**
9.3.1	The permitted organic materials and mineral fertilizers are listed in Appendix 1
9.3.2	Organic materials and mineral fertilizers not listed in Appendix 1 should be allowed according to Appendix 3

NO.	ELEMENTS
9.3.3	On farm and brought-in composts and mineral fertilizers used in compost production are permitted if they are listed in Appendix 1
9.3.4	Use of organic material (plant and animal) from conventional systems should be allowed where there is no organic material from organic systems are available
9.3.5	Organic industrial by-products should be allowed if they are not contaminated with non-permitted substances or other contaminants exceeding applicable health and sanitary regulations
9.3.6	Animal manures shall not be used directly on food crops, unless they have been composted or measures are taken to prevent risk of contamination exceeding applicable health and sanitary regulations
9.3.7	Use of human and pig excrement is prohibited
9.3.8	Poultry manure from battery production systems should be allowed if manure from non-battery based production systems (e.g. free range) is not available
9.3.9	Use of trace element should only be allowed as supplements and only where exhaustive measures to maximize the use of plant and animal organic matter produced within the farm as well as brought-in organic materials have been taken
9.4	**Growth Hormones and Others**
9.4.1	Synthetic growth hormones and similar substances are prohibited
9.5	**Prevention and Control of Pest, Disease and Weeds**
9.5.1	Pest, diseases and weeds shall be controlled by cultural, mechanical, physical and biological methods
9.5.2	Use of inputs for pest, disease, weed control and plastic mulch material shall be allowed only where cultural, biological and mechanical measures are ineffective under the production condition in question. Spent plastic mulch material shall be disposed or properly and not ploughed back into the soil
9.5.3	Use of plant waste material from conventional systems shall be allowed for mulching where there is no plant material from organic systems of the appropriate sort available. e.g : paddy straw, grasses, oil palm leaves etc
9.5.4	If mechanical/physical and biological methods are inadequate for pest control, farms shall only used permitted substances which appears in Appendix 2
9.5.5	Where the substances are restricted, the conditions of use as set by the certification body shall be strictly adhered by the farm
9.5.6	Use of pesticides not listed in Appendix 2 is prohibited unless its use is approved by appropriate authorities

NO.	ELEMENTS
9.5.7	All substances used for pest control shall comply with the relevant national regulations
9.5.8	Farms shall used the approved substances with care and abide with their conditions of use, so as to avoid altering the ecosystem of the soil and farm
9.6	**Equipment**
9.6.1	Farm equipment shall be cleaned before use on organic fields if they are used for conventional production. Where appropriate, operators are required to record the use of such equipment and their cleaning routine
9.6.2	Spraying equipment used for prohibited materials shall not be allowed, provided it is properly cleaned
10	**Handling**
10.1	**Harvesting**
10.1.1	Hygienic protocol for workers appropriate to a particular farm produce should be put in place in order to prevent physical, microbiological and chemical contamination
10.1.2	Farm produce from fields of partial conversion and conventional shall be clearly identified, distinguished and label at all times to prevent co-mingling of organic produce
10.2	**Post Harvest**
10.2.1	Portable water shall be used for washing of produce
10.2.2	Waste from handling shall be managed so as to have minimum effect on the environment. Where appropriate, organic waste shall be used for nutrient recycling in production fields
10.2.3	Based on risk assessments, source of water for post harvest washing shall be analyzed at least once in two years for microbial, chemical and mineral pollutants to ensure that it is potable
10.2.4	Use of synthetic additives and irradiation to prolong storage or shelf life is prohibited
11	**Storage**
11.1	**General Storage**
11.1.1	Operators shall be responsible for all storage and handling within and outside the operator’s unit up to the time of sale
11.1.2	Operators shall ensure that all storage and handling work done by others on their behalf meet applicable standards
11.1.3	All equipments, containers and handling facilities shall be cleaned and hygienic measures taken to prevent contamination from undesirable and prohibited substances

NO.	ELEMENTS
11.1.4	Handling of organic and conventional produce shall only be permitted if the operator has a management system in place that can ensure the integrity of the organic products according to these standards
11.1.5	Fertilizers shall not be stored with organic produce
11.2	**Storage of Organic Products**
11.2.1	Organic products shall be labelled and protected at all times from co-mingling with non-organic products
11.2.2	Organic products shall be protected at all times from contact with materials and substances not permitted for use in organic farming and handling
11.2.3	Organic produce shall not be stored together with non-organic products unless they can be clearly identified, separated and adequate measures are in place to prevent mixing
11.2.4	Bulk storage for organic product shall be separated from conventional product storage and clearly labelled
11.2.5	Storage areas for organic products shall be cleaned using methods and materials permitted in organic production
11.2.6	Measures shall be taken to prevent possible contamination from any pesticide or other treatment not listed in Appendix 2 before using a storage area or container that is not dedicated solely to organic products
11.2.7	Good manufacturing practices within storage area, packaging area and transport container shall be practiced to control infestation of pest
11.2.8	All permanent product packaging and storage sites shall have adequate pest control measures, particularly in areas of product handling and storage of packaging material
12	**Packaging**
12.1	Materials used for packaging shall comply to food standard
12.2	Packaging materials used for food products shall be clean and hygienic
12.3	Packaging materials shall not be treated with undesirable or prohibited substances
12.4	Environmentally friendly packaging material should be used where possible
12.5	Organic produce shall not be kept in containers, packaging or wrapping material in which conventional produce have previously been kept, unless these have been carefully cleaned
12.6	PVC and other chlorine based plastics are prohibited unless alternatives are unavailable.

NO.	ELEMENTS
12.7	Styrofoam is prohibited for use as packaging that is in direct contact with the organic produce
13	**Transport**
13.1	Transportation of organic products shall not be done together with non-organic products unless they can be clearly identified and labelled, separated and adequate measures are in place to prevent contamination or mixing
13.2	Transport and transport containers for organic products shall be cleaned using methods and materials permitted in organic production
13.3	Operators shall ensure that all transportation work done by others on their behalf meet this standard as in 14.1 and 14.2
14	**Workers' Health, Safety and Welfare**
14.1	**Action Plan**
14.1.1	There should be an action plan to promote safe and good working conditions
14.2	**Training**
14.2.1	Training shall be given to workers operating dangerous or sophisticated equipments
14.2.2	Record of training for each employee shall be kept
14.2.3	Workers and operators should receive basic training in hygiene requirements for the handling of organic produce
14.3	**Facilities and Equipment**
14.3.1	First aid boxes shall be available at permanent sites on the farm
14.3.2	Hazards should be clearly identified by warning signs where appropriate
14.3.3	Accident and emergency procedures shall be available with clear instructions to all workers and these procedures shall be displayed and shall be in the appropriate language of the workforce
14.3.4	Workers shall have access to clean toilet and washing facilities in the vicinity of their work
14.4	**Welfare**
14.4.1	All employment conditions shall comply with local and national regulations
14.4.2	If on-site living quarters are provided, they shall be habitable and have basic amenities and facilities
14.4.3	All premises should be kept clean at all times to avoid establishing a breeding ground for pests

NO.	ELEMENTS
14.4.4	Employees shall be made aware of the requirement to notify management should they contract any transferable diseases, which may render them unfit to work in the vicinity of produce destined for human consumption
15	**Analysis of Produce**
15.1	All products shall be analysed for pesticide residue and heavy metal content
16	**Waste Management**
16.1	Having identified wastes and pollutants, a plan should be developed and implemented to avoid or reduce wastage and pollution by recycling the waste
16.2	Whenever possible, land filling or burning should be avoided
17	**Record of Complaints**
17.1	Record of complaints and remedial actions on non compliance to the requirements in the standard should be kept by the producers

APPENDICES

Appendix 1. Substances for use in soil fertilizing and conditioning

SUBSTANCE	DESCRIPTION; COMPOSITIONAL REQUIREMENTS; CONDITIONS FOR USE
Farmyard manure	Only composted/processed farmyard manure is allowed. Human waste and pig waste are strictly prohibited
Slurry or urine	Fresh slurry or urine are not allowed. Fully fermented slurry is allowed as supplements
Guano	Fresh guano is not allowed
Crop and vegetable residues, mulch, green manure, straw	Crop and vegetable residues must be fully composted. Mulch material must be dried before use. Green manure and straw can be incorporated directly into the soil
Compost made from ingredients listed in this appendix, spent mushroom waste, humus from worms and insects, urban composts from separated sources which are monitored for contamination	Humus from worm (vermicompost) and insects are allowed. Spent mushroom waste must be composted. Commercial/ urban compost is allowed if not fortified with synthetic additives or GMOs and amount use is within acceptable heavy metal content limits
Biodegradable processing by-products of microbial, plant or animal origin, e.g. by product of food, oil palm, coconut and cocoa (including empty fruit bunch, palm oil mill effluent (pome), coco peat and empty cocoa pods), feed, oilseed, brewery, distillery or textile processing	Allowed if amount use is within acceptable heavy metal content limits
Seaweed and seaweed products	Allowed if amount use is within acceptable heavy metal content limits
Wood, bark, sawdust, wood shavings, wood ash, wood charcoal from untreated wood	Allowed if amount use is within acceptable heavy metal content limits
Natural phosphates	Only mined natural rock phosphates is allowed e.g. CIRP, Jordan Rock Phosphate

SUBSTANCE	DESCRIPTION; COMPOSITIONAL REQUIREMENTS; CONDITION OF USE
Basic slag	Allowed if amount use is within acceptable heavy metal content limits
Mineral potassium (e.g. sulphate of potash, kainit, sylvanite, patentkali)	Must be from natural sources only
Calcareous and magnesium amendments	Must be from natural sources only
Magnesium rock, kieserite and epsom salt (Magnesium sulphate)	Allowed
Gypsum of natural origin (calcium sulphate)	Allowed
Sodium chloride	Allowed
Trace elements (e.g. boron, copper, iron, manganese, molybdenum, zinc)	Allowed only in restricted amount (refer to 9.3.9 in the SOM Standard)
Sulphur	Allowed
Pulverised rock, stone, meal	Allowed. Shall be from natural sources only
Clay (e.g. bentonite, perlite, zeolite)	Allowed
Vermiculite	Allowed
Peat	Allowed. Shall be from natural sources and not fortified with synthetic additives
Chloride of limestone	Allowed. Shall be from natural sources only

Appendix 2. Substances for plant pest and disease control

SUBSTANCE	DESCRIPTION; COMPOSITIONAL REQUIREMENTS; CONDITIONS FOR USE
I. Plant and Animal	
Preparations on basis of pyrethrins extracted from *Chrysanthemum cinerariaefolium*, containing possibly a synergist	Allowed
Preparations of Rotenone from *Derris elliptica, Lonchocarpus, Thephrosia spp*.	Allowed
Preparations from *Quassia amara*	Allowed
Preparations from *Ryania speciosa*	Allowed
Preparation of Neem (Azadirachtin) from *Azadirachta indica*	Allowed
Propolis	Allowed
Plant oils	Allowed
Seaweed, seaweed meal, seaweed extracts, sea salt and salty water	Allowed if not fortified with synthetic additives
Gelatine	Allowed if not from animal origin
Lecithin	Allowed if not from animal origin
Casein	Allowed if not from animal origin
Natural acids (e.g. vinegar)	Allowed
Fermented product from Aspergillus	Allowed
Extract from mushroom (Shiitake fungus)	Allowed
Extract from Chlorella	Allowed
Natural plant preparations, excluding tobacco	Allowed

SUBSTANCE	DESCRIPTION; COMPOSITIONAL REQUIREMENTS; CONDITIONS FOR USE
Tobacco tea (except pure nicotine)	Restricted
II. Mineral	
Inorganic compounds (Bordeaux mixture, copper hydroxide, copper oxychloride)	Allowed
Burgundy mixture	Allowed
Copper salts	Allowed in natural form
Sulphur	Allowed in natural form
Mineral powders (stone meal, silicates)	Allowed
Diactomaceous earth	Allowed
Silicates, clay (Bentonite)	Allowed
Sodium silicate	Allowed
Sodium bicarbonate	Allowed
Potassium permanganate	Allowed
Paraffin oil	Allowed
III. Micro-organisms used for biological pest control	
Micro-organisms (bacteria, viruses, fungi) e.g. *Bacillus thuringiensis*, Granulosis virus, etc	Only approved micro-organisms are allowed. Imported micro-organisms must be approved by authority
IV. Other	
Carbon dioxide and nitrogen gas	Allowed
Potassium soap (soft soap)	Allowed
Ethyl alcohol	Allowed

SUBSTANCE	DESCRIPTION; COMPOSITIONAL REQUIREMENTS; CONDITIONS FOR USE
Hemeophatic and Ayurvedic preparations	Allowed
Herbal and biodynamic preparations	Allowed
Sterilised insect males	Allowed
Pheromone preparations	Allowed
Preparations on the basis of metaldehyde containing a repellent to higher animal species and as far as applied in traps	Allowed

Appendix 3. Requirements and criteria for inclusion and development of permitted substances in Appendix 1 & Appendix 2

1. At least the following criteria should be used for the purpose of amending the permitted substance lists. These include products whose use are established in organic agriculture as well as new products.

2. Any new substance must meet the following general criteria :

   a) It is consistent with principles of organic production

   b) Each input is necessary or essential for its intended use which cannot be satisfied by other alternatives

   c) Use of substance does not result in, or contribute to, harmful effects on the environment including soil organism

   d) It has the lowest negative impact on human or animal health and quality of life; and

   e) Approved alternatives are not available in sufficient quantity and/or quality.

3. The above criteria are intended to be evaluated as a whole in order to protect the integrity of organic production. In addition, the following criteria should be applied in the evaluation process :

   a) If the substances are used for fertilization, soil conditioning purposes :

      i. They are essential for obtaining or maintaining the fertility of the soil or to fulfill specific nutrition requirements of crops, or specific soil-conditioning and rotation purposes

      ii. The ingredients will be of plant, animal, microbial, or mineral origin and may undergo the following processes: physical (e.g. mechanical, thermal); enzymatic; microbial; and

      iii. Their use do not result in, or contribute to, unacceptable effects on, or contamination of, the environment, including soil organisms; and

      iv. Their use has no unacceptable effect on the quality and safety of the final

   b) If these substances are used for the purpose of plant disease or pest and weed control :

      i. they should be essential for the control of a harmful organism or a particular disease for which other biological, physical, or plant breeding

alternatives and/or effective management practices are not available, and

ii. substances should be plant, animal, microbial, or mineral origin and may undergo the following processes: physical (e.g. mechanical, thermal); enzymatic; microbial (e.g. composting, digestion) ;

iii. their use does not result in, or contribute to, unacceptable effects on, or contamination of, the environment; and

iv. however, if they are products used, in exceptional circumstances, in traps and dispensers such as pheromones, which are chemically synthesized, they will be considered for addition to the lists if the products are not available in sufficient quantities in their natural form, provided that the conditions for their use do not directly or indirectly result in the presence of residues of the product in the edible parts.

4. Because of the primary purpose of providing a list of permitted substances, the lists in Appendix 1 & Appendix 2 are open and subject to the inclusion of additional substances or the removal of existing ones on an ongoing basis. In the case where a stakeholder proposes inclusion of a substance to the lists, the stakeholder should submit a detailed description of the product and the conditions of its envisaged use.

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