
Appendix B:

Permitted, Restricted, and Prohibited Materials and Practices

Notification of changes to permitted, restricted, and prohibited materials and practices

Note that in general BioGro can only allow materials and practices which are allowed under all relevant international organic regulations and standards, including all export market regulations and the IFOAM Basic Standards. When there are changes in these regulations and standards, including clarifications and changed interpretations of them, then BioGro notifies these changes to all BioGro licensees with the required implementation period for that/those change(s). Such notifications override the allowed materials and practices listed in this Appendix and elsewhere in these Standards.

B1 Permitted materials and practices

B1.1 Definition

“Permitted” means materials, products and practices that are acceptable for relevant and reasonable use in/on any certified production/property. Applicants and licensees must list all permitted materials, products or practices they intend to use in their annual Organic Management Plan, and have this list approved by BioGro, or request specific approval prior to use. In addition, all inputs (a formulation of one or more materials) can only be used if they are certified by BioGro, or approved in writing by BioGro, at the time of use.

B1.2 Fertility Management

The objective of fertility management is to ensure that adequate levels and mixtures of nutrients are available to plants, animals and soil flora and fauna.

Addition of organic matter shall not lead to pollution of surface or subterranean waters.

Plants, and hence animals, shall not be subject to excessive nitrate levels from organic matter additions.

B1.3 Manures

Raw livestock manures, including those from the certified property if collected, must be composted. Exceptions, such as returning own certified dairy shed or certified pig house effluent to own paddocks, must be approved in advance, either as part of BioGro's approval of the Organic Management Plan or a separate written approval from BioGro.

B1.4 Composts and mulches

Compost ingredients that are obtained from conventional sources must go through a hot-composting process that is acceptable to and approved by BioGro. Documentation must be obtained to ensure that such ingredients do not contain unacceptable contaminants such as pesticide residues, heavy metals, and GMOs. Refer *BioGro Compost Guide*.

Mulching material from conventional sources must not have had any prohibited substances applied directly to it and documentation must be supplied to BioGro to confirm this. Residue tests may be required by BioGro.

B1.5 Biological activators

The following are permitted (refer B1.1):

- Bio-dynamic preparations
- Microbial activators
- Plant-based preparations

B1.6 Fertilisers

The underlying principle is that all fertilisers should be worked on by soil or compost organisms before the nutrients are plant assimilable.

The following are permitted (refer B1.1):

- dolomite
- feldspar
- fish products i.e. fish meal and fish liquids

Note: fish liquids may not be allowed for all markets.

- glauconite
- gypsum
- humates: only natural mined products are allowed.

Note: acid or alkali extracted humates are not allowed.

- limestone
- mineral deposits: e.g. ulexite
- phosphate rock: includes reactive phosphate rocks. Cadmium content must be less than 90 mg cadmium per kg of P₂O₅.
- plant and herbal extracts
- potassium sulphate: only natural mined products are allowed
- rock dusts: e.g. dunite, magnesite, chalk, serpentine, basalt
- salt: unrefined, unadulterated rock salt or sea salt
- seaweed and seaweed extracts
- sulphur: either natural or elemental. May be pelletised with bentonite

B1.7**Pest and disease management**

Pests and diseases shall be managed by protecting and encouraging beneficial fauna through the provision of favourable habitats, i.e. hedges, shelterbelts, rough grass areas, nesting sites etc., through the use of good soil management practices, and by the selection of suitable crops and varieties.

Where these methods are not providing sufficient pest and disease control the following materials and practices are permitted provided that their use does not result in or contribute to unacceptable effects on or contamination of the environment.

The following are permitted (refer B1.1):

- Biodynamic preparations and peppers
- bentonite

Note: may not be allowed for all markets.

- biological controls: e.g. introduction of parasites, predators, and disease organisms
- diatomaceous earth

Note: may not be allowed for all markets.

- disease organisms: e.g. *Bacillus thuringiensis* (Bt) products
- homeopathic preparations

Note: some forms may not be allowed for all markets.

- microbial products
- natural acids: e.g. citric acid, natural vinegar

Note: may not be allowed for all markets.

- pheromone products: must not be sprayed directly onto the crop
- plant and herbal extracts: e.g. garlic preparations

Note: some forms may not be allowed for all markets.

- potassium bicarbonate

Note: for growing of winegrapes only, and may not be allowed for all markets.

- soft soaps (potassium based soaps).

Note: may not be allowed for all markets.

- salt water

Note: may not be allowed for all markets.

- vegetable oils

B1.8 Animal health remedies

The following are permitted (refer B1.1):

- herbal, naturopathic, and homeopathic therapies and remedies.

B1.9 Vegetation control

The following are permitted (refer B1.1):

- mechanical techniques; and
- thermal techniques.

B1.10 Cleaning agents

Operations that use cleaners, sanitizers, and disinfectants on food contact surfaces must use them in a way that maintains the food's organic integrity.

The operator must perform an intervening event between the use of any cleaner, sanitizer, or disinfectant and the contact of organic food with that surface sufficient to prevent residual contamination of that organic food.

- citric acid (except prohibited for use as a disinfectant for beehives);
- hydrogen peroxide (except prohibited for use as a disinfectant for beehives);
- soda ash;
- soft and hard soaps; and
- thermal sterilisation.

B1.11 Water

Water used for irrigation and stock watering must be of appropriate quality. Optimum application rates should be used for irrigation, and all equipment, such as pipes, troughs etc., maintained to avoid problems such as wastage, leaching of soil nutrients, soil structural damage and soil erosion.

B1.12 Plastic coverings and netting:

Plastic structure coverings, mulches, fleeces, insect and bird netting, and silage and other livestock feed wrapping, can only be made from products based on polyethylene, polypropylene, or other polycarbonates. These must be removed from the soil and certified land after use, and must not be burned on the certified land.

B2 Restricted materials and practices

B2.1 Definition

“Restricted” means materials, products and practices that may be used but only in accordance with the principles specified in these Standards. Each year there must be a reduction in dependence on restricted materials and they may be used only until more acceptable alternatives are available

Applicants and licensees must list all restricted materials, products and practices they intend to use in their annual Organic Management Plan, and have this list approved by BioGro, or request specific approval prior to use. In addition, all inputs (a formulation of one or more materials) can only be used if they are certified by BioGro, or approved in writing by BioGro, at the time of use.

B2.2 Fertilisers

Materials in this list should not be the sole source of fertility. Soil and/or foliar tests are required as evidence of the need for restricted inputs.

BioGro certified/approved forms of the following:

- animal byproducts such as blood, bone, meat meal, and feathers. Blood, bone, and meat meal products can not be applied to pasture, and if applied to a crop or orchard then that land can not be grazed by livestock for at least 6 months.
 - calcium chloride: only the natural form produced by the brine process is allowed, and may only be used for foliar treatment of apple trees where calcium deficit will affect fruit quality.
 - langbeinite rock
 - magnesium sulphate (Epsom salts): only natural mined products are allowed.
 - potassium chloride: only natural mined products are allowed.
 - trace elements (also called micronutrients): soluble boron compounds, sulphates, carbonates, oxides, or silicates, including these forms chelated with non-synthetic agents of cobalt, copper, iron, manganese, molybdenum, selenium and zinc.
 - wood ash: only from untreated wood, and must not be contaminated or mixed with prohibited materials.
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B2.3 Pest and disease control

BioGro certified/approved forms of the following:

- copper in the forms of copper hydroxide, copper oxychloride, copper sulphate, cuprous oxide, and copper octanoate. Total applications of copper must not exceed 3 kg copper active ingredient per hectare per year
- hydrated lime
- lime sulphur
- mineral oils
- neem
- *Pyrethrum cinerifolium*, without the synergist piperonyl butoxide
- quassia
- ryania

Note: may not be allowed for all markets.

- sodium bicarbonate: i.e. baking soda.

Note: may not be allowed for all markets.

- spinosad
- sulphur

B2.4 Thermic sterilisation of soils

Permission may be given by BioGro on a case by case basis.

B2.5 Vegetation control

- Approved plant oils.
- Burning off crop residues. Burning off crop residues can only be done with prior written permission of BioGro and will only be granted in cases of real need such as for disease control.

B2.6 Cleaning agents

- caustic soda

B2.7 Interim animal health remedies

Proprietary animal health remedies may be used subject to all the requirements of *Module 5 Livestock Production Standard*. Selection of products should be based on those with the shortest withholding period.

B2.8 Quarantine periods**B2.8.1 Treated certified stock**

All certified stock on the property that are treated with an interim animal health remedy consequently lose certification (refer *Module 5 Section 4.7.3 g*), and must be kept in the designated quarantine area for at least 48 hours. All such treatments must be clearly documented on an *Animal Treatment Record Sheet*.

B2.8.2 Incoming uncertified stock

The following requirements must be met for all uncertified livestock brought onto the property (other than up to 2-day old chicks):

- all stock must be clearly and permanently marked; and
- all treatments administered in the three months prior to the stocks' arrival on the certified property must be recorded; and
- at least double the withholding period must have elapsed since any livestock health treatments they have received in the last 3 months; and
- the stock must be quarantined for at least 48 hours on the quarantine paddock of the certified farm; and
- dates of quarantining must be recorded.

B2.9 Quarantine area

A quarantine area shall be clearly designated in the farm plan. This is a designated area of the property where livestock can be run for the duration of the required quarantine period.

B2.9.1 Use of quarantine area

The quarantine area may not be used for the production of certified crops. It may be grazed only by livestock which will not be sold for meat for at least 12 months, or will not be producing any certified progeny or products for at least 6 months, e.g. breeding sires, heifers, replacement ewe lambs. The quarantine area may be used to make supplementary feed such as hay and silage, provided the feeding of this complies with the maximum allowances specified in *Module 5 Livestock Production Standard* section 4.4.3 i.

When no longer required as a quarantine area, part or all of the quarantine area can commence conversion as from the date of its last use as a quarantine area, and after 12 months conversion that land may take the status of the lowest status land on the farm.

B2.9.2 Withholding periods

It is in the interests of the producer to use interim animal health products that have the shortest possible withholding periods, so that the smallest possible area is required as a quarantine area.

B2.10 Treated timber

Use of timber treated with arsenate and/or other prohibited materials is a restricted practice and requires BioGro written approval. All alternatives must be evaluated first.

Note that properties producing certified products to be exported to US (including products which will be ingredients of processed products to be exported to US) must comply with USDA National Organic Program (NOP) requirements for treated timber.

B3 Prohibited materials and practices, and spray equipment

B3.1 Definition

Except as otherwise provided in these Standards, all other materials are prohibited from use on/in certified properties/production unless prior written approval has been received from BioGro. Except where so agreed to by BioGro, their use will cancel an existing BioGro certification and the property may be required to go through a conversion period before certification is regained.

Chilean nitrate fertilisers are specifically prohibited.

All synthetic pesticides are specifically prohibited.

Irradiation is specifically prohibited as a processing aid and as a pest and disease control measure in food processing and handling.

B3.2 Storage of prohibited materials

Except for properties with partial certification, no prohibited materials (apart from interim animal health remedies) may be stored on a BioGro certified property.

For properties with partial certification, prohibited materials must be stored in an area separate from where organic products are handled, and may not be stored on the certified area.

B3.3 Use of equipment for spraying

The objective, when using spraying equipment, is to minimise the risk of contamination of certified properties and crops with either prohibited or restricted materials. The onus will be on the operator/BioGro applicant to demonstrate that they have adopted adequate management practices to minimise the potential for contamination with prohibited materials from spraying equipment.

B3.3.1 Dedicated spray equipment

The aim should be to use spray equipment that is dedicated to organic use.

B3.3.2 Second hand or non-dedicated spray equipment

Spray equipment (no matter who owns it) that has had prohibited materials used in it at any time must be approved and cleaned out using the cleaning directions given below or another cleaning process approved in writing by BioGro prior to use on a certified property.

a. Cleaning directions

Spray equipment that has had prohibited materials in it, and which is to be used on a certified property, must go through the following steps, or another cleaning process approved in writing by BioGro:

- i. fill tank with cold tap water and with the hose continuing to run, activate the sprayer and leave running for 10 minutes;
- ii. drain, refill with tap water and add alkaline detergent at 500g/100 litre (or with the addition of washing soda that has been dissolved in hot water, at 100g/100 litre final concentration) circulate for 10 minutes, then flush with clean tap water;
- iii. drain and refill, circulate a 1 percent solution of household ammonia and then leave to stand for 24 hours before flushing out with clean water; and
- iv. drain and refill, circulate a 1 percent solution of chlorine bleach containing 3 percent sodium hypochlorite then flush out with clean water.

b. Cleaning flushings

Flushings must be disposed of in accordance with the local district plan.

Flushings must **not** be disposed of:

- anywhere on any certified property;
- anywhere where it is likely to contaminate surface or groundwater; or
- on any natural and/or unfarmed areas.

B3.4

Treated timber

Note that properties producing certified products to be exported to US (including products which will be ingredients of processed products to be exported to US) must comply with USDA National Organic Program (NOP) requirements for treated timber.