

New Zealand Food Safety Authority
PO Box 2835, Wellington, New Zealand

NZFSA Standard OP3, Appendix Two:

*NZFSA Technical Rules for
Organic Production*

November 2006 Version Six

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RULES OF ORGANIC PRODUCTION

1.0 INTRODUCTION

- 1.1 Originally issued in draft form as an extract (with MAF/NZFSA comments) in July 2000 from the relevant EU Regulation, and subsequently amended to incorporate United States National Organic Standard requirements, this document describes the scope and rules of production applying to NZFSA standards for giving official assurances of organic production to importing countries. It includes details of requirements for complying with NZFSA Standards OP1, OP2, and OP3.
- 1.2 It has been updated to take account of New Zealand law, for instance on food safety or animal welfare, other related standards and definitions, local production patterns and the like, rather than relying almost exclusively on the EU and US sources. This also takes into account that other markets are likely to seek official assurances of organic production from NZFSA as the relevant New Zealand Government agency.
- 1.3 The *Rules* are envisaged as the Third Party Agency's (TPA) main reference point for what is required of organic production. In the absence of a New Zealand national standard it will be the yardstick against which the TPA will undertake verification and put forward a recommendation on official assurances on organic products intended for export under the NZFSA programme.
- 1.4 In many instances organic production methods already in existence in New Zealand may be compatible with the overseas requirements. TPAs may designate a standard of production already in existence in New Zealand to verify against. In these instances an independent review of the designated standard against the *Rules* will be required.
- 1.5 TPAs need to be fully conversant with the details of the *Rules* relevant to the style of organic production they are verifying.
- 1.6 Entry into organic production involves a transition or conversion period from "conventional" to an organic system, and verification of this conversion process also forms a part of the requirements to be met.
- 1.7 These are the minimum requirements for organic production, and operators may choose to adopt higher standards.

Interpretations and/or changes to this document will be co-ordinated by NZFSA, on recommendation from the Organic Technical Committee. NZFSA interpretations may be added where clarification of the rules is required.

- 1.8 Proposals for dispensation will be accepted by NZFSA, provided it can be demonstrated to NZFSA's satisfaction that the required outcomes will be achieved.

- 1.9 Some organic products may not need an official organic assurance in order to gain access into an overseas market covered by this programme e.g. organic salt.

2.0 SCOPE

- 2.1 The *Rules* apply to the following products, produced and processed in accordance with New Zealand law, where such products bear, or are intended to bear, indications referring to the organic production method, and will be assessed for compliance with the NZFSA official organic assurance programme:
- (a) unprocessed agricultural plant and animal products and animals, to the extent that principles of production and specific inspection rules for them are introduced in the detailed rules of production which follow (from Section 5 onwards);
 - (b) processed agricultural plant and animal products intended for human or animal consumption derived mainly from one or more ingredients of plant and/or animal origin as defined in (a).
- 2.2 A product will be regarded as bearing indications referring to organic production methods where, in the labelling, advertising material or commercial documents, the product, or its ingredients, are described by the terms *organic*.
- 2.3 Organic Products not included in 2.1 (a) or 2.1 (b) may be issued with an official organic assurance if the requirements of NZFSA Standards OP1, OP2 and OP3, including these Technical Rules, have been met, unless they are specifically excluded (reference point 1.10).

3.0 DEFINITIONS

3.1 In addition to definitions set out in the *Guide*, OP1, OP2, and OP3, for the purposes of the *Rules*:

3.2 **Agricultural Compound** means any substance, mixture of substances, or biological compound, used or intended for use in the direct management of plants and animals, or to be applied to the land, place, or water on or in which the plants and animals are managed, for the purposes of--

- (a) Managing or eradicating pests, including vertebrate pests; or
- (b) Maintaining, promoting, or regulating plant or animal productivity and performance or reproduction; or
- (c) Fulfilling special nutritional requirements; or
- (d) The manipulation, capture, or immobilisation of animals; or
- (e) Diagnosing the condition of animals; or
- (f) Preventing or treating conditions of animals; or
- (g) Enhancing the effectiveness of an agricultural compound used for the treatment of plants and animals; or
- (h) Marking animals;--

and includes any veterinary medicine, any substance, mixture of substances, or biological compound used for post-harvest pest control or dis-infestation of raw primary produce, and any substance, mixture of substances, or biological compound declared to be an agricultural compound for the purposes of the Agricultural Compounds and Veterinary Medicines Act 1997.

NOTE: This definition encompasses the following terms:
animal feeds, compound feeds, feed additives, fertilisers, plant protection products, veterinary medicinal products as used in these *Rules*.

3.3 **Carriers**, including carrier solvents: food additives used to dissolve, dilute, disperse or otherwise physically modify a food additive without altering its technological function in order to facilitate its handling, application or use;

3.4 **Conventional feeds/feed materials** means feeds/feed materials not produced under these *Rules*.

3.5 **Flavouring**: substances and products authorised for use in food intended for human consumption;

3.6 **Food additive** means any substance not usually consumed as a food by itself that is added to food in small quantities in order to affect the food's keeping quality, texture, consistency, appearance, odour, taste, alkalinity, or acidity, or to serve any other technological function in the manufacture, processing, preparation, treatment, packing, packaging, transport or storage of the food, and that results or may be reasonably expected to result (directly or indirectly) in the substance or any of its by-products becoming a component of, or otherwise affecting the characteristics of, the food; and includes any preservative, antioxidant, colouring substance, artificial

sweetener, flavouring substance, food conditioner, anticaking agent, gaseous packing agent, propellant, vitamin, mineral, incidental constituent, or processing aid, and any material that is used in the production of a package and becomes a component of, or otherwise affects the characteristics of, any food packed in the package; but does not include salt, or any foodstuff;

- 3.7 **Genetically modified organism (GMO)** means, unless expressly provided other wise by regulations, any organism in which any of the genes or other genetic material- (a) Have been modified by *in vitro* techniques; or (b) Are inherited or otherwise derived, through any number of replications, from any genes or other genetic material which has been modified by *in vitro* techniques. (1) Organisms not to be regarded as genetically modified: (a) Organisms that result solely from selection or natural regeneration, hand pollination, or other managed, controlled pollination; (b) Organisms that are regenerated from organs, tissues, or cell culture, including those produced through selection and propagation of somaclonal variants, embryo rescue, and cell fusion (including protoplast fusion or chemical or radiation treatments that cause changes in chromosome number or cause chromosome rearrangements); (c) Organisms that result solely from artificial insemination, super ovulation, embryo transfer, or embryo splitting; (d) Organisms modified solely by – (i) The movement of nucleic acids using physiological processes, including conjugation. Transduction, and transformation; and (ii) Plasmid loss or spontaneous deletion; (e) Organisms resulting from a spontaneous deletions, rearrangements, and amplifications within a single genome, including its extra chromosomal elements. (2) Despite anything in sub clause (1)(d), if nucleic acid molecules produced using *in vitro* manipulation are transferred using any of the techniques referred to in subparagraph (i) or subparagraph (ii) of sub clause (1)(d), the resulting organism is a genetically modified organism. (Hazardous Substances and New Organisms Act 1996).
- 3.8 **GMO derivative:** any substance which is either produced from or produced by GMOs, but does not contain them;
- 3.9 **Homeopathic veterinary medicinal products** mean a veterinary medicinal product prepared by a process of solution, extraction or titration of an active ingredient followed by strict regimented serial dilution.
- 3.10 **In-conversion feeds/feed materials** means feeds/feed materials complying with these Rules except for the conversion period where the *Rules* apply for at least one year before the harvest;
- 3.11 **Ingredients of agricultural origin** are:
- (a) single agricultural products and products derived therefrom by appropriate washing, cleaning, thermic and/or mechanical processes and/or by physical processes having the effect of reducing the moisture content of the product;
 - (b) also, products derived from the products mentioned under (a) by other processes used in food processing, unless these products are considered food additives or flavourings as defined under points 3.5 or 3.6 hereunder.
- 3.12 **Ingredients of non-agricultural origin** are ingredients other than ingredients of agricultural origin and belonging to at least one of the following categories:

- food additives, including carriers for food additives, as defined in 3.3 and 3.6;
 - flavourings, as defined in 3.5;
 - water and salt;
 - micro-organism preparations
 - minerals (including trace elements) and vitamins.
- 3.13 **Labelling** means any written, printed or graphic matter that is present on the label, or accompanies the product or is displayed near the product including that for the purpose of promoting its sale or disposal.
- 3.14 **Marketing** means holding or displaying for sale, offering for sale, selling, delivering or placing on the market in any other form;
- 3.15 **Operator** means a natural or legal person or business entity who has completed the registration process with a Third Party Agency and has the day to day management and/or contractual control of an Organic Management Plan;
- 3.16 **Organically produced feeds/feed materials** means feeds/feed materials produced in accordance with these *Rules*;
- 3.17 **Preparation** means the operations of preserving and/or processing of agricultural products, (including slaughter and cutting for livestock products), and also packaging and/or alterations made to the labelling concerning the presentation of the organic production method of the fresh, preserved and/or processed product;
- 3.18 **Production** means the operations on the agricultural holding involved in producing, packaging and initially labelling as products of organic production, agricultural products produced on that holding;
- 3.19 **Use of GMOs and GMO derivatives** means use thereof as foodstuffs, food ingredients (including additives and flavourings), processing aids (including extraction solvents), animal feeds, compound feeds, feed materials, feed additives, processing aids for feeds, certain products used in animal nutrition, plant protection products, veterinary medicinal products, fertilisers, soil conditioners, seeds, vegetative reproductive material and livestock;

4.0 RULES OF PRODUCTION: GENERAL REQUIREMENTS TO BE MET PRIOR TO SEEKING OFFICIAL ORGANIC ASSURANCES

4.1 Organic production means that for the production of products referred to in other than seeds and vegetative propagating material:

- (a) at least the requirements of Sections 5, 6 and 7 and, where appropriate, the detailed rules relating thereto, must be satisfied;
- (b) only products composed of substances mentioned in Section 5 or listed in Tables 1 to 6 may be used as plant protection products, fertilisers, soil conditioners, animal feeds, feed materials, compound feeds, feed additives, substances used in animal nutrition, cleaning and disinfecting products for animal buildings and installations, products for pest and disease control of animal buildings and installations, or for another purpose where such purpose is specified in Tables 1 to 6 in regard to certain products. They may be used only under the specific conditions laid down in Sections 5, 6 and 7 and Tables 1 to 6 in so far as the corresponding use is authorised in general agriculture in New Zealand law;
- (c) only seed or vegetative propagating material produced by the organic production method referred to in 4.2 is used;
- (d) genetically modified organisms and/or any product derived from such organisms must not be used, with the exception of veterinary medicinal products.
- (e) For additional rules specific to the USA market please refer to point 1.1 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

4.2 Organic production means that for seeds and vegetative reproductive material, the mother plant in the case of seeds and the parent plant(s) in the case of vegetative propagating material have been produced:

- (a) without the use of genetically modified organisms and/or any products derived from such organisms, and
- (b) in accordance with 4.1 (a) and (b) for at least one generation or, in the case of perennial plants, two growing seasons.

The youngest propagating material should be sourced for all practical purposes.

Seeds and vegetative propagating material not obtained by organic production may, with NZFSA approval, be used provided that operators can show to the satisfaction of their TPA that they were unable to obtain on the market propagating material for an appropriate variety of the species in question and satisfying the requirements of 4.2. In that case, propagating material is to be used which, if treated, uses only products listed in Table 2.

If however, seed or propagating material cannot be successfully obtained without the use of products other than those listed in Table 2, the TPA may apply to NZFSA for dispensation to use a product not listed in Table 2.

Seeds not obtained by organic production cannot, under any circumstance, be used to harvest edible sprouts.

5.0 RULES OF PRODUCTION: PLANT AND PLANT PRODUCTS

- 5.1 The principles set out in this Section must normally have been applied on the parcels of land during a conversion period of at least two years before sowing or, in the case of perennial plants other than grassland, at least three years before the first harvest of products as referred to in 2.1(a).

The TPA may, with NZFSA approval, decide, in certain cases, to extend or reduce that period, having regard to previous parcel use. In particular, the conversion period may be reduced to the strict minimum in situations where the parcels have been treated with a product not included in Table 2 (pesticides) as part of a mandatory pest or disease control scheme in respect of a specific plant. In these instances:

The reduction in the conversion period must take account of the following points:

- the parcels were already converted or were undergoing conversion to organic farming; and
- the degradation of the plant protection product concerned must result in a level of residue in the soil, and in the plant where the plant is a perennial, which is undetectable using current methods, and
- Products of the harvest following treatment are not eligible for certification under the official organic assurance programme.
- In case of newly developed fields or fields not farmed for no less than two years, NZFSA may appropriately reduce conversion period only after careful consideration, provided that TPA confirms that prohibited substances have not been applied to those fields for two years.

For additional rules specific to the USA market please refer to point 1.1 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

- 5.2 The fertility and the biological activity of the soil must be maintained or increased, in the first instance, by:
- cultivation of legumes, green manures or deep-rooting plants in an appropriate rotation programme;
 - incorporation of animal manure from organic animal production within the

restrictions of Section 6.7.2, in accordance with the provisions of these *Rules*. By-products from animal farming such as farmyard manure may be used if they come from animal holdings respecting organic animal production principles recognised in New Zealand.

- incorporation of other organic material, composted or not, from holdings producing according to these *Rules*.

For additional rules specific to the USA market please refer to point 1.2 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

5.3 Other organic or mineral fertilisers, mentioned in Table 1, may exceptionally, be applied, as a complement to the extent that:

- adequate nutrition of the crop being rotated or soil conditioning are not possible by the methods set out under 5.2,
- with regard to the products in Table 1 referring to manure and/or animal excrements: these products may only be used to the extent that, in combination with the animal manure referred to in 5.2, the restrictions of Section 6.7.2 are satisfied.

For additional rules specific to the USA market please refer to point 1.2 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

5.4 For compost activation, appropriate plant-based preparations or preparations of micro-organisms, not genetically modified, may be used. So-called “biodynamic preparations” from stone meal, farmyard manure or plants may also be used.

5.5 Appropriate preparations of micro-organisms, whose use is legally permitted, and which are not genetically modified, may be used to improve the overall condition of the soil or the availability of nutrients in the soil or in the crops, where the need for such use has been recognised by the TPA.

5.6 Pests, diseases and weeds shall be controlled by a combination of the following measures:

- choice of appropriate species and varieties,
- biological control
- appropriate rotation programmes,
- soil solarisation (the plastic must be re-used and picked up once it has deteriorated beyond use);
- mechanical controls such as traps, barriers;
- light and sound;

- mechanical cultivation procedures,
- mulching and mowing;
- grazing of animals;
- protection of natural enemies of pests through provision of favourable habitats (e.g. hedges, nesting sites),
- flame weeding/ steam weeding (mobile units only which minimise soil damage, and only for use on emerged plants).

For additional rules specific to the USA market please refer to point 3.1 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

5.7 Only in cases of immediate threat to the crop may recourse be had to products referred to in Table 2.

5.8 The collection of edible plants and parts thereof, growing naturally in natural areas, forests and agricultural areas, is considered an organic production method provided that:

- those areas have received no treatments with products other than those referred to in Tables 1 and 2 for a period of three years before the collection.
- the collection does not affect the stability of the natural habitat or the maintenance of the species in the collection area.

5.9 For production of mushrooms, substrates may be used, if they are composed only of the following components:

- farmyard manure and animal excrements (including the products referred to in Table 1:
 - either from holdings operating an organic management plan;
 - or satisfying the requirements referred to (for animal wastes) in the first four entries in Table 1, only up to 25 %^(*), and only when product in the previous dash-point sub-paragraph is not available;
- products of agricultural origin, other than those covered under the first bullet point of this 5.9 (e.g. straw), from organic production operations;
- peat not chemically treated;
- wood, not treated with chemical products after felling;

For additional rules specific to the USA market please refer to point 1.3 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

- mineral products in Table 1, water and soil.

(* This percentage is calculated on weight of total components of the substrate (excluding the covering material and any added water) before composting.

6.0 RULES OF PRODUCTION: ANIMALS AND ANIMAL PRODUCTS

6.1 General principles

- 6.1.1 Species covered are: bovine (including *Bubalus* and bison species), porcine, ovine, caprine, cervine (i.e. farmed deer only), equidae, poultry, and ostriches and emus. Animal products from aquaculture are not, however, included, at this stage.
- 6.1.2 Animal production forms an integral part of many agricultural holdings practising organic farming. It must contribute to the equilibrium of agricultural production systems by providing for the nutrient requirements of plants and by improving the soil's organic matter. It can thus help establish and maintain soil-plant, plant-animal and animal-soil interdependence. As part of this concept, landless production (see 6.1.4 below) is not regarded as organic production.
- 6.1.3 By utilising renewable natural resources (animal manure, legumes and fodder crops), the cropping/stockfarming system and grazing systems allow soil fertility to be maintained and improved in the long term and contributes to the development of sustainable agriculture.

For additional rules specific to the USA market please refer to point 1.2 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

- 6.1.4 Organic animal farming is a land-related activity. Except where authorised by way of exception in this Section 6, animals must have access to a free-range area and the number of animals per unit of area must be limited to ensure integrated management of livestock and crop production on the production unit, so minimising any form of pollution, in particular of the soil and of surface and ground water. The number of animals must be closely related to the area available in order to avoid problems of over-grazing and erosion and to allow for the spreading of animal manure so that any adverse effect on the environment can be avoided. Detailed rules on the use of animal manure are set out in Section 6.7.
- 6.1.5 To be eligible for official organic assurances, all animals on one production unit must be reared in accordance with these *Rules*.
- 6.1.6 However, animals not so reared may be present on the holding provided they are on units where the buildings and parcels are separated clearly from the organic operation, and a different species is involved.
- 6.1.7 Animals not reared in accordance with these *Rules* can use, for a limited period of time each year, the pasture of complying organic units, provided that such animals have had normal access to pastoral grazing (and not intensive husbandry). Other animals reared for organic production are not to be present on this pasture at the same time. This procedure must be authorised beforehand by the TPA. Guidelines on

stocking density where animal manure from the operation is spread on pasture are set out in Table 7.

- 6.1.8 Animals reared in accordance with these *Rules* may be grazed on common land (not generally a concept recognised in New Zealand), providing that:
- (a) the land has not been treated with products other than those allowed for in Tables 1 and 2, for at least three years;
 - (b) any animals grazing this land, which are not from an organic operation, have had normal access to pastoral grazing (and not intensive husbandry) ;
 - (c) any animal products produced by animals from an organic operation, while using this land, shall not be regarded as being from organic-production, unless the TPA is satisfied there has been adequate segregation from other animals not so reared.

6.2 Conversion

For additional rules specific to the USA market please refer to point 1.1 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

Conversion of land associated with organic livestock production

- 6.2.1 Where a production unit is converted to organic production, the whole area of the unit used for producing animal feed must comply with these *Rules*, using the conversion periods established in Section 5 relating to plants and plant products.
- 6.2.2 The conversion period may be reduced to one year for pasture, open air runs and exercise areas used by non-herbivore species. This period may be reduced to six months where the land concerned has not, in the recent past, received treatments with products other than those referred to in Section 8 of these *Rules*. This reduction must be authorised by NZFSA.

Conversion of animals and animal products

- 6.2.3 If animal products are to be certified as organic products, the animals must be reared according to these *Rules* for at least:
- 12 months in the case of equidae, (cervine (i.e. farmed deer) and bovines (including *Bubalus* and bison species) for meat production, and in any case at least three quarters of their lifetime,
 - six months in the case of small ruminants and pigs;
 - six months in the case of animals for milk production;
 - 10 weeks for poultry for meat production, brought in before they are three days old,

- six weeks in the case of poultry for egg production.

For additional rules specific to the USA market please refer to point 2.1 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

Simultaneous conversion

6.2.4 By way of exception to 6.4.3 and 6.4.5, if there is simultaneous conversion of the complete production unit, including animals, and any land used for grazing and/or animal feed, the total combined conversion period is reduced to 24 months subject to the following conditions:

a) the exception applies only to the existing animals and their offspring and the land used for animal grazing/feed before starting the conversion;

b) the animals are mainly fed with products from the production unit.

6.3 **Origin of the animals**

For additional rules specific to the USA market please refer to point 2.1 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market for sections 6.3.1 to 6.3.13 of these *Rules*.

6.3.1 In the choice of breeds or strains, account must be taken of the capacity of animals to adapt to local conditions; their vitality, and their resistance to disease. Breeds or strains of animals shall be selected to avoid specific diseases or health problems associated with some breeds or strains used in intensive production (e.g. porcine stress syndrome, PSE Syndrome, sudden death, spontaneous abortion, difficult births requiring caesarean operations, etc.).

6.3.2 Animals must come from production units which comply with these *Rules*. Throughout their life, this system of production must be applied.

6.3.3 Subject to prior approval by the TPA, animals existing on the animal production unit not complying with these *Rules* can be converted¹.

6.3.4 When a herd or flock is constituted for the first time and organically reared animals are not available in sufficient numbers, non-organically reared animals may be brought into an organic production unit, subject to the following conditions:

- pullets for the production of eggs must be less than 18 weeks old,
- poultry for meat production must be less than three days old,
- buffalo for breeding purposes must be less than six months old,

- calves, deer and horses for breeding purposes must be reared according to these *Rules* as soon as they are weaned and must be less than six months old,
 - sheep and goats for breeding purposes must be reared according to these *Rules* as soon as they are weaned and in any case they must be less than 45 days old,
 - piglets for breeding purposes must be reared according to these *Rules* as soon as they are weaned and weigh less than 25 kg.
- 6.3.5 The exception in 6.3.4, which must be authorised beforehand by the TPA, applies for a transitional period expiring on 31 December 2004.
- 6.3.6 The renewal or reconstitution of the herd or flock may be authorised by the TPA or NZFSA when organically reared animals are not available, and in the following cases:
- a) high mortality of animals caused by health or catastrophic circumstances;
 - b) pullets for egg production no more than 18 weeks old;
 - c) poultry for meat production less than three days old;
- Cases (b) and (c) are authorised for a transitional period expiring on 31 December 2004.
- 6.3.7 In the case of the exception for pigs, pullets and poultry for meat production in 6.3.6 (b) and (c), the period may have its provisions extended.
- 6.3.8 Subject to TPA or NZFSA authorisation, an annual maximum of 10 % of adult equine or bovine (including *Bubalus* and bison species) or cervine (i.e. farmed deer) animals, and 20 % of the adult porcine, ovine and caprine animals may be brought in as female (nulliparous) animals from farms not in organic production, for supplementing natural growth and for the renewal of the herd or flock, when organically reared animals are not available.
- 6.3.9 The percentages in 6.3.8 do not apply to production units with less than 10 equine, bovine or cervine (i.e. farmed deer) animals, or with less than five porcine, ovine or caprine animals. For these units, any renewal is limited to a maximum of one animal per year.
- 6.3.10 These percentages may be increased up to 40 % following the opinion and agreement of the TPA, in the following special cases:
- when a major extension to the farm is undertaken;
 - when a breed is changed;
 - when a new animal specialisation is developed;
- 6.3.11 Males for breeding may be brought in from farms not in organic production provided that the animals are subsequently reared and fed in accordance with these *Rules*.

- 6.3.12 Where animals come from units not complying with these *Rules*, in accordance with the conditions and restrictions set out in 6.3.3 to 6.3.11, the periods specified in 6.2.3 must be observed if the products are to receive official organic assurances. During the conversion periods all the *Rules* must be complied with.
- 6.3.13 Where animals are obtained from units not complying with these *Rules*, special attention must be paid to animal health measures. The TPA may apply special measures, such as screening tests, and quarantine periods, depending on local circumstances.

6.4 Feed

For additional rules specific to the USA market please refer to point 2.2 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market for sections 6.4.1 to 6.4.18 of these *Rules*.

- 6.4.1 Details under this heading are set out so that operators using feeds know what the requirements are on operators in an EU situation. More normal New Zealand pastoral grazing avoids most of the requirements. Only feed materials also authorised for use in terms of New Zealand legislation may be used.
- 6.4.2 Feed is intended to ensure quality production rather than maximising production, while meeting the nutritional requirements of the animals at various stages of their development. Fattening practices are authorised in so far as they are reversible at any stage of the rearing process. Force-feeding is not permitted.
- 6.4.3 Animals must be fed on organically produced feeds.
- 6.4.4 Furthermore, animals must be reared in accordance with these *Rules*, using feed from the unit or, when this is not possible, using feed from other units or enterprises complying with these *Rules*. Moreover, in the case of herbivores, except during the period each year when the animals are under transhumance (high-country grazing), at least 50% of the feed shall come from the organic unit itself.
- 6.4.5 Up to 30 % of the feed formula of rations on average may comprise in-conversion feeds. When the in-conversion feeds come from the organic unit, this percentage can be increased to 60 %.
- 6.4.6 The feeding of young mammals must be based on natural milk, preferably maternal milk. All mammals must be fed on natural milk for a minimum period, depending on the species concerned, which shall be three months for bovines (including *Bubalus* and bison species), cervines (i.e. farmed deer), and equidae, 45 days for sheep and goats and 40 days for pigs. TPAs may consider reduced periods where the rearing systems use supplementary feed in the form of fresh and dry grass only as well as milk in order to produce well reared, hardy livestock.

- 6.4.7 Where relevant, NZFSA, in consultation with the TPA, may designate areas or regions where movement of animals to high-country grazing areas is practicable, without prejudice to the provisions on the feeding of animals in this Section 6.
- 6.4.8 Rearing systems for herbivores are to be based on maximum use of grazing according to the availability of pastures in the different periods of the year. At least 60 % of the dry matter in daily rations is to consist of roughage, fresh or dried fodder, or silage. Nevertheless, the TPA can permit a reduction to 50 % for animals in dairy production for a maximum period of three months in early lactation.
- 6.4.9 The use of a limited proportion of conventional feed of agricultural origin is authorised where farmers can show to the satisfaction of the TPA that they are unable to obtain feed exclusively from organic production. The maximum percentage of conventional feed authorised per period of 12 months is:
- a) For herbivores: 5% during the period from 25 August 2005 to 31 December 2007.
 - b) For other species:
 - 15% during the period from 25 August 2005 to 31 December 2007;
 - 10% during the period from 1 January 2008 to 31 December 2009;
 - 5% during the period from 1 January 2010 to 31 December 2011.

These figures shall be calculated annually as a percentage of the dry matter of feed from agricultural origin. The maximum percentage authorised of conventional feed in the daily ration, except during the period each year when the animals are under transhumance, must be 25 % calculated as a percentage of the dry matter.

- 6.4.10 When forage production is lost, in particular as a result of exceptional weather conditions, NZFSA can authorise TPAs to allow a higher percentage of conventional feeds for a limited period and in relation to a specific area.
- 6.4.11 Roughage, fresh or dried fodder, or silage must be added to the daily ration for pigs and poultry.
- 6.4.12 Only products listed in Table 3.4.5 and 6.1, respectively, can be used as additives and processing aids in silage.
- 6.4.13 Conventional feed materials of agricultural origin can be used for animal feeding only if listed in Table 3.1 (feed materials from plant origin), subject to the quantitative restrictions imposed in this Section 6, and only if they are produced or prepared without the use of chemical solvents.
- 6.4.14 Feed materials from animal origin (whether conventional or organically produced) can only be used if listed in Table 3.2, and subject to the quantitative restrictions imposed in this Section 6.

- 6.4.15 In order to satisfy nutritional requirements of animals, only products listed in Table 3.3 (feed materials from mineral origin), Table 3.4.1 (trace elements), and Table 3.4.2 (vitamins, pro-vitamins and chemically well-defined substances having a similar effect, enzymes, and micro-organisms), can be used for animal feeding.
- 6.4.16 Only products listed in Table 3.4.3 (enzymes approved for use under NZ legislation), Table 3.4.4 (micro-organisms approved for use under NZ legislation), Table 3.4.5 (preservatives), Table 3.4.6 (binders, anti-caking agents and coagulants), Table 3.4.7 (antioxidant substances), Table 3.5 (certain products used in animal nutrition) and Table 3.6 (processing aids in feeds) can be used in animal feeding for the purposes indicated in respect to the above mentioned categories. Antibiotics, coccidiostatics, medicinal substances, growth promoters or any other substance intended to stimulate growth or production shall not be used in organic animal feeding.
- 6.4.17 Feeds, feed materials, compound feeds feed additives, processing aids for feeds and certain products used in animal nutrition must not have been produced with the use of genetically modified organisms or products derived from GMOs.

6.5 Disease prevention and veterinary treatment

- 6.5.1 Operators must ensure that animals are treated in accordance with all provisions of New Zealand animal welfare and veterinary medicines legislation. Use only veterinary medicinal products that are authorised for the specified uses under the Animal Remedies Act (and/or the ACVM Act, HSNO Act when these come into force), or are exempt.
- 6.5.2 Disease prevention in organic animal production is based on the following principles:
- a) the selection of appropriate breeds or strains of animals as detailed in Section 6.3;
 - b) the application of animal husbandry practices appropriate to the requirements of each species, encouraging strong resistance to disease and the prevention of infections;
 - c) the use of high quality feed, together with regular exercise and access to grazing, having the effect of encouraging the natural immunological defence of the animals;
 - d) ensuring an appropriate density of animals, thus avoiding overstocking and any resulting animal health problems.
- 6.5.3 The principles set out in 6.5.2 should limit animal health problems so that they can be controlled mainly by prevention.
- 6.5.4 If, despite all of the above preventive measures, an animal becomes sick or injured, it must be treated immediately, if necessary in isolation, and in suitable housing.

For additional rules specific to the USA market please refer to point 2.3 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

6.5.5 The use of veterinary medicinal products in organic farming shall comply with the following principles:

a) Phytotherapeutic (e.g. plant extracts (excluding antibiotics), essences, etc.), homeopathic products (e.g. plant, animal or mineral substances) and trace elements and products listed in Table 3.3, shall be used in preference to chemically-synthesised allopathic veterinary medicinal products or antibiotics, provided that their therapeutic effect is effective for the species of animal, and the condition for which the treatment is intended;

b) If the use of these products is not effective in combating illness or injury, and treatment is essential to avoid suffering or distress to the animals, chemically-synthesised allopathic veterinary medicinal products or antibiotics may be used under the responsibility of a veterinarian;

For additional rules specific to the USA market please refer to points 2.3 and 6.2(a) in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

6.5.6 The use of chemically-synthesised allopathic veterinary medicinal products or antibiotics for preventive treatments is not permitted in animals or products for which official organic assurances are sought;

For additional rules specific to the USA market please refer to points 2.3 and 6.2(a) in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

6.5.7 In addition to the above principles, the following rules shall apply:

a) the use of substances to promote growth or production, (including antibiotics, coccidiostatics and other artificial aids for growth promotion purposes) and the use of hormones or similar substances to control reproduction (e.g. induction or synchronisation of oestrus), or for other purposes, is not permitted in animals or products for which official organic assurances are sought. Nevertheless, hormones may be administered to an individual animal, as a form of therapeutic veterinary treatment;

b) mandatory veterinary treatments to animals, or treatments to buildings, equipment and facilities including the use of immunological veterinary medicinal products when a disease risk has been recognised as present in a specific area in which the production unit is located, are authorised.

For additional rules specific to the USA market please refer to points 2.3, 3.2 (applies to 6.5.7b only) and 6.2(a) in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

- 6.5.8 Whenever veterinary medicinal products are to be used the type of product must be recorded clearly, (including an indication of the active pharmacological substances involved) together with details of the diagnosis; the posology; the method of administration; the duration of the treatment, and the legal withdrawal period. This information is to be declared to the TPA before official organic assurances are sought for the animals or animal products. Animals treated must be clearly identified, individually in the case of large animals; individually or by batch, in the case of poultry and small animals. Existing animal identification forms, vendor declarations or the like may be used.

For additional rules specific to the USA market please refer to points 2.3 and 6.2(a) in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

- 6.5.9 The withdrawal period between the last administration of an allopathic veterinary medicinal product to an animal under normal conditions of use, and the production of organic products from such animals, is to be twice the legal withdrawal period or, in a case in which this period is not specified, 48 hours.

For additional rules specific to the USA market please refer to points 2.3 and 6.2(a) in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

- 6.5.10 With the exception of mandatory vaccinations, treatments for parasites and any compulsory eradication schemes, where an animal or group of animals receive more than two or a maximum of three courses of treatments with chemically-synthesised allopathic veterinary medicinal products or antibiotics within one year (or more than one course of treatment if their productive lifecycle is less than one year) the animals concerned, or products derived from them, are not eligible for official organic assurances, and the animals must undergo the conversion periods in Section 6.2, subject to TPA agreement.

For additional rules specific to the USA market please refer to points 2.3 and 6.2(a) in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

6.6 Husbandry management practices, transport and identification of animal products

For additional rules specific to the USA market please refer to points 1.3 and 3.1 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

Husbandry practices

- 6.6.1 In principle, the reproduction of organically reared animals should be based on natural methods. Nevertheless artificial insemination is permitted. Other forms of artificial or assisted reproduction (for example embryo transfers) are not permitted.
- 6.6.2 Operations such as attaching elastic bands to the tails of sheep, tail-docking, cutting of teeth, trimming of beaks and dehorning are in principle not to be carried out systematically if animals are in organic production. These operations (for example dehorning in young animals) may, however, be authorised by the TPA, for reasons of safety or where normal New Zealand animal welfare or good husbandry practice requires, especially if they are intended to improve the health, welfare or hygiene of the animals, and some (e.g. dehorning) may actually be desirable. Such operations must be carried out at the most appropriate age by qualified personnel and any suffering to the animals must be reduced to a minimum.
- 6.6.3 Physical castration is allowed in order to maintain the quality of products and traditional production practices (pigs for meat, bullocks, capons, etc.) but only under the conditions set out in the last sentence of 6.6.2.
- 6.6.4 Keeping animals tethered is not permitted in animals or products for which official organic assurances are sought. Nevertheless, the TPA can authorise this practice for individual animals upon justification by the operator that this is necessary for safety or welfare reasons, and that such tethering is only for a limited period of time.
- 6.6.5 An exception to 6.6.4 is allowed in which cattle can be tethered in buildings already existing up to a year after these *Rules* come into effect, provided that regular exercise is possible and rearing takes place in line with animal welfare requirements, with comfortably littered areas as well as individual management. This exception applies for a transitional period expiring on 31 December 2010¹.
- 6.6.6 Where animals are reared in groups, the size of the group must depend upon their stage of development and the behavioural needs of the species concerned. The keeping of animals in conditions or on a diet, which may encourage anaemia, is not permitted in animals or products for which official organic assurances are sought.
- 6.6.7 For poultry, the minimum age at slaughter shall be:
- 81 days for chickens,
 - 150 days for capons,
 - 49 days for Peking ducks,
 - 70 days for female Muscovy ducks,
 - 84 days for male Muscovy ducks,
 - 92 days for Mallard ducks,
 - 94 days for guineafowl,
-

140 days for turkeys and roasting geese.

Where producers do not apply these minimum slaughter ages, they must use slow-growing strains.

Transport

- 6.6.8 Transport of animals must be carried out so as to limit the stress suffered by the animals in accordance with New Zealand legislation. Loading and unloading must be carried out with caution and without the use of any type of electrical stimulation to coerce the animals. The use of any allopathic tranquilliser, prior to and during transport, is not permitted in animals or products for which official organic assurances are sought.
- 6.6.9 During the period leading up to and at the time of slaughter, animals must be handled in such a way that stress to the animals is reduced to a minimum.

Identification of animal products

- 6.6.10 Animals and animal products are to be identified at all stages of their production, preparation, transport and marketing.

6.7 Animal manure

- 6.7.1 Normal New Zealand agriculture does not involve the spreading of animal manure from animals' housing. The provisions spelled out in this Section are likely to apply only in exceptional cases.
- 6.7.2 The total amount of manure applied on the holding may not exceed 170 kg of Nitrogen per year/hectare of agricultural area used. Where necessary, the total stocking rate is to be reduced to avoid exceeding this limit. Guidance for calculating the stocking rates for the various categories of animals is provided in Table 7. (*Note:* The stocking rates in Table 7 only apply to units where the spreading of animal manure from animals' housing on to pasture is undertaken).

For additional rules specific to the USA market please refer to point 1.2 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

- 6.7.3 Any deviation from these figures which is likely to lead to the limit of 170 kg of Nitrogen from manure per year/hectare being exceeded must be notified to NZFSA together with reasons justifying the changes. This is without prejudice to the stocking densities for animal health and welfare purposes in 6.8 and in Table 7.
- 6.7.4 Organic production holdings may establish cooperation with other holdings and enterprises which comply with these *Rules*, with the intention of spreading surplus manure from organic production. The maximum limit of 170 kg of Nitrogen from manure per year/hectare of agricultural area used will be calculated on the basis of all of the organic production units involved.

- 6.7.5 Storage facilities for animal manure must be of a capacity to preclude the pollution of water by direct discharge, or by run-off and infiltration of the soil.
- 6.7.6 To ensure sound fertiliser management, the capacity of such storage facilities for animal manure must exceed the storage capacity required for the longest period of the year in which any application of fertiliser to the land is either inappropriate (in accordance with good agricultural practice) or when such application is prohibited.

6.8 Free range areas and animal housing

General principles

- 6.8.1 Normal New Zealand agriculture does not involve widespread use of animal housing. Animal welfare and resource management requirements must be complied with. The provisions spelled out in this Section, following the EU model, are likely to apply only in exceptional cases.
- 6.8.2 Housing conditions for animals must meet the animals' biological and ethological needs (e.g. behavioural needs as regards appropriate freedom of movement and comfort). The animals must have easy access to feeding and watering. Insulation, heating and ventilation of the building must ensure that air circulation, dust level, temperature, relative air humidity and gas concentration, are kept within limits which are not harmful to the animals. The building must permit plentiful natural ventilation and light to enter.
- 6.8.3 Free-range, open-air exercise areas, or open-air runs must, if necessary, provide sufficient protection against rain, wind, sun and extreme temperatures, depending on the local weather conditions and the breed concerned.

Stocking densities and the avoidance of over-grazing

- 6.8.4 The stocking density in buildings shall provide for the comfort and well being of the animals which, in particular, shall depend on the species, the breed and the age of the animals. It shall also take account of the behavioural needs of the animals, which depend in particular on the size of the group and the animals' sex. The optimum density will seek to ensure the animals' welfare by providing them with sufficient space to stand naturally, lie down easily, turn round, groom themselves, assume all natural postures and make all natural movements such as stretching and wing flapping.
- 6.8.5 The minimum surface areas for indoor housing and outdoor exercise areas, and other characteristics of housing for different species and categories of animals, are set out in Table 7.
- 6.8.6 The outdoor stocking density of animal kept on pasture, other grassland, wetland, and other natural or semi-natural habitats, must be low enough to prevent poaching of the soil and over-grazing of vegetation.
- 6.8.7 Housing, pens, equipment and utensils must be properly cleaned and disinfected to prevent cross-infection and the build-up of disease-carrying organisms. Only the products listed in Table 5 can be used for such cleaning and disinfection of animal

buildings and installations. Faeces, urine and uneaten or spilt feed must be removed as often as necessary to minimise smell and to avoid attracting insects or rodents. Only the products listed in Table 2 can be used for the elimination of insects and other pests in buildings and other installations where animals are kept.

Mammals

- 6.8.8 Subject to the provisions in 6.5.4, all mammals must have access to grazing or an open-air exercise area or an open-air run which may be partially covered, and they must be able to use those areas whenever the physiological condition of the animals, the weather conditions and the state of the ground permit, unless there are requirements relating to specific animal health problems that prevent this. Herbivores must have access to grazing whenever conditions allow.
- 6.8.9 In cases where herbivores have access to pasture for grazing and where the winter-housing system gives freedom of movement to the animals, the obligation to provide open-air exercise areas or open-air runs during the winter months may be waived.
- 6.8.10 Notwithstanding the last sentence of 6.8.8, bulls over one year old must have access to grazing or an open-air exercise area or an open-air run.
- 6.8.11 The final fattening phase of cattle, pigs and sheep for meat production may take place indoors, provided that this indoors period does not exceed one fifth of their lifetime, and in any case for a maximum period of three months.
- 6.8.12 Animal housing must have smooth, but not slippery floors. At least half of the total floor area must be solid, not of slatted or of grid construction.
- 6.8.13 The housing must be provided with a comfortable, clean and dry laying/rest area of sufficient size, consisting of a solid construction which is not slatted. Ample dry bedding strewn with litter material must be provided in the rest area. The litter must comprise straw or other suitable natural material. The litter may be improved and enriched with any mineral product authorised for use as a fertiliser in organic farming in accordance with Table 1.
- 6.8.14 In addition to 6.8.1 requirements, in particular, animal welfare provisions relating to the rearing of calves and pigs must be complied with. For animals or products for which official organic assurances are sought:
- a) the housing of calves in individual boxes after the age of one week is not permitted;
 - b) sows must be kept in groups, except in the last stages of pregnancy and during the suckling period. Piglets may not be kept on flat decks or in piglet cages. Exercise areas must permit dunging and rooting by the animals. For the purposes of rooting, different substrates can be used.

Poultry

- 6.8.15 Poultry in organic production must be reared in open-range conditions and cannot be kept in cages.
- 6.8.16 Water fowl in organic production must have access to a stream, pond or lake whenever the weather conditions permit in order to respect animal welfare requirements or hygienic conditions.
- 6.8.17 Buildings for all poultry must meet the following minimum conditions:
- at least one third shall be solid, that is, not of slatted or of grid construction, and covered with a litter material such as straw, wood shavings, sand or turf;
 - in poultry houses for laying hens, a sufficiently large part of the floor area available to the hens must be available for the collection of bird droppings;
 - they must have perches of a size and number commensurate with the size of the group and of the birds as in Table 7;
 - they must have exit/entry pop-holes of a size adequate for the birds, and these pop-holes must have a combined length of at least 4m per 100m² area of the house available to the birds;
 - each poultry house must not contain more than:
4800 chickens,
3000 laying hens,
5200 guinea fowl,
4000 female Muscovy or Peking ducks or 3200 male Muscovy or Peking ducks or other ducks,
2500 capons, geese or turkeys;
 - the total usable area of poultry houses for meat production on any single production unit, must not exceed 1600 m².
- 6.8.18 In the case of laying hens, natural light may be supplemented by artificial means to provide a maximum of 16 hours light per day with a continuous nocturnal rest period without artificial light of at least eight hours.
- 6.8.19 Poultry must have access to an open-air run whenever the weather conditions permit and, whenever possible, must have such access for at least one third of their life. These open-air runs must be mainly covered with vegetation, be provided with protective facilities, and permit animals to have easy access to adequate numbers of drinking and feeding troughs.
- 6.8.20 For health reasons, buildings must be emptied of animals between each batch of poultry reared. The buildings and fittings are to be cleaned and disinfected during this time. In addition, when the rearing of each batch of poultry has been completed, runs must be left empty to allow vegetation to grow back, and for health reasons. These

requirements shall not apply to small numbers of poultry which are not kept in runs and which are free to roam, throughout the day.

General exception on the housing of animals

- 6.8.21 Stocking densities laid down in Table 7 may be varied, with NZFSA approval, for a transitional period expiring on 31 December 2010. This exception can only be applied to holdings with existing buildings constructed before these *Rules* come into effect and complying with then currently accepted organic animal production principles.
- 6.8.22 Operators affected shall include in their OMPs a description of arrangements which ensure compliance with these *Rules* at the end of the transitional period.

7.0 RULES OF PRODUCTION: BEEKEEPING AND BEE PRODUCTS

7.1 General principles

- 7.1.1 Beekeeping is an important activity that contributes to the protection of the environment and agricultural and forestry production through the pollination action of bees.
- 7.1.2 The qualification of bee products as being from organic production is closely bound up both with the characteristic of the hives' treatments and the quality of the environment. This qualification also depends on the conditions for extraction, processing and storage of bee products.
- 7.1.3 When an operator runs several beekeeping units in the same area, all the units must comply with these *Rules*. An operator can run units not complying with the provisions in 7.4.2 of these *Rules*, provided that all other requirements of these *Rules* are fulfilled. In these cases, the products from the apiaries not complying with 7.4.2 are not eligible for official organic assurances.

7.2 Conversion period

- 7.2.1 Bee products can be sold with references to the organic production method only when the provisions in these *Rules* have been complied with for at least one year. During the conversion period the wax has to be replaced as set out in paragraph 7.8.3.

7.3 Origin of the bees

- 7.3.1 In the choice of breeds, account must be taken of the capacity of animals to adapt to local conditions, their vitality and their resistance to disease.
- 7.3.2 Apiaries must be constituted by means of the division of colonies or the acquisition of swarms or hives from units complying with the provisions of these *Rules*.
- 7.3.3 Subject to the prior approval by the TPA, existing apiaries in the production unit not complying with these *Rules* can be converted to organic production.
- 7.3.4 The reconstitution of the apiaries can be authorised by NZFSA, when apiaries complying with these *Rules* are not available, in case of high mortality of animals caused by health or catastrophic circumstances, subject to the conversion period.
- 7.3.5 For the renovation of the apiaries, 10 % per year of the queen bees and swarms not complying with these *Rules* can be incorporated into the organic production unit provided that the queen bees and swarms are placed in hives with combs or comb foundations coming from organic production units. In that case, the conversion period does not apply.

7.4 Siting of the apiaries

7.4.1 Beekeeping complying with these *Rules* may not be practicable in some areas. A map on an appropriate scale listing the location of hives shall be provided with the OMP by the beekeeper. Where no such areas are identified, the beekeeper must provide the TPA with appropriate documentation and evidence, including suitable analyses if necessary, that the areas accessible to his colonies meet the conditions required in these *Rules*.

7.4.2 The siting of the apiaries must:

- (a) ensure enough natural nectar, honeydew and pollen sources for bees and access to water;
- (b) be such that, within a radius of 3 km from the apiary site, nectar and pollen sources consist essentially of organically produced crops and/or spontaneous vegetation, consistent with the requirements of these *Rules*, and crops not subject to the provisions of these *Rules* but treated with low environmental impact methods which cannot significantly affect the qualification of beekeeping production as being organic;
- (c) maintain enough distance from any non-agricultural production sources possibly leading to contamination, for example: urban centres, motorways, industrial areas, waste dumps, waste incinerators, etc. The TPA, in consultation with NZFSA, will determine how this requirement is met.

These requirements do not apply to areas where flowering is not taking place, or when the hives are dormant.

7.5 Feed

7.5.1 At the end of the production season hives must be left with reserves of honey and pollen sufficiently abundant to survive the winter.

7.5.2 The artificial feeding of colonies is authorised where the survival of the hives is endangered due to extreme climatic conditions. Artificial feeding shall be done with organically produced honey, preferably from the same organic production unit.

7.5.3 NZFSA can authorise the use of organically-produced sugar syrup, or organic sugar molasses instead of organically-produced honey in artificial feeding, in particular, when it is required by climatic conditions that provoke crystallisation of honey.

7.5.4 The following information shall be entered in the register of the apiaries with regard to the use of artificial feeding: type of product, dates, quantities and hives where it is used.

7.5.5 Other products different from those indicated in 7.5.1 to 7.5.3 cannot be used in beekeeping which complies with these *Rules*.

7.5.6 Artificial feeding may be carried out only between the last honey harvest and 15 days before the start of the next nectar or honeydew flow period.

7.6 Disease prevention and veterinary treatments

7.6.1 Disease prevention in beekeeping shall be based on the following principles:

(a) the selection of appropriate hardy breeds;

(b) the application of certain practices encouraging strong resistance to disease and the prevention of infections, such as: regular renewal of queen bees, systematic inspection of hives to detect any health anomalies, control of male broods in the hives, disinfecting of materials and equipment at regular intervals, destruction of contaminated material or sources, regular renewal of beeswax and sufficient reserves of pollen and honey in hives.

7.6.2 If despite all the above preventive measures, the colonies become sick or infested, they must be treated immediately and, if necessary, the colonies can be placed in isolation apiaries.

7.6.3 The use of veterinary medicinal products in beekeeping which complies with these *Rules* shall respect the following principles:

(a) only veterinary medicinal products that are authorised for the specified uses under the Animal Remedies Act (and/or the ACVM Act, HSNO Act when these come into force), or are exempt can be used;

(b) phytotherapeutic and homeopathic products shall be used in preference to chemically synthesised allopathic products, provided that their therapeutic effect is effective for the condition for which the treatment is intended;

(c) if the use of these products should prove or is unlikely to be effective to eradicate a disease or infestation which risks destroying colonies, chemically synthesised allopathic medicinal products may be used under the responsibility of a veterinarian or other authorised persons, without prejudice to the principles in 7.6.3 (a) and (b);

(d) the use of chemically synthesised allopathic medicinal products for preventive treatments is not permitted in animals or products for which official organic assurances are sought;

(e) without prejudice to the principle in (a) above, formic acid, lactic acid, acetic acid and oxalic acid and the following substances: menthol, thymol, eucalyptol or camphor can be used in cases of infestation with *Varroa destructor*, provided they are, at the time, legally authorised.

- 7.6.4 In addition to the above principles, official organic assurances may also be given on animals or products on which mandatory veterinary treatments or treatments to hives, combs etc., have been used.
- 7.6.5 If a treatment is applied with chemically synthesised allopathic products, during such a period, the colonies treated must be placed in isolation apiaries and all the wax must be replaced with wax complying with these *Rules*. Subsequently, the conversion period of one year will apply to those colonies.
- 7.6.6 The requirements in the 7.6.5 do not apply to products in 7.6.3(e).
- 7.6.7 Whenever veterinary medicinal products are to be used, the type of product (including the indication of the active pharmacological substance) together with details of the diagnosis, the posology, the method of administration, the duration of the treatment and the legal withdrawal period must be recorded clearly and declared to the TPA before official organic assurances are sought for the bee products.

7.7 Husbandry management practices and identification

- 7.7.1 The destruction of bees in the combs as a method associated with the harvesting of bee products is not permitted in animals or products for which official organic assurances are sought.
- 7.7.2 Mutilation such as clipping the wings of queen bees is not permitted in animals or products for which official organic assurances are sought.
- 7.7.3 The replacement of the queen bees involving the killing of the old queen is permitted.
- 7.7.4 The practice of destroying the male brood is permitted only to contain the infestation with *Varroa destructor*.
- 7.7.5 The use of chemical synthetic repellents is not permitted during honey extraction operations.
- 7.7.6 The zone where the apiary is situated must be recorded in the OMP with the identification of the hives. The TPA must be informed of the moving of apiaries within a time-scale agreed on with the TPA.
- 7.7.7 Particular care shall be taken to ensure adequate extraction, processing and storage of bee products. All the measures to comply with these requirements shall be recorded.
- 7.7.8 The removals of the supers and the honey extraction operations must be entered in the register of the apiary.

7.8 Characteristics of hives and materials used in beekeeping

- 7.8.1 The hives must be made basically of natural materials presenting no risk of contamination to the environment or the apiculture products. For additional rules

specific to the USA market please refer to point 1.3 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

- 7.8.2 With the exception of products in 7.6.3(e), only natural products such as propolis, wax and plant oils can be used in the hives.
- 7.8.3 The beeswax for new foundations must come from organic production units. But, in particular in the case of new installations or during the conversion period, beeswax not coming from such units may be authorised by the TPA in exceptional circumstances where organically produced beeswax is not available on the market and provided that it comes from the cap.
- 7.8.4 The use of combs, which contain broods, is prohibited for honey extraction.
- 7.8.5 For the purposes of protecting materials (frames, hives and combs), in particular from pests, only appropriate products listed in Table 2, section 2 are permitted.
- 7.8.6 Physical treatments such as steam or direct flame are permitted.
- 7.8.7 For cleaning and disinfecting materials, buildings, equipment, utensils or products used in beekeeping only the appropriate substances listed in Table 5 are permitted in animals or products for which official organic assurances are sought.

8.0 APPLICATION OF ORGANIC MANAGEMENT PLAN REQUIREMENTS: ON-SITE ASSESSMENT AND VERIFICATION, INSPECTION AND CERTIFICATION

This section describes the application of verification and inspection activities conducted by a TPA to establish, agree on, and verify the implementation of OMPs by operators in the sectors described. The requirements on TPAs and their work are set out in OP1, OP2 and, in particular, Appendix One to OP3.

Notwithstanding anything in the following Sections A-C, all final products (both fresh and manufactured) will be stored and/or transported in such a manner as to ensure no contamination from prohibited substances.

A Plants and plant products from farm production or collection

8.1 Production must take place in a unit, the land parcels and production and storage locations of which

- Have been managed in accordance with the provisions laid down in these Rules;
- Have distinct, defined boundaries and buffer zones such as runoff diversions to prevent the unintended application of a prohibited substance to the crop or contact with a prohibited substance applied to adjoining land that is not under organic management.
- The handler of an organic handling operation must implement measures necessary to prevent the commingling of organic and non-organic products and protect organic products from contact with prohibited substances.

Processing and/or packaging workshops may form part of the unit, where its activity is limited to processing and packaging of its own agricultural produce

8.2 When the OMP is first established, the producer, even where the activity is limited to the collection of wild plants, and the TPA must draw up:

- a full description of the unit, showing the storage and production premises and land parcels and/or collection areas and, where applicable, premises where certain processing and/or packaging operations take place,
- all the practical measures to be taken by the producer at unit level to ensure compliance with these *Rules*,
- and, in case of collection of wild plants, any relevant guarantees given by third parties, if appropriate, which the producer can provide to ensure that the provisions of Section 5.7 are satisfied.

The description and the measures concerned must be contained in the OMP.

In addition, the OMP must include:

- the date of the last application on the parcels and/or collection areas concerned of products the use of which is not compatible with Section 4.1 (b),
- an undertaking by the producer to carry out operations in accordance with these *Rules* and to accept, in the event of non-compliance, enforcement of the measures provided for in the programme.

8.3 Each year, before the date indicated by the TPA, the producer must notify the TPA of the unit's schedule of production of plant products, giving a breakdown by parcel.

8.4 Written and/or documentary accounts must be kept which enable the TPA to trace the origin, nature and quantities of all raw materials bought, and the use of such materials; in addition, written or documentary accounts must be kept of the nature, quantities and consignees of all agricultural products sold.

Where the unit itself processes its own agricultural produce, the accounts must contain information on the origin, nature and quantities of ingredients, additives and manufacturing aids delivered to the unit and the composition of the processed products.

8.5 Storage in the unit of input products other than those whose use is compatible with these *Rules* is not permitted.

8.6 Products referred to in Section 2 (Scope) may be transported to other operators, only in appropriate packaging or containers closed in a manner preventing substitution of the content and provided with a label stating, without prejudice to any other indications required by law:

a) the name and address of the person responsible for the production or preparation of the product, or, where another seller is mentioned, a statement which enables the receiving unit and the TPA to identify unequivocally the person responsible for the production of the product;

b) the name of the product, including a reference to the organic production method.

8.7 However, the closing of packaging or containers is not required where:

a) transportation is between a producer and another operator who are both complying with the provisions of the NZFSA official organic assurances programme, and

b) the products are accompanied by a document giving the information required under 8.6.

8.8 Where an operator runs several production units in the same area producing plants or plant products not covered in Section 2 (Scope) together with storage premises for input products (such as fertilisers, plant protection products, seed) these must all also

be included in the OMP. Plants of the same variety as those produced at the unit referred to in 8.1 may not be produced at these units.

However, producers are exempt from the requirement in the last sentence of 8.8:

- (a) in production of perennial plant products (fruit growing, vines and hops) provided the following conditions are met:
1. the production in question forms part of a conversion plan in respect of which the producer gives a firm undertaking and which provides for the beginning of the conversion of the last part of the area concerned to organic production in the shortest possible period, which may not in any event exceed a maximum of five years,
 2. appropriate measures have been taken to ensure the permanent separation of the products obtained from each unit concerned,
 3. the TPA is notified of the harvest of each of the products concerned at least 48 hours in advance,
 4. immediately upon completion of the harvest, the producer informs the TPA of the exact quantities harvested on the units concerned together with any particular distinguishing features (such as quality, colour, average weight, etc.) and confirms that the measures described in the OMP to separate the products have been applied,
 5. the conversion plan and the measures referred to in points 1 and 2 have been approved by the TPA. This approval must be confirmed each year after the start of the conversion plan;
- (b) in the case of areas intended for agricultural research agreed by national authorities, provided that conditions 8.8 (a) 2, 3, and 4. And the relevant part of condition 5 above are met;
- (c) in the case of production of seed, vegetative propagating material and transplants, provided that conditions 8.8 (a) 2, 3, and 4. And the relevant part(s) of condition 5 (above) are met.

An exemption to 8.8 applies on approval by the TPAs under a derogation expiring 31 December 2010.

B Animals and Animal Products

8.9 When the OMP applying specifically to animal production is first drawn up, it must include:

- a full description of the animal buildings, grazing and open-air exercise areas, open air runs, etc, and, where applicable, the premises for the storage, packaging and processing of animals, animal products, raw materials and inputs,
- a full description of the installations for the storage of animal manure,

- a plan for spreading manure agreed with the TPA, together with a full description of the areas given over to plant production,
- where appropriate, the arrangements with other farms for spreading of manure,
- a management plan for the unit (e.g. for animal feeding, reproduction, health, etc),
- all practical measures to be taken on the farm to ensure compliance with these *Rules*.

8.10 The general OMP requirements in 8.1 and 8.4 to 8.7 covering plants and plant products are applicable to animals and animal products.

The storage of allopathic veterinary medicinal products and antibiotics is permitted on holdings provided that they have been prescribed by a veterinarian in connection with treatment as referred to in Section 6, that they are stored in a supervised location and that they are entered in the farm register.

8.11 The animals must be identified permanently using techniques adapted to each species, individually in the case of large mammals and individually or by batch in the case of poultry and small mammals.

8.12 Animal records must be compiled in the form of a register and kept available to the TPA at all times at the address of the holding.

Such records, which are to provide a full description of the herd or flock management system, must contain the following information:

- by species, as regards animals arriving at the holding: origin and date of arrival, conversion period, identification mark and veterinary record;
- as regards animals leaving the holding: age, number of head, weight in case of slaughter, identification mark and destination;
- details of any animals lost and reasons;
- as regards feed: type, including feed supplements, proportions of various ingredients of rations and periods of access to free-range areas, periods of transhumance (high-country grazing) where restrictions apply;
- as regards disease prevention and treatment and veterinary care: date of treatment, diagnosis, type of treatment product, method of treatment and practitioner's prescription for veterinary care with reasons and withdrawal periods applying before animal products can be marketed.

8.13 Where a producer manages several holdings in the same region, the units which produce animals or animal products not covered in Section 2 (Scope) must also be included in the OMP, including the provisions on animal management, animal records and the principles governing storage of animal husbandry products used.

C Units for Preparation of Plant and Animal Products

For additional rules specific to the USA market please refer to point 5.1 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

8.14 When the OMP is first drawn up, it must include:

- a full description of the unit, showing the facilities used for the processing, packaging and storage of agricultural products before and after the operations concerning them,
- all the practical measures to be taken at the level of the unit to ensure compliance with these *Rules*.

8.15 Where products not covered in Section 2 (Scope) are also processed, packaged or stored in the unit concerned:

- the unit must have separate areas within the premises for the storage of products which are covered by Section 2 (Scope), before and after the operations,
- operations must be carried out continuously until the complete run has been dealt with, separated by place or time from similar operations performed on products not covered by Section 2 (Scope),
- if such operations are not carried out frequently, they must be announced in advance, with a time-scale agreed on with the TPA,
- every measure must be taken to ensure identification of lots and to avoid mixtures with products not obtained in accordance with these *Rules*.

8.16 Products covered by Section 2 (Scope) may be transported to other units only in appropriate packaging or containers closed in a manner preventing substitution of the content and provided with a label stating, without prejudice to any other indications required by law:

- (a) the name and address of the person responsible for the production or preparation of the product, or, where another seller is mentioned, a statement which enables the receiving unit and the TPA to identify unequivocally the person responsible for the preparation of the product;
- (b) the name of the product, including a reference to the organic production method.

On receipt of a product covered by Section 2 (Scope), the operator shall check the closing of the packaging or container where it is required and the presence of the indications referred to in 8.16 (a) and (b), in 8.6 or, on imported product, in Section 11. The result of this check shall be explicitly mentioned in the OMP implementation reports. Where the check leaves any doubt whether or not the product concerned came from an operator complying with this programme's provisions, if it is to receive official organic assurances, it may proceed to processing or packaging only after elimination of that doubt.

9.0 INPUTS USED IN ORGANIC PRODUCTION

- 9.1 Any inputs used in any part of organic production, processing, cleaning, and packing or for transportation and storage of the product should comply with relevant New Zealand law.
- 9.2 Conditions for use, in organic production, processing, cleaning, packaging and other processes, of certain inputs contained in the lists in Tables 1 to 6 may be specified by NZFSA, on a TPA's recommendation, e.g. its use only in case of absolute necessity, volume, frequency of application, specific purpose etc.
- 9.3 Inputs not authorised at the date of adoption of these *Rules* for a purpose indicated in Section 4.1 (b) may be included in Tables 1 to 6 by NZFSA, on a TPA's recommendation, provided that the following conditions are satisfied:
- (a) their use does not result in, or contribute to, unacceptable effects on, or contamination of, the environment;
 - (b) if they are used for the purpose of plant pest or disease control or for cleaning and disinfecting livestock buildings and installations:
 - they are essential for the control of a harmful organism or a particular disease for which other biological, cultural, physical or breeding alternatives are not available, and
 - the conditions for their use preclude any direct contact with the seed, the crop, crop products or animals or animal products; however, in the case of perennial crops, direct contact may take place, but only outside the growing season of the edible parts (fruits) provided that such application does not indirectly result in the presence of residues of the product in the edible parts, and
 - (c) if they are used for fertilisation or soil-conditioning purposes,
 - they are essential for specific nutrition requirements of crops or specific soil-conditioning purposes which cannot be satisfied by the practices mentioned in Sections 5, 6, 7, and
 - (d) with regard to minerals and trace elements used in animal nutrition, additional sources for these products may be included in Table 3 provided that they are of natural origin or failing that, synthetic in the same form as natural products.
- 9.4 The conditions provided for in 9.3 do not apply to products which were in common organic farming use in New Zealand before these *Rules* came into application.
- 9.5 The following may be specified by the TPA, where necessary, for any input included in Tables 1 to 6:
- a detailed description of the input,

- conditions of use and composition and/or solubility requirements, with regard in particular to the need to ensure for these products a minimal presence of residues on edible parts of the crop and on edible crop products, as well as a minimum effect on the environment,
- particular labelling requirements for products obtained with the aid of certain inputs referred to in Tables 1 to 6.

For additional rules specific to the USA market please refer to point 6 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

10.0 LABELLING

10.1 No agreed label or mark for the NZFSA official organic assurance has been developed. The official assurances are provided by NZFSA on a government-to-government basis and relates to product being in compliance with requirements, and not for advertising or marketing purposes.

10.2 The labelling of any item requiring an official assurance under this programme may refer to organic production methods only where:

(a) the product was produced by an operator registered to participate in this programme; or

(b) the product was imported from a third country under the arrangements described in Section 11.

(c) the labelling refers to the name and/or the NZFSA-issued code number of the TPA of the operator who has carried out the most recent preparation of the product, and the name or identification number of that operator.

(d) the product was produced in accordance with these *Rules* including the requirements that:

- the product or its ingredients have not been subjected to treatments involving the use of ionising radiation, and
- the product has been produced without the use of genetically modified organisms and/or any products derived from such organisms;

For additional rules specific to the USA market please refer to point 5.2(a) in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

10.3 The labelling of **unprocessed** plant and animal products described in Section 2.1 (a) may refer to organic production methods only where:

- such indications show clearly that they relate to a method of agricultural production.

10.4 The labelling of **processed** products described in Section 2.1 (b) may refer to organic production methods only where:

- (a) at least 95% of the ingredients of agricultural origin of the product are, or are derived from, products obtained from one or more sources complying with these *Rules*;

- (b) The same ingredient in a single product was not derived from an organic source and from a source not complying with these *Rules*;
- (c) All other product ingredients of agricultural origin are included in Table 4, Part C;
- (d) The ingredients of non-agricultural origin are only the substances listed in Table 4, Part A,;
- (e) The product or its ingredients of agricultural origin, referred to in subparagraph (a), have not been subjected to treatments involving the use of substances not listed in Table 4, Part B.

For additional rules specific to the USA market please refer to points 5.2(b) and 5.3 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

10.5 Where there is no organic source of product available, the labelling and advertising of a processed product which has been prepared partly from ingredients not satisfying these *Rules* or imported under the arrangements described in Section 11, may refer to organic production methods provided that all of the following are met:

- (a) at least 70% of the ingredients of agricultural origin satisfy these *Rules* or are imported under the arrangements described in Section 11;
- (b) all other ingredients of agricultural origin are included in Table 4 C, including any items added under the arrangements described in Section 9;
- (c) The ingredients of non-agricultural origin are only the substances listed in Table 4, Part A,;
- (d) The product or its ingredients of agricultural origin, referred to in subparagraph (a), have not been subjected to treatments involving the use of substances not listed in Table 4, Part B.
- (e) The same ingredient in a single product was not derived from an organic source and from a source not complying with these *Rules*;
- (f) the reference to organic production methods is included eg in the list of ingredients only in conjunction with the ingredient(s) produced in accordance with these *Rules* or imported under the arrangements described in Section 11, and further, all indications on these ingredients must:
 - appear in the same colour and with an identical style and size of lettering to that denoting other ingredients; and
 - show the percentage of ingredients of agricultural origin satisfying these *Rules*;
 - follow the style: “X% of the agricultural ingredients were produced in compliance with the requirements for official assurances of organic production agreed between New Zealand and [market(s)] Y.”

For additional rules specific to the USA market please refer to points 5.2(b) and 5.3 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

- 10.6 Products labelled in accordance with 10.1 to 10.4 may refer to **conversion** to organic production methods, provided that:
- (a) the requirements in points 10.1 to 10.3 are fully satisfied, with the exception of the conversion period referred to in Section 5.1 which must be at least 12 months;
 - (b) such indications do not mislead the purchaser of the product regarding its difference from products which satisfy all the requirements of 10.1 to 10.3;
 - (c) the indication takes the form of the words “product under conversion to organic production”, with equal prominence given to all these words;
 - (d) the product contains only one crop ingredient of agricultural origin;
 - (e) The ingredients of non-agricultural origin are only the substances listed in Table 4, Part A, as;
 - (f) The product or its ingredients of agricultural origin, referred to in subparagraph (a), have not been subjected to treatments involving the use of substances not listed in Table 4, Part B.
 - (g) The same ingredient in a single product was not derived from an organic source and from a source not complying with these *Rules*;
 - (h) For additional rules specific to the USA market please refer to point 1.1 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.
- 10.7 If exporters wish to apply labelling which is accepted in the destination market, this is arranged with the importer, but must be truthful. It is subject to verification by the TPA and any obvious misrepresentation will result in the product being removed from eligibility for New Zealand official organic assurances.
- 10.8 Product not in compliance with the provisions of this programme may not make any claim relating to MAF, NZFSA or the official organic assurance programme.

11.0 IMPORTED PRODUCT AND/OR INGREDIENT

11.1 Organic products legally imported from other countries as ingredients for processed organic products produced under these Rules must be approved by NZFSA. The following requirements must be met:

- (a) All importers importing organic products for incorporation into New Zealand organic products and subsequently exported under the NZFSA Official Organic Assurance Programme must be registered with a TPA. The imported product must be certified organic.
- (b) The importer must develop an organic management plan that addresses the following points:
 - (i) Inclusion (or reference to) the system of production used to produce the imported product in the country of origin
 - (ii) product identification and traceability back to source to ensure the product's certified organic status can be verified
 - (iii) details of the certification body that certified the product in the country of origin.

Note A: For imported products incorporated into product for export to the European Community the imported product must have been imported into New Zealand:

- either from the European Community;
- or from a Third Country within the framework of arrangements which are recognised as equivalent to the provisions of Article 11(1) of Regulation (EEC) No 2092/91,
- or from a third country whose rules of production and inspection system have been recognised as equivalent to the NZFSA Official Organic Assurance Programme. In these instances the imported product(s) can comprise up to a maximum of 5% of the total product(s) of agricultural origin as ingredients into the final product.

Note B: the certifying body in the country of origin needs to meet the following criteria: at least one of the following: direct oversight by a NZFSA recognised TPA, recognition by USDA, recognition by EC, recognition by Japan MAFF, recognition by AQIS.

11.2 When evaluating the importer's OMP the TPA:

- compares the organic rules of production for the imported product with the NZFSA Technical Rules for Organic Production.
- considers whether the certifying body meets the criteria listed in Note B above.

11.3 If satisfied that the product meets the requirements of the NZFSA Official Organic Assurance Programme the TPA prepares a report for NZFSA. The report includes the comparison on organic production methods, the certifying body and evidence it meets criteria listed in note A, and a recommendation that the product be approved for inclusion into the programme.

- 11.4 NZFSA will approve the product for inclusion into the programme if satisfied with the comparison of the organic production methods. NZFSA may require the TPA to undertake an on-site assessment of the organic production methods in the country of origin.
- 11.5 Each consignment imported under the organic management plan must be accompanied by an assurance from the source country's competent authority or a certifying body specifying that:
- the product was obtained within a system of rules equivalent to the NZFSA Technical Rules for Organic Production or the EC Regulation 2092/91 and subsequent amendments;
- The source country's assurance or certificate must accompany the product to the first consignee.
- The importer must keep the assurance available to the TPA for at least 3 years.
- 11.6 Each consignment must carry adequate identification; and must comply with labelling requirements in Section 10 of the NZFSA Technical Rules for Organic Production.
- 11.7 Proper separation must be maintained from non-complying product, and from New Zealand product awaiting assessment.
- 11.8 The product must be identifiable and traceable back to source and its organic status can be verified.
- 11.9 Imported Organic product trans-shipped through New Zealand (and not further processed or incorporated into New Zealand product) will not be issued with a NZFSA Official Organic assurance as it will be deemed to be product of the originating country.

TABLES: INPUTS, APPROVED ITEMS, AND OTHER CONDITIONS:

TABLE 1 FERTILISERS AND SOIL CONDITIONERS

General conditions for all the products:

- use in accordance with Sections 5, 6, 7, and 8 of these Rules.
- use only fertilisers and soil conditioners that are authorised for use in New Zealand under the ACVM Act and regulations, HSNO Act, or are exempt.
- Only the following substances in this section are allowed as fertilisers and soil conditioners for use with organic products exported to the EU and US, unless specifically prohibited under conditions for use.
- For additional rules specific to the USA market please refer to point 1.2 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

Name	Description; composition requirements; conditions for use
Compound products or products containing only materials listed hereunder: – Farmyard manure	Product comprising a mixture of animal excrements and vegetable matter (animal bedding) Need recognised by the TPA Indication of animal species Not coming from intensive husbandry
– Dried farmyard manure and dehydrated poultry manure	Need recognised by the TPA Indication of animal species Not coming from intensive husbandry
– Composted animal excrements, including poultry manure and composted farmyard manure included	Need recognised by the TPA Indication of the animal species Factory farming origin not permitted
– Liquid animal excrements (slurry, urine, etc.)	Use after controlled fermentation and/or appropriate dilution Need recognised by the TPA Indication of animal species Factory farming origin forbidden

	(iii.) fermentation Extraction or treatment with chemicals is prohibited. Need recognised by the TPA
– Sawdust and wood chips	Wood not chemically treated after felling
– Composted bark	Wood not chemically treated after felling
– Wood ash	From wood not chemically treated after felling
– Soft ground rock phosphate	Cadmium content less than or equal to 90 mg/kg of P ₂ O ₅
– Aluminium calcium phosphate	Cadmium content less than or equal to 90 mg/kg of P ₂ O ₅ Use limited to basic soils (pH > 7.5)
– Basic slag	Need recognised by the TPA
– Crude potassium salt – (for instance: kainit, sylvinit, etc.)	Need recognised by the TPA. Obtained by physical procedures but not enriched by chemical processes to increase its solubility.
– Potassium sulphate possibly containing magnesium salt	Product derived from crude potassium salt by a physical extraction process and possibly containing also magnesium salts Need recognised by the TPA
– Stillage and stillage extract	Ammonium stillage excluded
– Calcium carbonate of natural origin (for instance: chalk, marl, ground limestone, Breton ameliorant, (märl), phosphate chalk)	
– Magnesium and calcium carbonate of natural origin – (for instance: magnesian chalk, ground magnesium limestone, etc.)	Only of natural origin Need recognised by the TPA
– Magnesium sulphate (for instance: kieserite)	Obtained by physical procedures but not enriched by chemical processes to increase its solubility
– Calcium chloride solution	Foliar treatment of apple trees, after identification of deficit of calcium need recognised by the TPA
– Calcium sulphate (gypsum)	Only of natural origin
–	
– Elemental sulphur	Need recognised by the TPA
– Trace elements	Need recognised by the TPA
– Sodium chloride	Mined salt or solar salt obtained from seawater by non-synthetic process. Need recognised by the TPA For rules specific to the USA market please refer to point 6.1 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

- Stone meal	
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TABLE 2 PESTICIDES

1. Products for plant protection.

General conditions applicable for all the products composed or containing the following active substances:

- use in accordance with provisions of Sections 4, 5, 6 and 7 of these Rules.
- use only pesticides that are authorised for use in New Zealand under the Pesticides Act (and/or the ACVM Act and regulations, HSNO Act, or are exempt.
- Only the following substances in this section are allowed as pesticides for use with organic products exported to the EU and US, unless specifically prohibited under conditions for use.
- For rules specific to the USA market please refer to point 3.1 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

I. Substances of crop or animal origin

Name	Description; composition requirements; conditions for use
Azadirachtin extracted from <i>Azadirachta indica</i> (Neem tree)	Insecticide; Need recognised by the TPA
Beeswax	Pruning agent
Gelatine	Insecticide
Hydrolysed proteins	Attractant (used in traps and dispensers) “Derived without chemical treatment other than oil extraction using organic solvent”. Only in authorised applications in combination with other appropriate products of this Table 2.
Lecithin	Fungicide
Plant oils (e.g. mint oil, pine oil, caraway oil).	Insecticide, acaricide, fungicide, sprout inhibitor and foliage suppressant (targeted application only for foliage suppressant). Note: targeted application is considered as spot spraying only (e.g. spraying the structure posts of kiwifruit frames where physically/mechanically suppressing the foliage is not possible) and is to be used on established plants only. It does not include band or strip spraying of boundaries, walkways etc.
Pyrethrins extracted from <i>Chrysanthemum cinerariaefolium</i> .	Insecticide Use of piperonyl butoxide as a synergist is prohibited.
Quassia extracted from <i>Quassia amara</i>	Insecticide, repellent

II. Micro-organisms used for biological pest control

Name	Description; composition requirements; conditions for use
Micro-organisms (bacteria, viruses and fungi) e.g. <i>Bacillus thuringensis</i> , <i>Granulosis virus</i> , etc.	Not genetically modified

III. Substances to be used in traps and/or dispensers

General conditions:

- the traps and/or dispensers must prevent the penetration of the substances in the environment and prevent contact of the substances with the crops under cultivation.
- the traps must be collected after use and disposed of safely.

Name	Description; composition requirements; conditions for use
Diammonium phosphate	Attractant; Only in traps
Pheromones	Attractant, sexual behaviour disrupter Only in traps and dispensers.

IV. Other substances from traditional use in organic farming

Name	Description; compositional requirements; conditions for use
Copper in the form of copper hydroxide, copper oxychloride, (tribasic) copper sulphate, cuprous oxide	Fungicide; Until 31 December 2005 up to a maximum of 8 kg copper per hectare per year, and from 1 January 2006 up to 6 kg copper per ha per year, without prejudice to a more limited quantity if laid down under the specific terms of the general legislation on plant protection products in the country where the product is to be used; For perennial crops, operators may, by derogation to the previous paragraph, provide that the maximum levels apply as follows: <ul style="list-style-type: none"> - the total maximum quantity used from 23 March 2002 until 31 December 2006 shall not exceed 38 kg copper per ha - from 1 January 2007, the maximum quantity which may be used each year per ha shall be calculated by subtracting the quantities actually used in the 4 preceding years from, respectively, 36, 34, 32, and 30 kg copper for the years 2007, 2008, 2009 and 2010 and following years Need recognised by the TPA.
Ethylene	Degreening bananas and early season kiwifruit
Lime sulphur (calcium polysulphide)	Fungicide, insecticide, acaricide;

	Need recognised by the TPA.
Paraffin oil	Insecticide, acaricide
Fatty acid potassium salt (soft soap)	Insecticide
Mineral oils	Insecticide, fungicide; Only in fruit trees, olive trees, other subtropical fruit crops (e.g. kiwifruit, tamarillos, feijoas), and tropical crops (e.g. bananas); Need recognised by the TPA.
Potassium permanganate	Fungicide, bactericide; Only in fruit trees, olive trees and vines.
Quartz sand	Repellent
Sulphur	Fungicide, acaricide, repellent.

2. Products for pest and disease control in livestock buildings and installations:

Products listed in Table 2, 1: Products for plant protection

Name	Description; compositional requirements; conditions for use
Rodenticides	

TABLE 3 FEED MATERIALS

General conditions for all the products:

- use only feed materials that are authorised for use in New Zealand under the ACVM Act and regulations, HSNO Act, or are exempt.
- The following substances in this section are allowed as feed materials for use with organic products exported to the EU only.
- For rules specific to the USA market please refer to point 3.1 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

1. Feed materials from plant origin

- 1.1 Cereals, grains, their products and by-products. Only the following substances are included in this category:

Oats as grains, flakes, middlings, hulls and bran; barley as grains, protein and middlings; rice germ expeller; millet as grains; rye as grains and middlings; sorghum as grains; wheat as grains, middlings, bran, gluten feed, gluten and germ; spelt as grains; triticale as grains; maize as grains, bran, middlings, bran, germ expeller and gluten; malt culms; brewers' grains.

- 1.2 Oil seeds, oil fruits, their products and by-products. The following substances are included in this category:

Rape seed, expeller, and hulls; soya bean as bean, toasted, expeller and hulls; sunflower seed as seed and expeller; cotton as seed and seed expeller; linseed as seed and expeller; sesame seed as expeller; palm kernels as expeller; pumpkin seed as expeller; olives, olive pulp; vegetable oils (from physical extraction).

- 1.3 Legume seeds, their product and by-products. Only the following substances are included in this category:

Chick peas as seeds, middlings and bran; ervil as seeds, middlings and bran; chickling vetch as seeds submitted to heat treatment, middlings and bran; peas as seeds, middlings, and bran; broad beans as seeds, middlings and bran; horse beans as seeds middlings and bran, vetches as seeds, middlings and bran and lupin as seeds, middlings and bran.

- 1.4 Tuber roots, their products and by-products. Only the following substances are included in this category:

Sugar beet pulp, potato, sweet potato as tuber, potato pulp (by-product of the extraction of potato starch), potato starch, potato protein and manioc.

- 1.5 Other seeds and fruits, their products and by-products. Only the following substances are included in this category:

Carob, carob pods and meals thereof, pumpkins, citrus pulp, apples, quinces, pears, peaches, figs, grapes and pulps thereof; chestnuts, walnut expeller, hazelnut expeller; cocoa husks and expeller; acorns.

- 1.6 Forages and roughages. Only the following substances are included in this category:

Lucerne, lucerne meal, clover, clover meal, grass (obtained from forage plants), grass meal, hay, silage, straw of cereals, and root vegetables for foraging.

- 1.7 Other plants, their products and by-products. Only the following substances are included in this category:

Molasses, seaweed meal (obtained by drying and crushing seaweed and washed to reduce iodine content), powders and extracts of plants, plant protein extracts (solely provided to young animals), spices and herbs.

The following feed materials may be used until 30 June 2004: rice as grain, rice broken, rice bran, rye feed, rye bran, turnip rape seed expeller, turnip rape seed hulls and tapioca.

2 Feed materials from animal origin

- 2.1 Milk and milk products. Only the following substances are included in the category:

Raw milk, milk powder, skim milk, skim-milk powder, buttermilk, buttermilk powder, whey, whey powder, whey powder low in sugar, whey protein powder (extracted by physical treatment), casein powder, lactose powder, curd and sour milk.

- 2.2 Fish, other marine animals, their products and by-products. Only the following substances are included in the category:

Fish, fish oil and cod-liver oil not refined; fish molluscan or crustacean autolysates, hydrolysate and proteolysates obtained by an enzyme action, whether or not in soluble form, solely provided to young animals. Fish meal.

For additional rules specific to the USA market please refer to point 6.2 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

3 Feed materials from mineral origin

Only the following substances are included in this category:

<p>Sodium:</p> <ul style="list-style-type: none"> unrefined sea salt coarse rock salt sodium sulphate sodium carbonate sodium bicarbonate sodium chloride 	<p>Calcium:</p> <ul style="list-style-type: none"> lithotamnion and maerl shells of aquatic animals (including cuttlefish bones) calcium carbonate calcium lactate calcium gluconate
<p>Phosphorus:</p> <ul style="list-style-type: none"> bone dicalcium phosphate precipitate defluorinated dicalcium phosphate defluorinated monocalcium phosphate 	<p>Magnesium:</p> <ul style="list-style-type: none"> magnesium sulphate magnesium chloride magnesium carbonate magnesium oxide (anhydrous magnesia)
<p>Sulphur:</p> <ul style="list-style-type: none"> sodium sulphate 	

4 Feed additives

For additional rules specific to the USA market please refer to points 6.2 (c) and (d) in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

4.1 Trace elements. Only the following substances are included in this category:

E1 Iron: ferrous (II) carbonate ferrous (II) sulphate monohydrate and/or heptahydrate ferric (III) oxide	E2 Iodine: calcium iodate, anhydrous calcium iodate, hexahydrate sodium iodide
E3 Cobalt: cobaltous (II) sulphate monohydrate and/or heptahydrate basic cobaltous (II) carbonate, monohydrate	E4 Copper: copper (II) oxide basic copper (II) carbonate, monohydrate copper (II) sulphate, pentahydrate
E5 Manganese: Manganous (II) carbonate manganous oxide manganous (II) sulphate, mono- and/or tetrahydrate	E6 Zinc: zinc carbonate zinc oxide zinc sulphate mono- and/or hepta-hydrate
E7 Molybdenum: Ammonium molybdate, natrium molybdate	E8 Selenium: sodium selenate sodium selenite

4.2 Vitamins, provitamins and chemically well defined substances having a similar effect, and other items also legally available. Only the following substances are included in this category:

Vitamins approved for use under NZ Legislation:

- preferably derived from raw materials occurring naturally in feeds, or
- synthetic vitamins identical to natural vitamins only for mono-gastric animals.

By derogation from the first paragraph, and during a transitional period ending on 31 December 2005, the TPA may authorise the use of synthetic vitamins A, D and E for ruminants in so far as the following conditions are met:

- the synthetic vitamins are identical to the natural vitamins, and
- the authorisation issued by the TPA is founded on precise criteria.

Producers may benefit from this authorisation only if they have demonstrated to the satisfaction of the NZFSA that the health and welfare of the animals cannot be guaranteed without the use of these synthetic vitamins.

4.3 Enzymes. Only the following substances are included in this category:

Enzymes approved for use under NZ Legislation;

4.4 Micro-organisms. Only the following substances are included in this category:

Micro-organisms approved for use under NZ Legislation;

4.5 Preservatives. Only the following substances are included in this category:

E 236 Formic acid	E 260 Acetic acid
E 270 Lactic acid	E 280 Propionic acid

4.6 Binders, anti-caking agents and coagulants. Only the following substances are included in this category:

E 551b Colloidal silica	E 551c Kieselgur
E 558 Bentonite	E 559 Kaolinitic clays
E 561 Vermiculite	E 562 Sepiolite
E 599 Perlite	

4.7 Antioxidant substances. Only the following substances are included in this category:

E 306 Tocopherol-rich extracts of natural origin	
--	--

5 Certain products used in animal nutrition

Only the following products are included in this category:

brewer's yeasts.

6 Processing aids used in feeds

6.1 Processing aids for silage. Only the following substances are included in this category:

- Sea salt, coarse rock salt, whey, sugar, sugar beet pulp, cereal flour and molasses,

TABLE 4 INGREDIENTS, PROCESSING AIDS

General Principles

Processing and manufacturing methods should be mechanical, physical or biological (such as fermentation and smoking).

Table 4 covers the ingredients and processing aids which may be used in the preparation of food for human consumption composed essentially of one or more ingredients of plant and/or animal origin, referred to in Section 2.1 (b) of these *Rules*.

Notwithstanding reference to any ingredient in Parts A and C or any processing aid in Part B of this Table, any processing practice such as smoking, shall be carried out, and any ingredient or such processing aid shall be used only in accordance with relevant New Zealand legislation and, in the absence thereof, in accordance with good manufacturing practice for foodstuffs *as well as in minimum quantities necessary for desired results*.

For additional rules specific to the USA market please refer to point 6.3 in Appendix One: Supplementary requirements for Organic Operators producing for the USA Market.

Part A Ingredients Of Non-Agricultural Origin

A.1. Food additives, including carriers

	Name	Specific conditions (*)
E 170	Calcium carbonates	All authorised functions except colouring
E 270	Lactic acid	<i>Fruit and vegetable products</i>
E 290	Carbon dioxide	—
E 296	Malic acid	<i>DL-Malic acid</i> Prohibited for US
E 300	Ascorbic acid	<i>Ascorbic acid (L-)</i>
E 306	Tocopherol-rich extract	anti-oxidant in fats and oils
E 322	Lecithins	<i>Obtained without the use of bleaches and organic solvents.</i>
E 330	Citric acid	<i>Fruit and vegetable products</i>
E 331	Sodium citrate	Sausages/pasteurisation of egg whites/ milk products
E 334	Tartaric acid (L(+)-)	
E 335	Sodium tartrate	<i>Cakes, biscuits and confectionery</i> Prohibited for US
E 336	Potassium tartrate	<i>Cereals/cakes/confectionery</i>
E 341 (i)	Mono calcium phosphate	raising agent for self raising flour
E 400	Alginic acid	—
E 401	Sodium alginate	
E 402	Potassium alginate	
E 406	Agar	
E 407	Carrageenan	
E 410	Locust bean gum	—
E 412	Guar gum	—
E 413	Tragacanth gum	Prohibited for US
E 414	Arabic gum	<i>Fat and confectionery products</i>
E 415	Xantahn gum	—
E 416	Karaga gum	Prohibited for US

(*) CR-carrier

E 440 (i)	Pectin	—
E 500	Sodium carbonates	Cakes, biscuits and confectionery
E 501	Potassium carbonates	Cereals/Cakes, biscuits and confectionery
E 503	Ammonium carbonates	—
E 504	Magnesium carbonates	—
E 509	Calcium chloride	Milk products/meat products
E 516	Calcium sulphate	Carrier and coagulating agent Cakes & biscuits/soy bean products/bakers yeast
E 524	Sodium hydroxide	surface treatment of Laugengebäck
E 551	Silicon dioxide	<i>Gel or colloidal solution</i> Anti-caking agent for herbs and spices
E 938	Argon	Prohibited for US
E 941	Nitrogen	—
E 948	Oxygen	—

A.2. Flavourings

Substances and products labelled as natural flavouring substances or natural flavouring preparations.

A.3. Water and salt

Drinking water

Salt (with sodium chloride or potassium chloride as basic components), generally used in food processing.

A.4. Micro-organism preparations

Any preparations of micro-organisms normally used in food processing, with the exception of genetically modified micro-organisms;

A.5. Minerals (trace elements included), vitamins, amino acids and other nitrogen compounds

Minerals (trace elements included), vitamins, amino acids and other nitrogen compounds, only authorized as far their use is legally required in the foodstuffs in which they are incorporated.

Part B Processing Aids and Other Products which may be used in Organic Production of Ingredients of Agricultural Origin

Name	Specific conditions (*)
Water	
Calcium chloride	coagulation agent
Calcium carbonate	
Calcium hydroxide	
Calcium sulphate	coagulation agent
Magnesium chloride (or nigari)	coagulation agent
Potassium carbonate	drying of grapes
Sodium carbonate	sugar production, anti-caking agent, milk products: neutralising substance
Citric acid	Oil production and hydrolysis of starch Fruits and vegetable products.
Sodium hydroxide	— Sugar production

	— oil production from rape seed (<i>Brassica</i> spp)
Sulphuric acid	sugar production, Prohibited for US
Carbon dioxide	
Lactic acid	Milk product: coagulation agent, pH regulation of salt bath for cheeses
Nitrogen	
Ethanol	Solvent, Prohibited for US
Tannic acid	filtration aid, Prohibited for US
Egg white albumen	Prohibited for US
Casein	Prohibited for US
Gelatin	
Isinglass	Prohibited for US
Vegetable oils	greasing, releasing or anti-foaming agent, Prohibited for US
Silicon dioxide gel or colloidal solution	
Activated carbon	Prohibited for US
Talc	Prohibited for US
Bentonite	
Kaolin	
Diatomaceous earth	
Perlite	
Hazelnut shells	Prohibited for US
Rice meal	Not chemically treated. Prohibited for US
Beeswax	releasing agent
Carnauba wax	releasing agent

Preparations of micro-organisms and enzymes:

Any preparations of micro-organisms and enzymes normally used as processing aids in food processing, with the exception of genetically modified micro-organisms and genetically modified enzymes.

Part C Ingredients of Agricultural Origin Which Have Not Been Produced Organically

Prohibited for US.

Able to be used when the same organic products are not available commercially

C.1. Unprocessed vegetable products as well as products derived therefrom by processes referred to under definition in Section 4.2(a):

C.1.1. Edible fruits, nuts and seeds:

acorns (<i>Quercus</i> spp)	raspberries (dried) (<i>Rubus idaeus</i>)
cola nuts (<i>Cola acuminata</i>)	red currants (dried) (<i>Ribes rubrum</i>)
gooseberries (<i>Ribes uva-crispa</i>)	Maracujas (passionfruit) (<i>Passiflora edulis</i>)

C.1.2. Edible spices and herbs:

pepper (peruvian)	<i>Schinus molle</i> L.
horseradish seeds	<i>Armoracia rusticana</i>

lesser galanga	<i>Alpinia officinarum</i>
safflower flowers	<i>Carthamus tinctorius</i>
watercress herb	<i>Nasturtium officinale</i>

C.1.3. Miscellaneous:

algae, including seaweed, permitted in conventional foodstuffs preparation

C.2. Vegetable products, processed by processes as referred to under definition 2(b):

C.2.1. Fats and oils whether or not refined, but not chemically modified, derived from plants other than:

Cocoa (<i>Theobroma cacao</i>)	rape (<i>Brassica napus, rapa</i>)
coconut (<i>Cocos nucifera</i>)	safflower (<i>Carthamus tinctorius</i>)
olive (<i>Olea europaea</i>)	sesame (<i>Sesamum indicum</i>)
sunflower (<i>Helianthus annuus</i>)	soya (<i>Glycine max</i>)
palm (<i>Elaeis guineensis</i>)	

C.2.2. Sugars; starch; other products from cereals and tubers:

fructose	unleavened bread paper
rice paper	starch from rice and waxy maize, not chemically modified

C.2.3. Miscellaneous:

pea protein (<i>Pisum spp</i>)	
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rum: only obtained from cane sugar juice

kirsch prepared on the basis of fruits and flavourings as referred to in Section A.2 of this Table

C.3. Animal products:

Aquatic organisms, not originating from aquaculture, and permitted in conventional foodstuffs preparation

gelatin	
whey powder "herasuola"	

TABLE 5 CLEANING AIDS AND DISINFECTANTS

Potassium and sodium soap	Water and steam
Milk of lime	Lime
Quicklime	Sodium hypochlorite (e.g. as liquid bleach)
Caustic soda	Caustic potash
Hydrogen peroxide	Natural essences of plants
Citric, peracetic acid, formic, lactic, oxalic and acetic acid	Alcohol
Nitric acid (dairy equipment)	Phosphoric acid (dairy equipment)
Formaldehyde	Cleaning and disinfection products for teats and milking facilities
Sodium carbonate	

TABLE 6 OTHER INPUTS

None at this stage

TABLE 7 ANIMAL STOCKING RATES (WHEN SPREADING ANIMAL MANURE FROM HOUSING), HOUSING SPACE

NOTE: The animal stocking rates listed in this table are only applicable to production units where the spreading of animal manure from animals' housing on to pasture is undertaken.

Maximum number of animals per hectare

Class or species	Maximum number of animals per ha equivalent to 170 kg N/ha/year
Equines over six months old	2
Calves for fattening	5
Other bovine animals less than one year old	5
Male bovine animals from one to less than two years old	3.3
Female bovine animals from one to less than two years old	3.3
Male bovine animals two years old or over	2
Breeding heifers	2.5
Heifers for fattening	2.5
Dairy cows	2
Cull dairy cows	2
Other cows	2.5
Female breeding rabbits	100
Sheep	13.3
Goats	13.3
Piglets	74
Breeding sows	6.5
Pigs for fattening	14
Other pigs	14
Table chickens	580
Laying hens	230

Minimum surface areas indoors and outdoors and other characteristics of housing in the different species and types of production

1. *Bovines, Cervines (i.e. farmed deer), Ovines and Pigs*

	Indoors area (net area available to animals)		Outdoors area (exercise area, excluding grazing)
	Live weight minimum (kg)	M ² /head	M ² /head
Breeding and fattening bovine cervines (i.e. farmed deer), and equidae	up to 100 up to 200 up to 350 over 350	1.5 2.5 4.0 5 with a minimum of 1 m ² /100kg	1.1 1.9 3 3.7 with a minimum of 0.75 m ² /100kg
Dairy cows		6	4.5
Bulls for breeding		10	30
Sheep and goats		1.5 sheep/goat 0.35 lamb/kid	2.5 2.5 with 0.5 per lamb/kid
Farrowing sows with piglets up to 40 days		7.5 sow	2.5
Fattening pigs	up to 50 up to 85 up to 110	0.8 1.1 1.3	0.6 0.8 1
Piglets	over 40 days and up to 30 kg	0.6	0.4
Brood pigs		2.5 female 6.0 male	1.9 8.0

2. *Poultry*

	Indoors area (net area available to animals)			Outdoors area (m ² of area available in rotation/head)
	No animals/m ²	cm perch/animal	nest	
Laying hens	6	18	8 laying hens per nest or in case of common nest 120 cm ² /bird	4 (#)
Fattening poultry (in fixed housing)	10 with a maximum of 21 kg live-weight/ m ²	20 (for guinea fowl only)		4 broilers and guinea fowl (#) 4.5 ducks (#) 10 turkey (#) 15 geese (#)

(#) provided that the limit of 170 kg of N/ha/year is not exceeded

Fattening poultry in mobile housing	16 (*) in mobile poultry houses with a maximum of 30 kg live-weight/ m ²			2.5, (#)
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(*) only in the case of mobile houses not exceeding 150 m² floor space which remain open at night.

APPENDIX ONE: SUPPLEMENTARY REQUIREMENTS FOR ORGANIC OPERATORS PRODUCING FOR THE USA MARKET

Organic product exported to the United States under the NZFSA Official Organic Assurance Programme needs to be produced in accordance with the USDA NOS.

This Appendix contains extracts from the United States Department of Agriculture National Organic Standard (USDA NOS) which describe requirements that are either different or are more stringent to those contained in the main body of the NZFSA Technical Rules for Organic Production.

If further clarification on these supplementary requirements and their application is required NZFSA suggests the reader refers to the USDA NOS. This standard is available on the following website:

<http://www.ams.usda.gov/>

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1.0 General Requirements to be met prior to seeking Official Organic Assurances

1.1 Conversion period for land associated with organic livestock and plant production

Cross references:

USDA NOP: § 205.202 Land requirements.

NZFSA Technical Rules for Organic Production:

Section 4, point 4.1

Section 5, point 5.1

Section 6, point 6.2

Any field or farm parcel from which harvested crops are intended to be sold, labelled, or represented as "organic," must:

- (a) Have been managed in accordance with the provisions of Sections 4 and 5 and 6 of NZFSA Technical Rules;
- (b) Have had no prohibited substances applied to it for a period of 3 years immediately preceding harvest of the crop; and
- (c) Have distinct, defined boundaries and buffer zones such as runoff diversions to prevent the unintended application of a prohibited substance to the crop or contact with a prohibited substance applied to adjoining land that is not under organic management.

Interpretative note

Extracted from the Frequently Asked Question answer on Buffer Zones: [Source AMS website www.ams.usda.gov/nop/]

The US national standards do not specify specific dimensions for buffer zones, but leaves the determination of their size to the organic producer and the certifying agent on a case-by-case basis.

In the US it has always been the responsibility of organic operations to manage potential contact of organic products with other substances not approved for use in organic production systems. The organic system plan must outline steps that an organic operation will take to avoid drift from neighboring operations, particularly drift of synthetic chemical pesticides.

While the US national organic standards provide significant discretion in establishing buffer zone dimensions, buffer zones should not be sized at distances which attempt to achieve a zero tolerance for prohibited substances. The intent of the regulations in the US are to foster a collaborative effort between the certifying agents and their grower clients to determine an appropriate buffer zone with each party being fully cognisant of the process-based nature of the organic label claim.

1.2 Soil fertility and crop nutrient management practice

Cross references

USDA NOP: § 205.203 Soil fertility and crop nutrient management practice standard.

NZFSA Technical Rules for organic production:

Section 5, point 5.2-5.3

Section 6, point 6.1.3, 6.7.2

Section 8, point 8.9

Table 1

The producer must manage plant and animal materials to maintain or improve soil organic matter content in a manner that does not contribute to contamination of crops, soil, or water by plant nutrients, pathogenic organisms, heavy metals, or residues of prohibited substances. Animal and plant materials include:

- (1) Raw animal manure, which must be composted unless it is:
 - (i) Applied to land used for a crop not intended for human consumption;
 - (ii) Incorporated into the soil not less than 120 days prior to the harvest of a product whose edible portion has direct contact with the soil surface or soil particles; or
 - (iii) Incorporated into the soil not less than 90 days prior to the harvest of a product whose edible portion does not have direct contact with the soil surface or soil particles;

- (2) Composted plant and animal materials produced through a process that
 - (i) established an initial C:N ratio of between 25:1 and 40:1; and
 - (ii) maintained a temperature of between 131F and 170F for 3 days using an in-vessel or static aerated pile system; or
 - (iii) maintained a temperature of between 131F and 170F for 15 days using a window composting system, during which period, the materials must be turned a minimum of five times.

- (3) Un-composted plant materials.

The producer must not use sewage sludge (biosolids).

1.3 Treated lumber.

Cross references

US Reference: § 205.206 Crop pest, weed, and disease management practice standard.

NZFSA Technical Rules for Organic Production:

Section 6, point 6.6

Section 5, point 5.9

Section 7, point 7.8.1

The producer must not use lumber treated with arsenate or other prohibited materials for new installations or replacement purposes in contact with soil or livestock.

This means:

*Treated lumber is prohibited from direct contact with organically produced and handled crops and livestock. This prohibition **does not include** uses such as lumber for fence posts or building materials that are isolated from production. The prohibition applies to lumber used in crop production, such as the frames of a planting bed, and for raising livestock, such as the boards used to build a farrowing house.*

Treated lumber is prohibited for use in:

- *wooden structures used to support crops*

- wooden frames for planting beds
- livestock housing
- enclosures used in intensive livestock production

The prohibition does not apply to:

- fencing used to manage stock in extensive livestock production systems.

(Ref. email correspondence from Keith Jones, USDA – “Organic Enquiries” (08/05/03))

1.4 Residue levels.

Cross references

USDA NOP: § 205.671 Exclusion from organic sale.
NZFSA/MAF Standard OP2, section 7.0

When residue testing detects prohibited substances at levels that are greater than 5 percent of the NZFSA’s tolerance for the specific residue detected or unavoidable residual environmental contamination, the agricultural product must not be sold, labelled, or represented as organically produced. The Third Party Agency or NZFSA may conduct an investigation of the certified operation to determine the cause of the prohibited substance.

2.0 Livestock

2.1 Origin of livestock

Cross reference

USDA NOP: 205.236 Origin of livestock
NZFSA Technical Rules for Organic Production:
Section 6, point 6.2.3, 6.3.1-6.3.14

(a) Livestock products that are to be sold, labelled, or represented as organic must be from livestock under continuous organic management from the last third of gestation or hatching: Except, that:

- (1) Poultry. Poultry or edible poultry products must be from poultry that has been under continuous organic management beginning no later than the second day of life;

Dairy animals. Milk or milk products must be from animals that have been under continuous organic management beginning no later than 1 year prior to the production of the milk or milk products that are to be sold, labeled, or represented as organic, *Except*,

- (i) That, crops and forage from land, included in the organic system plan of a dairy farm, that is in the third year of organic management may be consumed by the dairy animals

- of the farm during the 12-month period immediately prior to the sale of organic milk and milk products; and
- (ii) That, when an entire, distinct herd is converted to organic production, the producer may *provided* no milk produced under this subparagraph enters the stream of commerce labeled as organic after June 9, 2007: (a) For the first 9 months of the year, provide a minimum of 80-percent feed that is either organic or raised from land included in the organic system plan and managed in compliance with organic crop requirements; and (b) Provide feed in compliance with § 205.237 for the final 3 months.
 - (iii) Once an entire, distinct herd has been converted to organic production, all dairy animals shall be under organic management from the last third of gestation.

This means:

All dairy animals that are being raised as organic must be managed in compliance with the USNOS (fully certified property) for a period of 12 months before milk or milk products from these animals will meet the requirements for export to the US. The exception to this rule is when the entire distinct herd of dairy animals is converted to organic the cows can be fed C2 crops or pasture during the 12 month period prior to full organic.

- (2) Breeder stock. Livestock used as breeder stock may be brought from a non-organic operation onto an organic operation at any time: Provided, that, if such livestock are gestating and the offspring are to be raised as organic livestock, the breeder stock must be brought onto the facility no later than the last third of gestation.

(b) The following are prohibited:

- (1) Livestock or edible livestock products that are removed from an organic operation and subsequently managed on a non-organic operation may be not sold, labelled, or represented as organically produced.
- (2) Breeder or dairy stock that has not been under continuous organic management since the last third of gestation may not be sold, labelled, or represented as organic slaughter stock.

- (c) **The producer of an organic livestock operation must maintain records sufficient to preserve the identity of all organically managed animals and edible and non-edible animal products produced on the operation.**

2.2 Livestock feed

Cross references

USDA NOP: 205.237 LIVESTOCK FEED
NZFSA Technical Rules for Organic Production:
Section 6, point 6.4.1-6.4.18

(a) The producer of an organic livestock operation must provide livestock with a total feed ration composed of agricultural products, including pasture and forage, that are organically produced and, if applicable, organically handled: Except, that, non-synthetic substances and synthetic substances allowed under point 6.2 of this Appendix may be used as feed additives and supplements.

(b) The producer of an organic production must not:

- (1) Use animal drugs, including hormones, to promote growth;
- (2) Provide feed supplements or additives in amounts above those needed for adequate nutrition and health maintenance for the species at its specific stage of life;
- (3) Feed plastic pellets for roughage;
- (4) Feed formulas containing urea or manure;
- (5) Feed mammalian or poultry slaughter by-products to mammals or poultry; or
- (6) Use feed, feed additives, and feed supplements in violation of New Zealand legislation [ACVM Act, PAR system, professional conduct (NZVA)].

2.3 Livestock health care practice standard

Cross references

USDA NOP: 205.238 Livestock health care practice standard

NZFSA Technical Rules for Organic Production:

Section 6, point 6.5.4-6.5.10

(a) Only medicines listed by the United States that are permitted under NZ law may be used.

(b) When preventive practices and veterinary biologics are inadequate to prevent sickness, a producer may administer synthetic medications: Provided, that, such medications are allowed under point 6.2 in this Appendix. Parasiticides allowed under point 6.2 may be used on:

- (1) Breeder stock, when used prior to the last third of gestation but not during lactation for progeny that are to be sold, labelled, or represented as organically produced; and
- (2) Dairy stock, when used a minimum of 90 days prior to the production of milk or milk products that are to be sold, labelled, or represented as organic.

(c) The producer of an organic livestock operation must not:

- (1) Sell, label, or represent as organic any animal or edible product derived from any animal treated with antibiotics, any substance that contains a synthetic substance not allowed

under point 6.2 of this Appendix, or any substance that contains strychnine, a prohibited non-synthetic substance.

This means:

(a) For livestock (excluding dairy animals for milk production);

If an organic animal is treated with antibiotics, the animal and its products following treatment must not be sold, labeled, or represented as organic.

(b) For dairy animals for milk production;

1. A conventional dairy animal treated with antibiotics can be converted to organic by being under continuous organic management for 1 year prior to milk and milk products from the animal being sold as organic.

2. Once a dairy animal is converted to organic, if it is treated with antibiotics (subsequent to gaining organic status) it loses its organic status for ever (Rules: 205.236 (2) (iii), 205.238 (c) (1)).

- (2) Administer any animal drug, other than vaccinations, in the absence of illness;
- (3) Administer hormones for growth promotion;
- (4) Administer synthetic parasiticides on a routine basis;
- (5) Administer synthetic parasiticides to slaughter stock;
- (6) Administer animal drugs in violation of NZ legislation [ACVM Act, PAR system, professional conduct (NZVA)]; or
- (7) Withhold medical treatment from a sick animal in an effort to preserve its organic status. All appropriate medications must be used to restore an animal to health when methods acceptable to organic production fail. Livestock treated with a prohibited substance must be clearly identified and shall not be sold, labelled, or represented as organically produced.

3.0 Pest management

3.1 Requirements for facility pest management.

Cross references

US NOP: § 205.271 Facility pest management practice

NZFSA Technical Rules for Organic Production:

Section 5, point 5.6

Section 6, point 6.6

Table 2, Pesticides

(a) The producer or handler of an organic facility must use management practices to prevent pests, including but not limited to:

- (1) Removal of pest habitat, food sources, and breeding areas;
- (2) Prevention of access to handling facilities; and
- (3) Management of environmental factors, such as temperature, light, humidity, atmosphere, and air circulation, to prevent pest reproduction.

(b) Pests may be controlled through:

- (1) Mechanical or physical controls including but not limited to traps, light, or sound; or
- (2) Lures and repellents using non-synthetic or synthetic substances consistent with the National List (*i.e. NZFSA Technical Rules for Organic Production, Table 2*).

(c) If the practices provided for in paragraphs (a) and (b) of this section are not effective to prevent or control pests, a non-synthetic or synthetic substance consistent with the National List (*i.e. NZFSA Technical Rules for Organic Production, Table 2*) may be applied.

(d) If the practices provided for in paragraphs (a), (b), and (c) of this section are not effective to prevent or control facility pests, a synthetic substance not on the National List (*i.e. NZFSA Technical Rules for Organic Production, Table 2*) may be applied. Provided, that, the handler and certifying agent agree on the substance, method of application, and measures to be taken to prevent contact of the organically produced products or ingredients with the substance used.

(e) The handler of an organic handling operation who applies a nonsynthetic or synthetic substance to prevent or control pests must update the operation's organic handling plan to reflect the use of such substances and methods of application. The updated organic plan must include a list of all measures taken to prevent contact of the organically produced products or ingredients with the substance used.

(f) Notwithstanding the practices provided for in paragraphs (a), (b), (c), and (d) of this section, a handler may otherwise use substances to prevent or control pests as required by NZ legislation. Provided, That, measures are taken to prevent contact of the organically produced products or ingredients with the substance used.

3.2 Measures to be taken following the application of non-approved pest control substances

Cross references

USDA NOP: § 205.672 Emergency pest or disease treatment.

*NZFSA Technical Rules for Organic Production:
Section 6, point 6.5.7(b)*

When a prohibited substance is applied to a certified operation due to a National emergency pest or disease treatment program and the certified operation otherwise meets the requirements of this part, the certification status of the operation shall not be affected as a result of the application of the prohibited substance: Provided, That:

(a) Any harvested crop or plant part to be harvested that has contact with a prohibited substance applied as the result of a National emergency pest or disease treatment program cannot be sold, labelled, or represented as organically produced; and

(b) Any livestock that are treated with a prohibited substance applied as the result of a National emergency pest or disease treatment program or product derived from such treated livestock cannot be sold, labelled, or represented as organically produced: Except, That:

(1) Milk or milk products may be sold, labelled, or represented as organically produced beginning 12 months following the last date that the dairy animal was treated with the prohibited substance; and

(2) The offspring of gestating mammalian breeder stock treated with a prohibited substance may be considered organic: Provided, that the breeder stock was not in the last third of gestation on the date that the breeder stock was treated with the prohibited substance.

4.0 Prohibited substances

Cross references

*USDA NOP: § 205.400 General requirements for certification.
NZFSA Technical Rules for Organic Production: Not covered*

Immediately notify the Third Party Agency concerning any application, including drift, of a prohibited substance to any field, production unit, site, facility, livestock, or product that is part of an operation.

5.0 Packaging and Labelling

Cross references

USDA NOP: § 205.272 Commingling and contact with prohibited substance prevention practice standard.

*NZFSA Technical Rules for Organic Production:
Section 8 C, points 8.14-8.16*

5.1 Packaging

- (a) **The handler of an organic handling operation must implement measures necessary to prevent the commingling of organic and non-organic products and protect organic products from contact with prohibited substances.**
- (b) **The following are prohibited for use in the handling of any organically produced agricultural product or ingredient labelled in accordance with the Labelling, product composition section of this part:**
- (1) Packaging materials, and storage containers, or bins that contain a synthetic fungicide, preservative, or fumigant;
 - (2) The use or reuse of any bag or container that has been in contact with any substance in such a manner as to compromise the organic integrity of any organically produced product or ingredient placed in those containers, unless such reusable bag or container has been thoroughly cleaned and poses no risk of contact of the organically produced product or ingredient with the substance used.

5.2 Labelling

(a) **The term, "organic",**

Cross references

USDA NOP: § 205.300 Use of the term, "organic."

NZFSA Technical Rules for Organic Production:

Section 10, point 10.2

The term, "organic," may not be used in a product name to modify a non-organic ingredient in the product.

(b) **Calculation of % organic. Products sold, labelled, or represented as "organic".**

Cross references

USDA NOP: § 205.301 Product composition.

NZFSA Technical Rules for Organic Production:

Section 10, point 10.4-10.5

Interpretative Note:

Both NZ and US require at least 95% organic ingredients in 'organic' products. However, under the US standard, at least 95% of the *total* ingredients must be organic; under NZ, at least 95% of the ingredients of *agricultural origin* must be organic. That is, non-agricultural ingredients are not included in the NZ calculation, whereas they are included in the calculation under US. The NZ method of calculation can result in products with less than 95% of the total ingredients being labelled 'organic'.

Similarly, both NZ and US require at least 70% organic ingredients in 'made with organic ingredient' products. However, under US, at least 70% of the *total* ingredients must be organic (refer below); under NZ, at least 70% of the ingredients of *agricultural origin* must be organic. Non-agricultural ingredients are not included in the NZ calculation, whereas they are included under US. The NZ method of calculation can result in products with less than 70% of the total ingredients being labelled 'made with organic ingredients'.

5.3 Limits on listing organic ingredients.

Cross references

USDA NOP: § 205.304 Packaged products labelled "made with organic (specified ingredients or food group(s))."

*NZFSA Technical Rules for Organic Production:
Section 10, 10.4-10.5*

Agricultural products in packages labelled “made with organic (specified ingredients of food group(s)) may display on the principal display panel, information panel, and any other panel and on any labelling or market information concerning the product:

(1) The statement:

(i) "Made with organic (specified ingredients)": Provided, that the statement does not list more than three organically produced ingredients; or

(ii) "Made with organic (specified food groups)": Provided, That, the statement does not list more than three of the following food groups: beans, fish, fruits, grains, herbs, meats, nuts, oils, poultry, seeds, spices, sweeteners, and vegetables or processed milk products.

6.0 Listing allowed and prohibited inputs

Cross references

USDA NOP: § 205.600 Evaluation criteria for allowed and prohibited substances, methods, and ingredients.

*NZFSA Technical Rules for Organic Production:
Section 9, Inputs used in Organic Production*

The following criteria will be utilised in the evaluation of substances or ingredients for the organic production and handling sections of the National List (*i.e. NZFSA Technical Rules for Organic Production, Tables 1-6*):

(a) Synthetic and non-synthetic substances considered for inclusion on or deletion from the National List (*i.e. NZFSA Technical Rules for Organic Production, Tables 1-6*) of allowed and prohibited substances will be evaluated using the criteria specified in Section 9 of the NZFSA Technical Rules.

(b) In addition to point (a) above, any synthetic substance used as a processing aid or adjuvant will be evaluated against the following criteria:

(1) The substance cannot be produced from a natural source and there are no organic substitutes;

(2) The substance's manufacture, use, and disposal do not have adverse effects on the environment and are done in a manner compatible with organic handling;

- (3) The nutritional quality of the food is maintained when the substance is used, and the substance, itself, or its breakdown products do not have an adverse effect on human health as defined by applicable New Zealand regulations;
 - (4) The substance's primary use is not as a preservative or to recreate or improve flavours, colours, textures, or nutritive value lost during processing, except where the replacement of nutrients is required by law;
 - (5) The substance is listed as generally recognised as safe (GRAS) by the NZFSA when used in accordance with NZFSA's good manufacturing practices (GMP) and contains no residues of heavy metals or other contaminants in excess of tolerances set by NZFSA; and
 - (6) The substance is essential for the handling of organically produced agricultural products.
- (c) Non-synthetics used in organic processing will be evaluated using the criteria specified in Section 9 of the NZFSA Technical Rules.**

6.1 Crop Inputs

Synthetic substances allowed for use in organic crop production for the US

The following substances in this section are allowed for use on organic crop products for export to the US only. They are prohibited for use on organic crop products for export to the EU, unless specifically listed in Tables or Sections as per the cross references below.

Cross references

USDA NOP: 205.601 Synthetic substances allowed for use in organic crop production

In accordance with restrictions specified in this section, the following synthetic substances may be used in organic crop production: Provided, that use of such substances do not contribute to contamination of crops, soil, or water. Substances allowed by this section, except disinfectants and sanitizers in paragraph (a) and those substances in paragraphs (c), (j), (k), and (l) of this section, may only be used when the provisions set forth in § 205.206 (a) through (d) prove insufficient to prevent or control the target pest:

(a) As algicide, disinfectants, and sanitizer, including irrigation system cleaning systems

Cross references

NZFSA Technical Rules for Organic Production:

Table 5 Cleaning Aids and Disinfectants

Section 4.1

(1) Alcohols

(i) Ethanol

(ii) Isopropanol

(2) Chlorine materials - Except. That, residual chlorine levels in the water shall not exceed the maximum residual disinfectant limit under the Safe Drinking Water Act

(i) Calcium hypochlorite

- (ii) Chlorine dioxide
- (3) Ozone gas--for use as an irrigation system cleaner only
- (4) Peracetic acid--for use in disinfecting equipment, seed, and asexually propagated planting material
- (5) Soap-based algicide/demossers

(b) As herbicides, weed barriers, as applicable

Cross references

*NZFSA Technical Rules for Organic Production:
Table 2 Pesticides
Section 5.6*

- (1) Herbicides, soap-based - for use in farmstead maintenance (roadways, ditches, right of ways, building perimeters) and ornamental crops
- (2) Mulches
 - (i) Newspaper or other recycled paper, without glossy or colored inks
 - (ii) Plastic mulch and covers (petroleum-based other than polyvinyl chloride (PVC))

(c) As compost feedstocks

Cross references

*NZFSA Technical Rules for Organic Production:
Table 1 Fertilisers and Soil Conditioners
Section 4.1*

- (1) Newspapers or other recycled paper, without glossy or colored inks

(d) As animal repellents

Cross references

*NZFSA Technical Rules for Organic Production:
Table 2 Pesticides
Section 5.6*

- (1) Soaps, ammonium - for use as a large animal repellent only, no contact with soil or edible portion of crop

(e) As insecticides (including acaricides or mite control)

Cross references

NZFSA Technical Rules for Organic Production:
Table 2 Pesticides
Section 5.7

- (1) Ammonium carbonate - for use as bait in insect traps only, no direct contact with crop or soil
- (2) Boric acid - structural pest control, no direct contact with organic food or crops
- (3) Elemental sulfur
- (4) Soaps, insecticidal

(f) As rodenticides

Cross references

NZFSA Technical Rules for Organic Production:
Table 2 Pesticides
Section 5.7

- (1) Sulfur dioxide - underground rodent control only (smoke bombs).
- (2) Vitamin D3.

(g) As plant disease control

Cross references

NZFSA Technical Rules for Organic Production:
Table 2 Pesticides
Section 5.7

- (1) Coppers, fixed - copper hydroxide, copper oxide, copper oxychloride, includes products exempted from EPA tolerance, Provided, that copper-based materials must be used in a manner that minimizes accumulation in the soil and shall not be used as herbicides
- (2) Copper sulfate - Substance must be used in a manner that minimizes accumulation of copper in the soil
- (3) Hydrated lime
- (4) Hydrogen peroxide
- (5) Peracetic acid - for use to control fire blight bacteria
- (6) Potassium bicarbonate
- (1) Streptomycin, for fire blight control in apples and pears only

(8) Tetracycline (oxytetracycline calcium complex), for fire blight control only

(j) As plant or soil amendments.

Cross references

NZFSA Technical Rules for Organic Production:

Table 1 Fertilisers and Soil Conditioners

Section 5.3

- (1) Aquatic plant extracts (other than hydrolyzed) - Extraction process is limited to the use of potassium hydroxide or sodium hydroxide; solvent amount used is limited to that amount necessary for extraction.
- (2) Calcium chloride – only for use as a brine sourced foliar spray to treat a physiological disorder associated with calcium uptake.
- (3) Humic acids - naturally occurring deposits, water and alkali extracts only.
- (4) Lignin sulfonate - chelating agent, dust suppressant, floatation agent.
- (5) Magnesium sulfate - allowed with a documented soil deficiency.
- (6) Micronutrients - not to be used as a defoliant, herbicide, or desiccant. Those made from nitrates or chlorides are not allowed. Soil deficiency must be documented by testing.
 - (i) Soluble boron products.
 - (ii) Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese, molybdenum, selenium, and cobalt.
- (7) Liquid fish products - can be pH adjusted with sulfuric, citric or phosphoric acid. The amount of acid used shall not exceed the minimum needed to lower the pH to 3.5.
- (2) Sodium nitrate – use must be restricted to 20% of the crops total nitrogen requirement.
- (3) Vitamins, B1, C, and E.

(k) As plant growth regulators.

Cross references

NZFSA Technical Rules for Organic Production:

Table 2 Pesticides

Section 5.3

- (1) Ethylene gas – for regulation of pineapple flowering**

l) As floating agents in postharvest handling.

Cross references

NZFSA Technical Rules for Organic Production:
Not covered

- (1) Lignin sulfonate.
- (2) Sodium silicate - for tree fruit and fiber processing.

(1) As synthetic inert ingredients as classified by the Environmental Protection Agency (EPA), for use with non-synthetic substances or synthetic substances listed in this section and used as an active pesticide ingredient in accordance with any limitations on the use of such substances.

Cross references

NZFSA Technical Rules for Organic Production:
Not covered

- (1) EPA List 4 - Inerts of Minimal Concern; and
- (2) EPA List 3 - Inerts of unknown toxicity - for use only in passive pheromone dispensers.

Both are limited to synthetic inert ingredients as classified by NZFSA-ACVM/ERMA , for use with non-synthetic substances or synthetic substances listed in this section and used as an active pesticide ingredient in accordance with any limitations on the use of such substances.

6.2 Livestock Inputs

Synthetic substances allowed for use in organic livestock production

The following substances in this section are allowed for use on organic livestock products for export to the US only. They are prohibited for use on organic livestock products for export to the EU, unless specifically listed in Tables or Sections as per the cross references below.

Cross references

USDA NOP: 205.603 Synthetic substances allowed for use in organic livestock production

In accordance with restrictions specified in this section the following synthetic substances may be used in organic livestock production:

(a) As disinfectants, sanitisers, and medical treatments as applicable

Cross references

NZFSA Technical Rules for Organic Production:
Table 5 Cleaning Aids and Disinfectants

Section 6.5.5 – 6.5.10

(1) Alcohols

- (i) Ethanol – disinfectant and sanitiser only, prohibited as a feed additive
- (ii) Isopropanol – disinfectant only

(2) Aspirin – approved for health care use to reduce inflammation

(3) Chlorine materials – disinfecting and sanitising facilities and equipment. Residual chlorine levels in the water shall not exceed the maximum residual disinfectant limit under the Drinking Water Standards for New Zealand 2000.

- (i) Calcium hypochlorite
- (ii) Chlorine dioxide
- (iii) Sodium hypochlorite

(4) Chlorhexidine – Allowed for surgical procedures conducted by a veterinarian. Allowed for use as a teat dip when alternative germicidal agents and/or physical barriers have lost their effectiveness.

(5) Electrolytes – without antibiotics

(6) Glucose

(7) Glycerin – Allowed as a livestock teat dip, must be produced through the hydrolysis of fats or oils.

(8) Iodine

(9) Hydrogen peroxide

(10) Magnesium sulfate

(11) Oxytocin – use in postparturition therapeutic applications

(12) Parasiticides

Ivermectin is the only synthetic parasiticide that is allowed, but with the following restrictions:

- prohibited in slaughter stock,
- allowed in emergency treatment for dairy and breeder stock when organic system plan-approved preventive management does not prevent infestation.
- Milk or milk products from treated animal cannot be labelled as provided for in this standard for 90 days following treatment.
- In breeder stock, treatment cannot occur during the last third of gestation if the progeny will be sold as organic and must not be used during the lactation period of breeding stock.

(13) Phosphoric acid – allowed as an equipment cleaner, Provided, that, no direct contact with organically managed livestock or land occurs.

(14) Biologics: Vaccines

(b) As topical treatment, external parasiticide or local anaesthetic as applicable.

(4) Iodine

(5) Lidocaine – as a local anaesthetic. Use requires a withdrawal period of 90 days after administering to livestock intended for slaughter and 7 days after administering to dairy animals.

(6) Lime, hydrated – as an external pest control, not permitted to cauterise physical alterations or deodorise animal wastes.

(7) Mineral oil – for topical use and as a lubricant.

(8) Procaine – as a local anaesthetic, use requires a withdrawal period of 90 days after administering to livestock intended for slaughter and 7 days after administering to dairy animals.

(9) Copper sulphate

(c) As feed supplements

Cross references

*NZFSA Technical Rules for Organic Production:
Table 3, section 4 Feed additives*

Milk replacers – without antibiotics, as emergency use only, no non-milk products or products from BST treated animals.

(d) As feed additives

Cross references

*NZFSA Technical Rules for Organic Production:
Table 3, section 4 Feed additives*

(1) DL – Methionine, DL-Methionine – hydroxy analog, and DL-Methionine – hydroxy analog calcium – for use only in organic poultry production until October 21, 2005.

(2) Trace minerals, used for enrichment or fortification when FDA approved.

(3) Vitamins, used for enrichment or fortification when FDA approved

(e) As synthetic inert ingredients as classified by NZFSA-ACVM/ERMA, for use with non-synthetic substances or a synthetic substance listed in this section and used as an active pesticide ingredient in accordance with any limitations on the use of such substances.

Cross references

*NZFSA Technical Rules for Organic Production:
Table 3, part 2.2*

Fish-based feeds.

Fish and fish products are not considered to be from organic sources and on that basis are prohibited as animal feeds by US.

Interpretative note

On 3/1/02, the US National Organic Programme posted an answer to a “Frequently Asked Question” which indicates that fish products can be used for livestock feed

Q: Is the feed that is fed to organic livestock and poultry "vegetarian" feed?

A: Not necessarily. Although as stated in the National Organic Standards subpart C, section 205.237(b) (5), "The producer of an organic operation must not feed mammalian or poultry slaughter by-products to mammals or poultry". There is no restriction against organic livestock feed containing appropriate fish products.)

6.3 Processing Inputs

Non-agricultural (non-organic) substances allowed as ingredients in or on processed products labelled as “organic” or “made with organic (specified ingredients or food group(s)).”

The following substances in this section are allowed for use in organic products for export to the US only. They are prohibited for use in organic products for export to the EU, unless specifically listed in Tables or Sections as per the cross references below.

Cross references

USDA NOP: 6.3.1 Non-agricultural (non-organic) substances allowed as ingredients in or on processed products labelled as “organic” or “made with organic (specified ingredients or food group(s)).”

The following non-agricultural substances may be used as ingredients in or on processed products labelled as “organic” or “made with organic (specified ingredients or food group(s))” only in accordance with any restrictions specified in this section.

(a) Non-synthetics allowed:

Animal enzymes – (Rennet – animals derived; Catalase – bovine liver; Animal lipase; Pancreatin; Pepsin; and Trypsin)

Calcium sulphate – mined only

Glucono delta-lactone – production by the oxidation of D-glucose with bromine water is prohibited

Cross references

NZFSA Technical Rules for Organic Production:

Table 4, Ingredients, Processing Aids

Summary of differences.

The following processing inputs are allowed by NZ, as prescribed in Table 4, NZFSA Technical Rules for Organic Production, but prohibited by US:

activated carbon, argon, calcium sulphate, casein, egg white albumen, ethanol solvent, karaga gum, hazelnut shells, isinglass, malic acid, rice meal, sodium tartrate, sulphuric acid, talc, tannic acid, tragacanth gum, and vegetable oils. All of Table 4 Part C.

Volatile solvents.

Cross references

USDA NOP: Section 205.270 c2

US specifically prohibits synthetic volatile solvents in products labelled ‘organic’ and ‘100% organic’. NZ does not specifically prohibit synthetic volatile solvents, but none are approved on the list of allowed processing inputs.