







These organic standards for the Demeter certification of biodynamic agricultural and horticultural production in New Zealand were developed by Demeter New Zealand, an enterprise of the Bio Dynamic Farming and Gardening Association in New Zealand (Inc.)

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Demeter New Zealand Production Standards for

Biodynamic Agriculture

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1. General

1.1. Inclusions

- 1.1.1. These standards set the minimum requirements for use of the Demeter name and symbols in relation to biodynamic produce grown or sold in New Zealand. They are specific to New Zealand and subordinate to the *International Demeter Biodynamic Standard*. They omit certain practices common overseas that are irrelevant to the New Zealand situation.
- 1.1.2. Imported Demeter produce must meet the standards of the *International Demeter Biodynamic Standard*.
- 1.1.3. Only those products which have been verified by Demeter New Zealand as meeting the requirements of these standards may be traded using the Demeter name or symbols.

1.2. Scope

These standards contain details for primary production, with a few extensions into processing or packaging. The full requirements for processing Demeter produce are in *International Demeter Biodynamic Standard* available from Demeter New Zealand or www.demeter.net.

1.3. The Laws of New Zealand

Persons producing to these standards should familiarise themselves with and conform to applicable law. However, the Demeter certification process assesses only against these standards, and Demeter New Zealand takes no responsibility for ensuring that licensees follow laws if they are not replicated in these standards.

1.4. Prohibitions

The following are specifically prohibited by these standards:

- inclusion of any genetically modified organism or its product;
- b) irradiation by ionising radiations;
- c) artificial production systems such as hydroponics or feedlots;
- d) use of particles less than 100 nanometres in size (nanoparticles) or nanotechnology.

1.5. Interpretation

- 1.5.1. The meaning of these standards shall be that given by the Council of the Bio Dynamic Farming and Gardening Association in New Zealand (Inc.) (the owner of these standards), or by delegated authority, in its sole and absolute discretion. The Bio Dynamic Farming and Gardening Association in New Zealand (Inc.) trades as Biodynamics New Zealand and is referred to in these standards as Biodynamics New Zealand.
- 1.5.2. In all appropriate cases the singular includes the plural and the masculine includes the feminine and vice versa.
- 1.5.3. All matters stated to be requirements for Demeter certification or full Demeter certification shall, unless the context indicates otherwise, also be requirements for certification *In Conversion to Demeter*.
- 1.5.4. Items in these standards labelled "Comment" are not part of the requirements.
- 1.5.5. In all cases, where practices or materials need to be approved or permission is required, this shall be taken to mean approval or permission in writing from Demeter New Zealand.

2. Principles of Biodynamics

Human consciousness has evolved over time to the point where individuals are capable of experiencing themselves as separate from Nature and natural processes.

In modern agriculture, this has led to the development of an industry in which humanity typically works <u>on</u> Nature toward its own ends, with the result of major and growing disruption to ecological balance.

Biodynamics acknowledges this capacity for self-consciousness but also recognises that the individual remains at the same time an integral and inseparable part of the natural world with the possibility of developing a relationship with Nature in a path of mutual development.

The challenge of the biodynamic farmer, through a working association with the natural world is to develop a different way of thinking about Nature and his/her place within it.

Through an awareness and understanding of the processes behind the outer manifestations of Nature, including those beyond the currently measurable or acknowledged, and in recognition of an inseparability, a relationship is sought whereby the farmer is able to serve and enhance the forces of Nature in an on-going path of mutual development.

Biodynamic methods encourage individuals to work on different levels toward this end. These include:

- a) application of sound organic principles;
- development of an attitude of respect for and interest towards Nature;
- the development of the farm, as far as possible, into a unique self-contained organism as the basic unit of a sustainable system, also called the farm individuality;
- sustainable practices which maintain and increase fertility without the use of synthetic fertilisers and chemicals;
- e) the keeping and breeding of healthy livestock in such a fashion that they are as far as possible able to perform all aspects of their innate behaviour;

- positive care of the environment, efficient water use and the avoidance of pollution;
- g) production of food of the highest nutritional quality;
- development of a healthy and balanced cultural, social and economic environment;
- i) development of associative business forms whereby a fair and equitable relationship is fostered between producer, distributor and consumer;
- j) acknowledgement and working with the influences of the wider Earth environment including sun, moon, planets and fixed stars;
- k) use of biodynamic preparations: These may be seen on one level as 'microbial inoculants' but can also provide the farmer with the opportunity for a more meditative approach and a chance to reflect upon and recognise the higher principles and various beings in Nature. Use of the biodynamic preparations aims to restore health to the farm individuality.

Biodynamics arises from lectures to farmers and a dialogue between them and Dr Rudolf Steiner. The lectures and discussions are known as the Agriculture Course, and may be found in books such as the 1993 translation by M. Gardner and C. Creeger published as Spiritual Foundations for the Renewal of Agriculture, Bio Dynamic Farming and Gardening Association, Kimberton, Pennsylvania.

3. How Demeter Certification Works

3.1. Nature of these standards

3.1.1. **Organisation**

These standards state principles, and requirements arising from those principles. Principles are statements of the practices on an ideal Demeter certified farm. Requirements are the minimum practices that must be adhered to in practice. These standards state methods or materials that may or shall be used. Methods or materials not stated in these standards may not normally be used.

3.1.2. **Subordination**

These Standards are specific to New Zealand and subordinate to the International Demeter Biodynamic Standard. They omit certain practices common overseas that are irrelevant to the New Zealand situation.

3.1.3. Application

The application of these standards and the application of the *International Demeter Biodynamic Standard* in New Zealand may be modified by technical bulletins issued by Demeter New Zealand. All Demeter standards shall be read in conjunction with such bulletins.

3.1.4. Unsanctioned materials and methods

Licensees or applicants wishing to use methods or materials not explicitly sanctioned by these standards may not do so without specific permission. For permission to be given Demeter New Zealand must be convinced that such materials and methods are in accord with the intent of these standards. It is the responsibility of those seeking to use such materials or methods to prepare and submit evidence accordingly.

3.1.5. **Organic Certification**

Biodynamic production is inherently an organic system. Demeter certification does not provide certification to organic status in itself, but to obtain Demeter status the licensee must have and maintain a Demeter New Zealand approved certification to an acceptable organic standard. At this time the acceptable standard is the current version BioGro New Zealand standard.

3.2. Conversion and registration period

Principles:

Certified organic farms, gardens and orchards become Demeter certified after being managed to the Demeter standards for a specified period.

Requirements:

3.2.1. Full certification

Full Demeter certification of primary producers takes at least three years from the time the primary producer enters the conversion period, that is, is recorded as having begun conversion to biodynamic management. This period can be simultaneous with the conversion to organic certification. Full Demeter certification cannot be granted without full organic certification.

3.2.2. First certification

In Conversion to Demeter certification is normally granted not less than one year after the date the primary producer enters the conversion period.

The Demeter conversion period normally begins on the date the first full set of Demeter application forms are received by Demeter New Zealand. Prior periods are not counted, except where an organic certification is already held.

In Conversion to Demeter certification shall not normally be held for more than five years.

A full year's farming to the standards at the time of inspection is required before the first grant of certification.

3.2.3. Registration period

During the first twelve months, or longer if required by Demeter New Zealand (the registration or D0 period) no certification is possible, nor is any reference to Demeter or Demeter certification allowable in the marketing of produce.

(Comment: This was previously called the stand-down period.)

3.2.4. Progression from an existing organic certification

Applicants who already have an organic certification such as BioGro New Zealand certification may gain Demeter certification in a shorter time, normally

not less than one year but depending on specific circumstances. Copies of reports of audits must be made available if requested. Applicants must be able to demonstrate:

- a) a generous programme of biodynamic preparation use;
- no non-compliances with these standards (or only very minor ones) in the
 12 months prior to application for Demeter certification.

This section applies both to new applicants for certification and existing Demeter licensees seeking to convert certified organic sections of their enterprise to Demeter certification.

3.2.5. Reconversion

Where the use of a prohibited material or process or other breach of these standards leads to land and/or a product losing certification, a reconversion period is normally necessary. The provisions of 3.2.1., 3.2.2. and 3.2.3 above will normally apply as if the certification application is a new one, but Demeter New Zealand may permit a shorter period of reconversion if it is satisfied that the intention of these standards will not be breached.

3.3. Farm Management structure

Principles:

Demeter licensees are individuals or organisations who are able to demonstrate day to day management and control of their enterprise.

Requirements:

3.3.1. Manager specification

- 3.3.1.1. Applicants shall be paid up members of Biodynamics New Zealand or shall join simultaneously with making a Demeter application. Licensees shall maintain paid up membership. Membership information is available from the Biodynamics New Zealand office or from www.biodynamic.org.nz.
- 3.3.1.2. Applicants shall, by their management history, demonstrate the ability and knowledge to manage the enterprise biodynamically to the requirements of these standards.

3.3.2. Daily presence

- 3.3.2.1. The enterprise manager shall supervise production on a daily basis, except during absences approved by Demeter New Zealand as in 3.3.2.2 below.
- 3.3.2.2. When the manager is not present on a daily basis, supervision shall be by a person approved by Demeter New Zealand according to protocols submitted in the Management Plan. All Management Plans shall contain such protocols to cover planned and emergency absences. The level of supervision required will depend on what operations are to be carried out.

3.3.3. **Control**

All land under the manager's supervision and control shall be included in the enterprise considered for certification. Family arrangements and other associations may be considered by Demeter New Zealand in defining the enterprise, especially where there are close connections with uncertified properties, to ensure that these properties do in fact as well as in appearance have different managers.

3.3.4. Non-owner managers

Principles:

A manager who is not also the owner of the property has delegated authority to meet Demeter obligations.

Requirements:

3.3.4.1. Documentary evidence that the manager has the owner's authority to meet Demeter obligations shall be supplied to Demeter New Zealand. Such documents may include, but are not limited to, management contracts, grazing agreements and letters of authority.

Specific obligations of non-owner manager include, but are not limited to:

- a) managing the farm to these standards on a day-to-day basis;
- notifying Demeter New Zealand immediately if the management or ownership structure changes such that management to the standards is no longer possible;

- c) notifying Demeter New Zealand immediately if ceasing to be the manager;
- d) notifying Demeter New Zealand immediately if instructed or required to undertake or allow any activity that might be contrary to the Demeter standards or might depart from the Farm Profile and/or Management Plan previously submitted.

3.3.5. Absentee owner

Where owners who are not the day-to-day managers want the enterprise to be Demeter certified, their recourse is to include that as a requirement in the contract with the manager.

3.3.6. Group and corporate management

Where the management is by a group or body corporate, that organisation shall demonstrate a management structure that meets all the requirements of these standards.

- a) Demeter New Zealand may accept accreditation to appropriate organisational standards (such as those of ISO) as full or partial evidence of such a structure. A natural person must be named as the licensee.
- b) A group (includes a board or committee of an incorporated or unincorporated entity or an informal group) may be designated jointly as the licensee. In this case the individual members shall normally be named on the certificate and in the contract, along with the name (if any) of the group and shall have joint responsibility for management according to these standards.
- c) The individual members of the group shall declare any conflicts of interest between
 - their work as part of the joint manager and
 - any other activities,
 and describe how those conflicts of interest are managed to ensure
 Demeter integrity.
- d) Demeter New Zealand must be satisfied that the group structure, performance and conflict of interest arrangements ensure that the property is managed to the standards and is adequately described in the Management Plan.

3.3.7. Change of manager

Unless Demeter New Zealand has approved a change of manager, such a change automatically triggers suspension of certification until Demeter New Zealand is satisfied certification may be resumed.

Unless Demeter New Zealand agrees otherwise, the sale of a property is a change of manager.

A Demeter licensee-manager shall notify Demeter New Zealand <u>immediately</u> if they:

- a) cease to be able to continue unimpeded day to day supervision. Demeter
 New Zealand may require them to notify other parties, such as customers;
- b) cease to have any responsibility for the enterprise, such as an individual person who is the sole manager ceasing employment on the property;
- c) in the case of a group or corporate manager, the structure of the group changes in any significant way, such as by a change of personnel, or by a change in the responsibilities accorded to the group by any other party (including but not limited to an owner or board of directors or any more senior management).

If acceptable prior arrangements for a change of manager are not made with Demeter New Zealand, a reconversion as in 3.2.5. above may be required.

3.4. Application procedure

Principles:

Applications, both initial and renewal, require written reports supplied by the applicant according to prescribed formats.

Requirements:

3.4.1. **Contact**

The applicant contacts Demeter New Zealand and asks for Demeter certification. Demeter New Zealand sends the applicant the appropriate current forms. The applicant returns the completed forms to Demeter New Zealand. Demeter New Zealand forwards documents to an appropriate auditor, who contacts the applicant to arrange the audit.

3.4.2. **Audit**

The auditor will report back to Demeter New Zealand following which an offer of certification or a written statement of how the standards were not met will be sent to the applicant. General farming advice will not be offered, but information on what changes the applicant should make to meet the standards can be requested.

3.4.3. **Follow up**

If certification is declined the applicants may submit a new application at any time they believe they have satisfied the requirements of the standards.

After an initial inspection, Demeter New Zealand may revise the starting date of the registration period and notify the applicant accordingly.

3.4.4. **Documentation**

- 3.4.4.1. Applicants and those holding a current Demeter certification shall have a copy of the most recent standards and be able to produce it when requested.
- 3.4.4.2. For an initial or renewal audit the following are to be supplied, completed:
 - a) Demeter New Zealand Annual Report form;
 - b) Farm Profile;
 - c) Management Plan;
 - d) supplementary documents to the annual report;
 - e) supplementary documents to the Farm Profile and Management Plan;
 - f) evidence of certification to the BioGro New Zealand standards, or evidence of registration with an approved certifier as working towards certification to the BioGro New Zealand standards.

Extra costs of processing additional documents supplied late or separately may be passed on.

3.4.4.3. **Documents to be supplied**

Documents to be supplied include, but are not limited to:

Farm profile arranged as specified in the current Demeter New Zealand
 Farm Profile Template form;

b) Management plan:

- to be arranged as specified in the current Demeter New Zealand Management Plan form;
- ii) if for a new application, must include a proposal for conversion of the entire enterprise within the time permitted by these standards;
- iii) must provide a plan for dealing with foreseeable problems, such as expected weeds, insect pests and diseases, and any likely spray drift;
- if requested by Demeter NZ, supplementary documents to the annual report such as copies of supplier certificates for brought-in materials and livestock;
- d) information supplementary to the Farm Profile and Management Plan, including additional documents specified in the templates such as maps, copies of contracts for land, grazing or cropping leases, copies of instructions to relief workers, soil chemical residue tests and similar. These documents should become a permanent part of the Profile or Plan.

3.4.4.4. **Document specifications**

Documents shall be:

- a) in electronic form as pdf documents. Other electronic formats may be accepted with prior approval of Demeter New Zealand;
- b) not bigger than A3 (i.e. 2 x A4);
- c) clear, legible and able to be printed or copied;
- d) supplied in timely fashion as appropriate to the procedures;
- e) accurate, complete and truthful.

3.5. Compliance with standards

Principles:

Demeter licensees are able to demonstrate compliance with the Demeter standards at any time.

Requirements:

3.5.1. **Demonstration of compliance**

Demeter licensees shall demonstrate that their management complies with the Demeter standards by:

- a) opening their enterprise to inspection by Demeter New Zealand at all reasonable times, whether announced or unannounced. All parts of the enterprise or property shall be made accessible;
- b) making all farm records quickly available during announced inspections, and reasonably available during unannounced inspections;
- c) ensuring that all documentation required for brought-in materials and livestock is obtained prior to the material or animals being brought-in;
- d) ensuring that all relevant parts of these standards are complied with.

Demeter licensees shall be inspected (audited) at least annually against these standards, and in the view of Demeter New Zealand, shall have satisfied the requirements.

3.5.2. Instructions

Licensees shall undertake such corrective actions as may be required in appropriate and timely fashion.

Licensees shall comply with instructions contained in technical bulletins or these standards, or directives from Demeter New Zealand.

3.5.3. Integrity of certification

Licensees shall report promptly any event or activity that compromises the integrity of the certification.

3.5.4. Limitations

Licensees who have all or part of their enterprise rated *In Conversion to Demeter* shall make on-going progress towards meeting the requirements for full Demeter certification.

Licensees with full Demeter certification on part or all of their enterprise shall not retain on their property products whose use is prohibited by these standards.

Small quantities for household use are excepted, as are materials retained to save life or prevent suffering by livestock.

3.6. Audit and peer review procedures

Principles:

Documentation supplied by the applicant is reviewed, and the enterprise audited at least annually. The review and audit reports are considered by an assessment group within Demeter New Zealand. The audit is undertaken by a Demeter New Zealand approved organic certifier who reports their audit findings to Demeter New Zealand, which decides the outcome.

Requirements:

3.6.1. Timing of audits

Audits shall normally be by arrangement between applicant and their Demeter New Zealand approved organic certifier, so that the same person can audit for the organic requirements and Demeter requirements in the same visit.

Demeter New Zealand may additionally or in substitution initiate an unannounced audit at any reasonable time. Application for Demeter certification is consent to such audits.

3.6.2. Scope of audit

All documentation supplied by the applicant shall normally be reviewed as part of the audit process.

The audit shall include a physical examination of the enterprise, and where this requires transport to distant parts of the farm, it shall be supplied by the applicant in a form acceptable to the auditor.

The audit shall include review of such farm records as the auditor finds necessary. Applicants shall have such records, including their primary record (see 3.13. below), readily available.

3.6.3. Missing documents

Where an auditor notifies an applicant that documentation is missing, the applicant shall forward copies of the missing documentation to Demeter New Zealand as soon as possible.

3.6.4. **Notification**

Demeter New Zealand shall notify the applicant whether or not they are fully compliant with the requirements of these standards. Where there are non-compliances, Demeter New Zealand shall advise:

- a) whether the non-compliance is critical, in which case sale of produce as
 Demeter certified must cease until such time the non-compliance has been corrected to the satisfaction of Demeter New Zealand, or:
- whether the non-compliance is major in which case it shall be corrected to the satisfaction of Demeter New Zealand before a new certificate is issued and by a specified time or be treated as a critical non-compliance as in paragraph a) above, or;
- c) whether the non-compliance is minor, in which case it shall be corrected to the satisfaction of Demeter New Zealand by a specified time or if not completed in due time may be treated as a major non-compliance as in paragraph b) above.

Where the auditor observes an activity that he/she considers is outside that permitted by this standard, he/she may bring it to the attention of the applicant during the inspection process and may offer an opinion on the effect of this and what corrective action may be required.

Any such opinion offered by the auditor is provisional only and shall be reviewed during assessment and may be confirmed or altered at the discretion of Demeter New Zealand.

3.6.5. Peer Review and Biodynamic Development

Principles:

In addition to the rules set out in this standard, an important aspect of biodynamic production is the understanding and application of the principles outlined in section 2. of this standard. Those new to biodynamics will naturally take time to develop their depth of understanding of these principles and to incorporate them into the normal day to day functioning of the farm. The aim of the peer review or the alternative development routes is to assess the licensee's understanding and application of biodynamic principles on the

subject property and to provide the Demeter assessment group with confidence that the principles are being understood and applied.

Requirements:

3.6.6. Peer Review and Biodynamic Development Frequency and Timing

Demeter New Zealand may arrange a peer review at any time the Demeter assessment group considers it necessary to allow Demeter New Zealand to assure the biodynamic integrity of the production system. The frequency will be determined by the Demeter assessment group for each licensee individually in the light of their experience.

The date and time for the peer review shall normally be by arrangement between applicant and their nominated reviewer.

A peer review is conducted at the certified property by a person approved by Demeter New Zealand.

The alternative development routes will be notified from time to time in material available from Demeter New Zealand.

3.7. Nature of certification & licensing

Principles:

Certification is a licence to use the Demeter name and/or symbols in the sale and promotion of produce.

Requirements:

3.7.1. Licensing contract

Certification shall be governed by a contract issued under New Zealand law. The contract shall be between the owners of the Demeter trademark in New Zealand, Biodynamics New Zealand, and the manager of the certified enterprise.

Certification is a licence to the manager to say that certain products are Demeter products. The licence shall:

a) require annual renewal by the issue of a certificate;

- b) be specific to particular farms or enterprises. Products from farms,
 enterprises or areas other than those named on the certificate shall not be included;
- be specific to a particular manager or management system being in daily control. Products produced under the control of others not named on the certificate shall not be included, except as provided in approved Management Plans;
- d) be specific to particular products. Products not named on the certificate shall not be included.

3.7.2. Supply of products

For a product to be Demeter certified:

- the producer of the product shall have a current licence to call that product
 Demeter; and;
- b) the supplier of the product shall state that the product is Demeter certified, or otherwise, by action or inference, cause the reasonable belief that the product is Demeter certified.
- 3.7.2.1. Except as provided in section 3.7.3. below products supplied by non-licensed persons are not Demeter certified.
- 3.7.2.2. Products supplied without any indication of their certified status, even from Demeter licensed persons, are not Demeter certified.
- 3.7.2.3. For a product to be certified *In Conversion to Demeter* similar requirements as in 3.7.2. above apply.
- 3.7.2.4. Demeter licensees have a duty to ensure that the recipient of any product is properly informed about its certification status.

3.7.3. Chain of custody

3.7.3.1. A chain of custody by licensed persons ensures the continuation of Demeter certification. Except in specific circumstances, Demeter certification ceases when the product passes out of the hands of a Demeter licensee. The exceptions to this rule, under which certified status continues shall be:

- a) when the product is transferred to a wholesaler or retailer who takes reasonable care to protect it from inappropriate handling or mixing with uncertified produce, or;
- b) when the product is transferred to the consumer, or;
- when the product is packed into containers that will be sealed until they reach retailer or consumer, or;
- d) when Demeter New Zealand authorises an extension of the Demeter certification to continue while the product is in the custody of another, unlicensed operator. (Comment: An example is a packhouse packing Demeter certified fruit, where certification may be governed by an extension to the grower's Demeter licence if particular conditions are met.)
- 3.7.3.2. In such cases produce handled or processed by unlicensed operators can retain its Demeter status providing:
 - a) particular procedures ensure that the product is not handled or processed in inappropriate ways or mixed with produce of different certification, or with uncertified produce, or otherwise contaminated, and;
 - the procedures are documented to the satisfaction of Demeter New Zealand, and;
 - the actual adoption of the procedures is audited to the satisfaction of Demeter New Zealand. Audit by other certifiers may in some circumstances be acceptable, and;
 - d) the produce returns to the custody of a Demeter licensee, or is sealed into containers for dispatch to retailers or consumers, and those containers are sufficient to protect the produce from reasonably expected threats to its status.

3.8. Non-compliances and penalties

Principles:

Where there are breaches of these standards corrective action will be required to protect the public and the good name and integrity of Demeter certification. Deliberate breaches are likely to lead to additional penalties to those for inadvertent or unintentional breaches. Unintentional or inadvertent breaches are followed by measures to prevent repetition.

Requirements:

3.8.1. **Basis**

Demeter licensees shall ensure that only approved materials and methods are used, and that any produce not complying with these standards is not in any way represented as Demeter to the purchaser or consumer.

3.8.2. Corrective Actions

Applicants or licensees shall undertake such corrective actions as may be required by Demeter New Zealand. If required corrective actions are not carried out, Demeter New Zealand may require additional corrective action, and may also invoke the penalties set out below, according to the particular circumstances.

3.8.3. Penalties for particular cases

Penalties for non-compliance with these standards are at the discretion of Demeter New Zealand.

- 3.8.3.1. Penalties may include, for use of prohibited materials or practices on:
 - a) crops or plants while growing decertification for up to three years;
 - b) crop in storage crop decertification;
 - c) land land decertification for up to three years;
 - d) on animals, decertification in accordance with the BioGro standard;
 - e) affected land (could be entire property) decertified for up to three years.
- 3.8.3.2. Penalties may include, for application of Demeter label or sale of product as Demeter when the product is not certified:
 - in the case of unintentional first offence warning, recall of product if required, notification of consumers at licensee's expense if required;

- in the case of unintentional second offence revocation of certification, recall of product if required, notification of consumers at licensee's expense if required;
- in the case of deliberate offence immediate revocation of all certification, recall of product if required, notification of consumers at licensee's expense if required, legal action to recover damages.
- 3.8.3.3. Penalties may include, for supply of erroneous information (including errors of omission):
 - a) in the case of an unintentional error suspension of certification until correct information is obtained and assessed, and the product or enterprise is found to comply with these standards;
 - in the case of deliberate deceit or careless withholding of unfavourable information – suspension or revocation of certification, recall of product if required, notification of consumers at licensee's expense if required.

3.8.4. Breach of contract

Demeter New Zealand reserves the right to review certification whenever a breach of the licensing contract is alleged and may impose the above or any other penalties.

3.9. Fees and charges

Principles:

Use of the Demeter trademark and/or access to the certification and inspection system requires payment of applicable fees and charges.

Requirements:

3.9.1. Liability for fees

Annual fees are charged for inspection and certification and become payable as soon as the first of the forms are lodged.

Licensing fees (levies) are charged for the use of the Demeter name or symbols on the basis of a report of annual sales from licensees and are due within three months of the licensees' annual accounting balance date.

3.9.2. Fee structure

Current inspection, certification and licensing fees and any applicable discounts are published in Biodynamics New Zealand's magazine, or in letters, invoices or bulletins to licensees or applicants. Information in such letters, invoices or bulletins takes precedence over other sources.

3.9.3. Additional charges

Work additional to that normally covered by the above fees may be charged for in addition at Demeter New Zealand's current charge out rate. Additional work includes:

- a) on-site inspection taking longer than Demeter New Zealand's current guidelines;
- visits to additional properties or venues required to conclude an assessment or inspection;
- additional research, investigation or report preparation by auditor or assessors;
- additional office work generated by failure to supply complete, well presented or timely information;
- e) the cost of unannounced inspections triggered by informal reports of serious non-compliance with the standards, where serious non-compliance is found:
- f) any other work required to complete certification or ensure the integrity of a particular Demeter licence.

3.9.4. Entitlement and liability

Payment of fees does not entitle the payer to certification, only to access to the certification process.

Liability to pay fees is not altered by the outcome of an assessment, such as failure to qualify.

3.9.5. **Disbursements**

Disbursements made by Demeter New Zealand and not included in other fees

may be passed on to the applicant/licensee, with an additional charge to cover financing, invoicing and the like.

3.9.6. Unpaid fees and charges

If fees or charges are not paid or annual sales reports are not furnished in timely fashion, certification renewal may be withheld. Demeter New Zealand reserves the right to recover any costs incurred in collecting unpaid fees or charges.

3.10. Partial Certification and Parallel Production

Principles:

Licensees holding full Demeter certification practise only certified biodynamic and certified organic farming. Partial certification, where there are both certified and uncertified crops, land or livestock is generally not acceptable. Parallel production, where the same products are produced to different standards (or where one is uncertified) is not normally allowed.

Requirements:

3.10.1. Partial certification

Except as provided in these standards, partial certification is not permitted. Partial certification refers to part of an enterprise having a different certification status from another part. The parts may be differentiated by being different plots of land together with their vegetation, and/or different animals. Different status arises when two or more parts have different certifications drawn from:

- a) uncertified:
- b) In Conversion to Demeter,
- c) Full Demeter;
- d) one or more levels of other certifications, such as BioGro, In Conversion to BioGro.

3.10.2. Partial certification exceptions

Partial certification is possible:

 a) during conversion, when some of the enterprise may be converted ahead of other parts. In this case the converted part of the enterprise cannot

- advance to Full Demeter until the whole enterprise is rated at least *In Conversion to Demeter*, Full BioGro, In Conversion to BioGro, or equivalent;
- b) when new land or a new farm enterprise is added. The new land or enterprise shall be converted as if it is a separate farm so that any farm inputs coming from the new land are treated as if from another uncertified or partially certified property. A full revised Management Plan shall be submitted and shall include details of any transfer of materials or livestock between new land and land already certified;
- c) when uncertified animals are brought-in for grazing according to section 7.6. of these standards. These animals shall be clearly and permanently identified separately from animals of other certifications. Such identifications shall be:
 - i) species, or;
 - ii) visible breed difference, or;
 - iii) evident colour or skin pattern differences, or;
 - iv) permanent markings such as ear tags.
- d) the meaning of all such identifications shall be recorded in the farm primary records;
- e) when a community has a sewage system for human waste generated on the property. The land that such a facility is constructed on, and any land used for sewage disposal, shall not be certified;
- f) when a sanction imposed by Demeter New Zealand results in part of the land or enterprise losing certification. Demeter New Zealand may at its discretion in some cases give permission for the remainder of the land or enterprise to retain certification provided other requirements are met;
- g) where events outside the licensee's control, including extreme weather conditions or natural disaster (force majeure) result in part of the land or enterprise losing certification. Demeter New Zealand may at its discretion in

some cases give permission for the remainder of the land or enterprise to retain certification provided other requirements are met;

h) when experiments are carried out using materials or methods outside these standards. Demeter New Zealand may give permission for experiments on pieces of land appropriately defined and separated from the certified area. Such land shall not be certified.

3.10.3. Parallel production

Except as provided in these standards, parallel production is not permitted.

Parallel production refers to produce of a particular type being produced or sold in more than one certification status.

3.10.4. Parallel production exceptions

Parallel production is possible:

- a) where produce is brought-in to supplement that sold in a farm shop. In this case the status of all produce shall be clearly labelled, and there shall be written procedures approved by Demeter New Zealand as being satisfactory to ensure separation of products of different status and to properly inform the consumer;
- where produce is sent out for processing to a facility that processes other uncertified or differently certified produce and the requirements of section
 a) above are followed;
- c) in other cases, where Demeter New Zealand is satisfied that the intention of these standards is not being breached and arrangements are made to its satisfaction for separation of the products of different certification levels.

3.10.5. Record keeping

Where parallel production and/or partial certification is approved on the basis of written procedures, those procedures shall include auditable records of the amounts of each type of produce introduced, produced, and dispatched.

3.10.6. Other cases

In all other cases neither parallel production nor partial certification is permitted.

3.11. Complaints

Principles:

Complaints against the Demeter system or personnel by any person are resolved in a fair and transparent fashion.

Requirements:

3.11.1. Who may complain

Any person, whether a member of Biodynamics New Zealand or not, may initiate a complaint about any matters relating to Demeter licensing.

3.11.2. How to complain

Informal complaints may be made to Demeter New Zealand personnel.

Formal complaints shall be in writing and forwarded to Demeter New Zealand.

3.11.3. Complaint procedures

Once a complaint is received, Demeter New Zealand will endeavour to ensure that all relevant information is gathered and will forward a written report to the convenor of the Demeter Assessment Group.

The convenor of the Demeter Assessment Group will write to the complainant acknowledging receipt of the complaint and write to the person or persons apparently causing the complaint, telling of the nature of the complaint, and asking for a response or explanation.

On receipt of the response, the convenor shall decide whether to seek any further information from any other source. The convenor may appoint an independent investigator.

When the convenor is satisfied that all relevant available information has been gathered, he will decide whether any further action is required. If so, he will refer the matter to the members of the Demeter Assessment Group for consideration.

3.11.4. Complaint resolution

3.11.4.1. Where the complaint is against a Demeter licensee or Demeter personnel, the Assessment Group may apply sanctions, may seek further information or may decide that no further action is warranted. The complainant will be advised of the outcome in writing. Before any sanctions come into force as a result of a complaint, the person against whom the sanctions shall apply, shall be given an opportunity to make submissions on the appropriateness and the severity of the sanctions in the individual's circumstances.

- 3.11.4.2. Where the complaint is against a member of the Assessment Group that member shall not participate as a committee member in the resolution of complaints against him personally. The complaint shall otherwise be resolved as in 3.11.4.1. above.
- 3.11.4.3. Where the complaint is against the convenor, his duties will be undertaken by another member of the Assessment Group. The complaint shall otherwise be resolved as in 3.11.4.1, above.
- 3.11.4.4. If the complaint is against the entire Assessment Group or against the system(s), the matter shall be referred to the Chair of Demeter New Zealand who shall appoint a referee or referees to hear and adjudicate on the complaint.
- 3.11.4.5. Complainants dissatisfied with the outcome of a complaint against an individual may appeal by initiating a complaint against the entire Assessment Group as in 3.11.4.4 above.

3.12. Appeals Against Assessments

Principles:

Licensees or applicants dissatisfied with an assessment may have it independently reconsidered.

Requirements:

3.12.1. Initiating an appeal

Any licensee who believes that he has been given an assessment inconsistent with these standards may appeal against it by notice in writing to the Chair of Demeter New Zealand. Such notice shall state specific details as to:

- a) the nature of the assessment;
- b) the part of the standard that he considers has been misconstrued;

- what the appellant considers that part of these standards means in relation to his circumstances;
- d) what the appellant believes the assessment should have been.

A \$300 deposit shall be paid against appeal costs. The money shall be refunded if the appeal is granted, but not otherwise.

3.12.2. Appeal procedure

On receipt of a written notice of appeal, the Chair of Demeter New Zealand shall:

- a) check that the deposit has been paid, and if not hold the documentation until it has been;
- b) check that it contains details under points a) to d) above, and;
- c) if not complete return it to the appellant for completion, or;
- d) if complete shall appoint as adjudicator or adjudicators persons knowledgeable in certification procedures to hear the appeal. The appellant shall be given an opportunity to object against the choice of adjudicator, if he/she so desires.

3.12.3. **Decision**

The decision of the adjudicators shall be communicated to the appellant and Demeter New Zealand staff in writing and shall be binding.

3.13. Record Keeping

Principles:

All farm activity is recorded at the time it occurs, or shortly thereafter in a fashion that enables a complete picture of the farming activity for the year to be assembled.

Requirements:

3.13.1. Primary record

All farm activity shall be recorded by the licensee. A daily diary, in which weather, farm activity, etc. are recorded or its equivalent shall be kept as a primary record in the English language.

Reports of activities furnished to Demeter New Zealand shall be based on information in the primary record.

3.13.2. Contents of the primary record

The following details must be recorded with special care:

- a) details of all production and use of biodynamic preparations;
- details of the use of all other brought-in or own produced materials,
 whether considered to be benign or not. These must include material, rate
 of use, time of use, crop or animal applied to, location, area affected;
- full details of the **bringing-in** of any materials or livestock, including certificates of origin or supplier statements
- d) in the case of materials applied to animals and brought-in animals, the quarantine procedures (including location of quarantine area and withholding period) and identifying marks of the animals concerned must be recorded. See sections 7.9. and 7.10. for more detail;
- e) full details of the activities of consultants, contractors, local authorities in respect to the property;
- f) details of dispatch of produce:
 - i) amount;
 - ii) where sent;
 - iii) distinguishable produce type;
 - iv) when sent;
 - v) whether Demeter or *In Conversion to Demeter* and how labelled or indicated:
- g) details of any neighbouring activity that could affect certification;
- h) details of any other activity that might affect the certification status of farm or produce.

3.13.3. Inspection of primary record

The primary record must be readily available during inspections for the auditor to look through without requiring to be assembled or amended.

The primary record must be clear and unambiguous and enable the auditor to trace, if necessary the origin, date, nature and quantities of all materials and livestock brought-in or generated on farm, and the use of these materials or livestock.

3.14. Labelling

Principles:

Demeter produce is labelled with one or more of the Demeter symbols.

Requirements:

3.14.1. The rules in this section are a simplified version of the full rules to be found in the *International Demeter Biodynamic Standard*, chapter 4. (See www.demeter.net) They are appropriate for most cases of labelling of Demeter produce that will not be exported.

3.14.2. **Symbols**

The principal Demeter symbols are:

a) the Demeter co-brand symbol;



b) the Demeter flower symbol.



3.14.3. **Demeter produce**

Containers of Demeter produce for sale in New Zealand:

- a) shall, wherever possible, carry the Demeter flower symbol, and;
- b) shall, wherever possible carry the word "biodynamic" somewhere on the label, and;
- c) may in addition carry the word "organic", and;

- d) may carry the Demeter co-brand symbol, used as defined in the International Demeter Biodynamic Standard, and;
- e) may in addition carry details of other certifications where approved by Demeter New Zealand.

Individual items, such as fruit, may be individually labelled according to the same rules.

For export requirements see section 3.16. below.

3.14.4. Licensee details

The Demeter licence number and contact details shall also appear on the label.

3.14.5. Limitation to full Demeter

The Demeter symbols shall be applied only to fully Demeter certified produce. They shall not be applied to produce rated *In Conversion to Demeter*.

3.14.6. Labelling of In-Conversion produce

Produce rated In Conversion to Demeter may be labelled with those words.

3.14.7. Approval of labels and materials

All labels or promotional material using the Demeter symbols, the word *Demeter*, the words *In Conversion to Demeter* shall be submitted to Demeter New Zealand for approval and shall not be published without that approval.

3.14.8. Requirement to declare status

Demeter licensees selling materials or livestock to be used on other farms shall state the certification status on the sale documentation (e.g. tax invoice).

See also Chapter 8. Harvest and Post-Harvest Management, section 8.4. for further labelling requirements.

3.15. Standards Review

These standards shall be revised or reviewed in whole or part as Biodynamics New Zealand sees necessary. The Association reserves the right to alter or suspend all or any part of them at any time without prior notice. Variations to these standards, or exemptions from them will be issued only in writing. The written standards take precedence over all unwritten communications.

3.16. Exporting

Principles:

Demeter certification exists independently in a number of countries, and each country has its own authority which controls Demeter sales and labelling.

Requirements:

3.16.1. Other country requirements

Where Demeter produce is exported to another country the requirements of the Demeter certifier in that country shall be followed in respect of:

- a) labelling;
- b) packaging and handling;
- c) chain of custody;
- d) any other requirements.

3.16.2. Other country fees

Any fees or charges by the Demeter certifier in another country shall be met by the licensee or exporter.

3.16.3. Responsibility to comply

It is the responsibility of the licensee or exporter to ascertain and comply with the requirements of the Demeter certifier in the destination country.

3.16.4. Responsibility to inform

Demeter New Zealand shall be informed of any labelling or presentation adopted to meet the requirements of the Demeter certifier in another country.

3.16.5. **No liability**

Neither Demeter New Zealand, nor Biodynamics New Zealand nor its agents or servants shall be responsible or liable for any loss suffered because of the action or requirements of a Demeter certifier in another country. Export of Demeter certified produce shall constitute agreement to this.

4. Biodynamic Preparations

4.1. General

Principles:

All the measures used on a biodynamically managed enterprise are evaluated according to holistic principles. In a living totality, it is of real importance not only to balance out the material requirements of the system, but also as Rudolf Steiner explicitly indicated in the Agriculture Course, to balance the depletion of the forces active in them.

Biodynamic farmers work from knowledge derived from Rudolf Steiner's spiritual science. This indicates that particular materials of mineral, plant and animal origin can be metamorphosed by the effects of cosmic/earthly influences during the course of the year. The resulting preparations guide and stimulate the life processes. These preparations are used on the soil, plants and manures, to contribute to enlivening the earth, optimising yield and enhancing quality in plants, and health, vitality and production of animals on the biodynamic farm.

Conscientious attention to detail in the production, storage and usage of the preparations is of vital importance in this regard.

Management of the biodynamic preparations is based on the skill and knowledge of the licensee, which is developed out of careful practice and its evaluation.

Requirements:

- 4.1.1. The licensee shall manage the preparation work on the farm directly. If delegation is required, the licensee shall be responsible for seeing that the person in charge is adequately trained.
- 4.1.2. The licensee shall provide documentary evidence that preparation production, sourcing and usage are in compliance with these standards.

4.2. Plan

Requirements:

All preparation and other activities in this chapter shall be according to procedures set out in a Management Plan approved by Demeter New Zealand.

4.3. Contractors

Principles:

The work of contractors is supervised by licensees to ensure it meets these standards.

Requirements:

All licensees who contract out any part of the work of preparation production, storage or application shall ensure that the work done by contractors is in accordance with these standards. To this end:

- the Management Plan shall state what work is done by contractors, and under what conditions. This section of the Management Plan is to receive specific approval by Demeter New Zealand before implementation;
- b) Demeter New Zealand may, where the arrangements are complex and there is a risk that the standards may be breached, require that the methods to be used are detailed in a signed agreement between licensee and contractor. Copies of such agreements shall be available for inspection by Demeter New Zealand;
- Demeter New Zealand may require evidence that the licensee is actively monitoring the performance of contractors;
- d) the extent of work done by contractors shall be described in the licensee's annual report.

4.4. Preparation production and frequency of use

Principles:

Preparations are made on the farm, in co-operation with another farm, or obtained from an approved source. The source of sheaths, methods of production and choice of production site (including the climatic requirements) follow current best practice (see bibliography on page 38).

Applications of the field spray preparations 500 and 501 are timed by consideration of season, weather, and the astronomical calendar. Additionally for preparation 500, sufficient moisture and warmth for plant growth is desirable. For the application of preparation 501 additional considerations are crop stage and growth.

Requirements:

- 4.4.1. Preparations made on the farm shall be available for inspection. A biographical description shall be provided in the approved form.
- 4.4.2 If preparations are not made on the farm, they shall be from a source approved by Demeter New Zealand and documented as such.
- 4.4.3. Preparation 500 shall be used at least once per year at a rate of at least 50g/ha on all productive areas, apart from woodlots, where usage is discretionary.
 - Productive areas include areas used to source composting or mulch materials.
- 4.4.4. Preparation 501 shall normally be used at least once per year at a rate of at least 2.5g/ha on all crops, including hay, silage and other fodder crops.

4.4.5. Compost preparations

- 4.4.5.1. Compost preparations shall be used in all soil amendments prepared from plant material or animal manures, at an early stage of fermentation.
- 4.4.5.2. Exception to 4.4.5.1. above: compost preparations are not required in those materials stated in Tables 5-1 and 6-1 as not needing to be composted.

4.5. Preparation Storage

Principles:

Preparations in storage are contained in such a way that their forces do not dissipate. A shield of peat on all sides provides this protection. Additionally, appropriate moisture content is maintained.

- 4.5.1. Preparations 500, 502 506 shall be stored under aerobic conditions surrounded by peat, at a site that is free from strong electric or magnetic fields, exhaust fumes, solvent vapours and similar contaminants.
- 4.5.2. Preparation 501 shall be stored in a glass jar in a sunny place protected from the weather.

4.5.3. Preparation 507 shall be stored as are the other compost preparations except that the container shall exclude air as far as practicable.

4.6. Stirring and application of the spray preparations

Principles:

Preparations are stirred by hand, machine or flow form in such a way as to produce an alternating chain of vortices separated by broken chaotic water.

Rain water or best quality available water is heated to blood temperature preferably by flame or solar heating. Preparations are stirred outside at the appropriate time of the day and cosmic condition.

Application is by a system that causes the least disturbance to the liquid after stirring. Pressures and nozzles are chosen to give as large a droplet size for preparation 500, and a fine mist for preparation 501.

Application is completed within one hour of stirring wherever possible.

Dedicated machinery for the application of the spray preparations minimises contamination and eliminates cleaning problems.

Requirements:

4.6.1. **Stirring**

- 4.6.1.1. Both spray preparations shall be stirred for one hour using a method approved by Demeter New Zealand.
- 4.6.1.2. The best quality water available shall be used.

4.6.2. **Application**

- 4.6.2.1. All preparations shall be applied through equipment that is uncontaminated.
- 4.6.2.2. Equipment that is not dedicated to preparation application shall be cleaned before use by an approved method. (Comment: Approved methods require many hours of cleaning, so in many cases it will not be practical to alternate equipment between conventional and biodynamic use.)

4.6.2.3. Preparations shall be sprayed out within an hour of stirring if possible, but in every case within two hours.

4.7. Use of the compost preparations

Principles:

Compost preparations are used together as a set of six. The methods of insertion are described in books in the bibliography on page 36. For those areas of the enterprise, which receive insufficient preparation-treated compost, the effect of the compost preparations can be brought out in fermented liquid manures or spread through the cow pat pit.

Requirements:

- 4.7.1. Compost preparations shall be used in all composting and liquid manure fermented materials, including liquid manures and brought in composts at an early stage of fermentation.
- 4.7.2. The effect of the compost preparations shall reach all productive areas of the enterprise at least once each year.

4.8. Approval of preparations

Principles:

Preparations made on Demeter properties are approved as part of the Demeter certification process. Preparations made elsewhere are approved by a similar process.

- 4.8.1. Preparation makers who are Demeter licensees or applicants shall:
 - a) work according to a documented plan;
 - b) record details in a daily diary or similar primary record available at the annual inspection;
 - c) complete and supply the current biographical forms;
 - d) have their preparation making arrangements inspected along with samples of preparations retained for that purpose.

- 4.8.2. Preparation makers who are not Demeter licensees or applicants shall:
 - a) satisfy the requirements in 4.8.1. above;
 - b) supply a declaration of the integrity of the preparation making site and arrangements in an approved form;
 - c) supply other supporting evidence where requested.

4.9. Preparations Bibliography

G. Krenek, *Using the Biodynamic Preparations*, Bio Dynamic Farming and Gardening Association in NZ (2003)

5. Arable and Annual Plant Production

5.1. General

Principles:

Arable and annual plant production, including vegetable production, generally is supported by some animal husbandry that is integrated with it, especially of ruminants, and by a diverse ecosystem which includes trees and plants that support beneficial insects, pollinator and predator populations. Small intensive units unable to support animals bring in appropriate types and quantities of animal manure.

5.2. Plan

Requirements:

All plant production and other activities in this chapter shall be according to procedures set out in a Management Plan approved by Demeter New Zealand.

5.3. Soil management and soil fertility

Principles:

Soil biological fertility and soil life are maintained by:

- a) appropriate restorative pasture phases, where practical;
- b) incorporation of green manures;
- c) compost applications;
- cultivation practices which protect soil macro and micro life and soil organic matter, and minimise time land is left bare;
- e) careful use of the biodynamic preparations.

Requirements:

5.3.1. Materials

5.3.1.1. All materials used for soil management, amendment or fertilising shall meet the requirements of Table 5-1 Fertilising and soil conditioning materials and amendments in addition to being approved by the organic certifier.

- 5.3.1.2. All composts, liquid manures or other plant/animal wastes incorporated into the soil shall include use of the biodynamic compost preparations as set out in Chapter 4., except as otherwise permitted by Table 5-1 and 5.4.1.8. below.
- 5.3.1.3. Brought-in manures made without the compost preparations are acceptable if:
 - a) they meet the other requirements of this standard, and;
 - b) they are observed to ferment under the guidance of the compost preparations (if necessary after dilution by or addition of on-farm materials such as plant materials, animal manures and wood ash), and;
 - c) the fermentation is allowed to continue until it is finished.
- 5.3.1.4. Application of fertilising materials of plant or animal origin without prior composting (hot composting or in liquid manures) requires express permission from Demeter New Zealand.
- 5.3.1.5. The total amount of animal manure applied annually, averaged over a whole rotation, shall be no more than the amount which would be produced by the farm itself if it were run as a pure biodynamic livestock unit.
- 5.3.1.6. Materials that have been approved by the organic certifier can be normally accepted as satisfying Demeter requirements except where specifically prohibited by these standards.
- 5.3.1.7. Brought in composts shall be made using biodynamic preparations as in Chapter 4.
- 5.3.1.8. Where permission is sought to apply brought-in fertilising or soil amendment materials without composting, the licensee may be required to provide additional information on the materials before the matter is considered by Demeter New Zealand.
- 5.3.1.9. Except as expressly permitted elsewhere in these standards, fossil carbon such as peat or mined humates shall not be used in fertilising materials.
- 5.3.2. Weed management
- 5.3.2.1. Soil sterilisation is not permitted, except as permitted by s5.4.3 below.
- 5.3.2.2. Mulching is permitted so long as:

- a) commercial/industrial mulches such as weed mats and paper mulch are used sparingly and limited to difficult cases where soils are heavily infested and covered with weeds, and;
- b) prior permission for the use of such materials is obtained from Demeter New Zealand.
- 5.3.2.3. Soil may not be kept continuously free of vegetation.
- 5.3.2.4 Herbicides (whether organically approved or not) may not be used on a Demeter farm.
- 5.3.2.5 Soil may not be steam treated.

5.3.3. Soil-less techniques

- 5.3.3.1. Soil-less growing techniques, use of inert substrates, and hydroponic systems are not permitted.
- 5.3.3.2. Crops grown to harvest shall not be container grown.
- 5.3.3.3. An exception. to 5.3.3.2 above is that watercress and wasabe may be grown under approved natural conditions.

5.3.4. Livestock requirement

- 5.3.4.1. Cropping farms must have some livestock (ruminants or equidae). The minimum stocking rate is 2 stock units per hectare.
- 5.3.4.2. Exceptions to the requirements of 5.3.4.1. are possible for market gardens if:
 - a) use of manures, compost, green manures, and biodynamic preparations is, in the judgement of Demeter New Zealand, particularly intensive, and;
 - b) the whole enterprise, including any market garden area, is less than 40ha.

5.3.5. **Manure Limits**

5.3.5.1. The total amount of manure that may be applied is based on the manure production of two 500kg cows per hectare, averaged over the whole farm. Such animals are assumed to each excrete up to 56kg of nitrogen (N) and 49kg of

- phosphorus pentoxide (P₂O₅) per year. There are exceptions for particular cases as detailed below.
- 5.3.5.2. The amount of manure that may be derived from other animals is calculated by comparing the number of stock units that the animal represents with that of a 500kg cow.
- 5.3.5.3. Market gardens may import up to 170 kg of nitrogen per hectare per year if it can be shown that they are exporting more than 112 kg of nitrogen per year.
- 5.3.5.4. Market gardens without any ruminants or equidae of their own are required to import at least 10kg N/ha/yr in the form of plant or animal composts or composting material.
- 5.3.5.5. Greenhouses may be excepted from the requirements of 5.3.5.1 above if it can be shown that the nitrogen imported and the nitrogen exported are equal to within 5% of the total.
- 5.3.5.6. Imported commercial certified organic manures, in addition to meeting the requirements of 5.3.1.3., are limited to 40 kg of nitrogen per hectare per year. An exception may be allowed for perennial crops.
- 5.3.5.7. Where the provisions of items 5.3.5.2 to 5.3.5.6 above apply, the licensee is to prepare a nitrogen balance and submit it to Demeter New Zealand for approval.

5.3.6. Crop Rotation

For market gardens larger than 2 ha, one third of the crop rotation shall be green manure or fodder production.

5.4. Plant propagation

Principles:

Preference is given to Demeter certified propagation material if available, or otherwise to certified organic. Where possible locally adapted propagation material suitable for biodynamic horticulture is used.

Requirements:

5.4.1. **Seeds and plant materials**

5.4.1.1. Demeter certified seeds and plant material shall be used if available.

- 5.4.1.2. If Demeter certified seeds or plant material is not available, material from certified organic production may be used.
- 5.4.1.3. If only conventionally grown seeds or plant material is available then:
 - a) seeds must be untreated;
 - plant material except seeds must normally undergo a minimum of one year's conversion to Demeter production;
 - c) mature plants and rootstocks may require a longer conversion period.
- 5.4.1.4. Every licensee must have a detailed procedure stated in an approved Management Plan by which seeds and plant material are to be sourced in accordance with this section.
- 5.4.1.5. Synthetic root promoting compounds may not be used.

5.4.2. Propagation media

Plant propagation and seed raising mixes:

- a) shall consist of at least 25% by volume of biodynamically prepared composts;
- b) all other additives shall be permitted materials.

5.4.3. Potting mix sterilisation

- 5.4.3.1. Potting and seed raising mixes shall not be sterilised by chemical means.
- 5.4.3.2. Media and substrates for propagation may be steam-sterilised.
- 5.4.3.3. After sterilisation and cooling the biodynamic compost preparations, liquid compost extracts, horn manure preparation or the cow pat pit preparation shall be promptly used to guide the microbial recolonisation.

5.5. Biodiversity reserve

Principles:

Biodynamic farms maintain on-farm biodiversity.

- 5.5.1. No less than 10% of the farm area is normally kept as a biodiversity reserve.
- 5.5.2. Areas which may be considered as biodiversity reserve include:
 - a) Farm forestry areas;
 - b) Undisturbed native forest;
 - c) Headlands;
 - d) Land seeded to annual/ perennial plants that are allowed to go through flowering. The plants may not be the main (intensive, commercially harvested) agricultural crop on the land unless it is green manure or grassland, and it has to be a crop pollinated by insects;
 - e) Fallow land (part of the rotation or otherwise);
 - f) Fence lines (width of undisturbed land can be counted);
 - g) Native trees. Single trees appropriate to the location (100m² per tree) and tree lined avenues;
 - h) Hedges, field and stream bank tree groves;
 - i) Water races, ponds, wet lands, riparian areas;
 - j) Ruderal areas, (e.g. landslips), stone windrows and heaps;
 - k) Dry stone walls;
 - I) Unsealed natural paths and tracks;
 - m) Other biodiversity reserve contributions, including husbandry of rare or endangered plant and animal species;
 - n) Other elements approved in the Management Plan.
- 5.5.3. Where the biodiversity reserve is less than 10% of the total farm area, the Management Plan will set out other methods of achieving equivalent biodiversity within an agreed time. Such methods may include but are not limited to:

- a) The maintenance of rare or endangered breeds of plants and animals;
- b) Fostering bird or insect life by providing habitats;
- c) Biodynamic plant and animal breeding.
- 5.5.4. The biodiversity reserve is to be part of the whole farm or block. A reserve that is not contiguous with certified land shall not normally be counted.

5.6. Production under glass or plastic

Principles:

Production under glass or plastic may require additional measures.

Requirements:

- 5.6.1. Where artificial heating is used, energy saving measures shall be taken wherever possible.
- 5.6.2. In emergencies soil sterilisation may be permitted by Demeter New Zealand. Proof of need will be required. Section 5.4.3.3. also applies.
- 5.6.3. Where enclosed systems cover more than 50% of the whole productive area, the following additional requirements apply:
 - a) A minimum of 20% of the farm must be biodiversity reserve, and
 - b) There must be flower strips and green manure within the enclosed area itself.

5.7. Mushroom Production

For production of edible fungi refer to International Demeter Biodynamic Standard.

5.8. Biodynamic preparations

The preparations shall be used as set out in Chapter 4. Biodynamic Preparations.

Table 5-1 Fertilising and soil conditioning materials and amendments permitted in organic certification but where the Demeter conditions differ

Materials permitted by the organic certifier may be used according to that certifier's requirements, except where different or additional Demeter requirements are listed below.

Material	Usage	Demeter Conditions
Biodynamic preparations	See Chapter 4. for requirement to use the preparations	Must be from an approved source
All brought-in plant and animal materials	Composts, liquid manures, mulches etc	Must not cause manure limits (may be lower than organic limits) to be exceeded and must not include manure from unethical animal production.
All plant and animal materials	Composts and liquid manures	Biodynamic preparations used in all composting and fermentation. (Use of animal materials uncomposted requires express permission from Demeter New Zealand)
Fish wastes		Not sourced from processing factory fishmeal or from fish farming
Fossil Carbon e.g. peat or mined humates	Soil fertilisation or soil amendment	Not permitted

Table 5-2 Plant pest and disease materials and methods permitted in organic certification but where the Demeter conditions differ

Materials permitted by the organic certifier may be used according to that certifier's requirements, except where different or additional Demeter requirements are listed below

Purpose	Material or method	Demeter conditions
Control of any	Viruses e.g. granulosis, Bacteria	Whole organisms only, no
organism	e.g. Bacillus thuringiensis,	extracts
	Fungi e.g. <i>Trichoderma spp.</i>	
Plant growth	Herbicides, including organically	Not permitted under any
regulation,	approved materials	circumstances on any part of
including weed		farm
control		
Fungi and bacterial	Materials based on copper	Use discouraged. Only allowed
control		on permanent crops. Permission
		required from Demeter New
		Zealand
Control of any	Materials based on mineral oils	Not allowed on annual crops
organism		

6. Orchard and Perennial Plant Production

6.1. General

Principles:

Biodynamic orchards sustain and improve the fertility and life-supporting properties of the soil and associated biological, physical and chemical properties. They do this by the maintenance and enhancement of soil organic matter, humus-content, biological activity, soil structure and soil mineral status. Small intensive units unable to support animals bring in appropriate types and quantities of animal manure.

Orchards are part of an integrated self-sustaining and stable ecosystem where trees, shrubs and vines are supported by a microbially active soil and diverse groundcover, green-sward and humus-layer.

6.2. Plan

Requirements:

All plant production and other activities in this chapter shall be according to procedures set out in a Management Plan approved by Demeter New Zealand.

6.3. Orchard Design

Principles:

Choice of species, cultivars and rootstocks reflects characteristics of soil, climate, aspect and topography, and resistance to pests and diseases. Where operations tend towards monoculture, active measures are taken to create a balance through more intensive use of compost, biodynamic preparations and a wide variety of groundcover species and ancillary plantings.

Requirements:

6.3.1. A biodynamic orchard shall provide a habitat for beneficial organisms such as insects, birds, vertebrate and invertebrate fauna.

6.4. Soil management and soil fertility

Principles:

Soil biological fertility and soil life are maintained by:

- recycling of green material from the sward;
- b) compost applications;
- harvesting and use of machinery in ways which protect soil macro and micro life and soil organic matter;
- d) careful use of the biodynamic preparations.

Requirements:

6.4.1. **General**

- 6.4.1.1. All materials used for soil management, amendment or fertilising shall meet the requirements of Table 6-1 *Fertilising and soil conditioning materials and amendments* in addition to being approved by the organic certifier.
- 6.4.1.2. All composts, liquid manures or other plant/animal wastes incorporated into the soil shall include use of the biodynamic compost preparations as set out in Chapter 4., except as otherwise permitted by Table 6-1 and 6.4.1.3. below.
- 6.4.1.3. Brought-in manures made without the compost preparations are acceptable if:
 - a) they meet the other requirements of this standard, and;
 - b) they are observed to ferment under the guidance of the compost preparations (if necessary after dilution by or addition of on-farm materials such as plant materials, animal manures and wood ash), and;
 - c) the fermentation is allowed to continue until it is finished.
- 6.4.1.4. Application of fertilising materials of plant or animal origin without prior composting (hot composting or in liquid manures) requires express permission from Demeter New Zealand.

6.4.2. Additional requirements for brought-in fertilising materials

- 6.4.2.1. Brought in composts shall be made using biodynamic preparations as set out in Chapter 4.
- 6.4.2.2. Where permission is sought to apply brought-in fertilising or soil amendment materials without composting, the licensee may be required to provide additional information on the materials before the matter is considered by Demeter New Zealand.
- 6.4.2.3. Except as expressly permitted elsewhere in these standards, fossil carbon such as peat or mined humates shall not be used in fertilising materials.

6.4.3. Weed management

- 6.4.3.1. Soil sterilisation is not permitted, except as permitted by 6.5.4.2. below.
- 6.4.3.2. Mulching is permitted so long as:
 - a) commercial/industrial mulches such as weed mats and paper mulch are used sparingly and limited to difficult cases where soils are heavily infested and covered with weeds, and;
 - b) prior permission for the use of such materials is obtained from Demeter New Zealand.
- 6.4.3.3. Soil may not be kept continuously free of vegetation.
- 6.4.3.4. Herbicides (whether organically approved or not) may not be used on a Demeter farm.
- 6.4.3.5. Soil may not be steam treated.

6.4.4. Soil-less techniques

- 6.4.4.1. Soil-less growing techniques, use of inert substrates, and hydroponic systems are not permitted.
- 6.4.4.2. Crops grown to harvest shall not be container grown.

6.4.5. Production under glass or plastic

- 6.4.5.1. Where artificial heating is used, energy saving measures shall be taken wherever possible.
- 6.4.5.2. In emergencies soil sterilisation may be permitted by Demeter New Zealand. Proof of need will be required. Section 5.4.3.3 also applies.
- 6.4.5.3. Where enclosed systems cover more than 50% of the whole productive area, the following additional requirements apply:
 - a) A minimum of 20% of the farm must be biodiversity reserve, and;
 - b) There must be flower strips and green manure within the enclosed area itself.

6.4.6. Livestock requirement

- 6.4.6.1. Wherever possible orchards shall have some grazing livestock. The minimum stocking rate is 2 stock units per hectare.
- 6.4.6.2. Exceptions to the requirements of 6.4.6.1. are possible for orchards and other permanent crops if use of manures, compost, green manures, and biodynamic preparations is, in the judgement of Demeter New Zealand, particularly intensive.

6.4.7. **Manure Limits**

- 6.4.7.1. The total amount of manure that may be applied is based on the manure production of two 500kg cows per hectare, averaged over the whole farm. Such animals are assumed to each excrete up to 56kg of nitrogen (N) and 49kg of phosphorus pentoxide (P₂O₅) per year. There are exceptions for particular cases as detailed below.
- 6.4.7.2. The amount of manure that may be derived from other animals is calculated by comparing the number of stock units that the animal represents with that of a 500kg cow.
- 6.4.7.3. Market gardens may import up to 170 kg of nitrogen per hectare per year if it can be shown that they are exporting more than 112 kg of nitrogen per year.

- 6.4.7.4. Greenhouses may be excepted from the requirements of 6.4.7.1. above if it can be shown that the nitrogen imported and the nitrogen exported are equal to within 5% of the total.
- 6.4.7.5. Imported commercial certified organic manures, in addition to meeting the requirements of 6.4.1.3., are limited to 40 kg of nitrogen per hectare per year. An exception may be allowed for perennial crops.
- 6.4.7.6. Where the provisions of items 6.4.7.1. to 6.4.7.5. above apply, the licensee is to prepare a nitrogen balance and submit it to Demeter New Zealand for approval.

6.5 Plant propagation

Principles:

Preference is given to Demeter certified propagation material if available, or otherwise to certified organic. Where possible, locally adapted propagation material suitable for biodynamic orchards is used.

Requirements:

6.5.1. Plant materials

- 6.5.1.1. Demeter certified seeds and plant material shall be used if available.
- 6.5.1.2. If Demeter certified seeds or plant material is not available, material from certified organic production may be used.
- 6.5.1.3. If only conventionally grown seeds or plant material is available then:
 - a) seeds must be untreated;
 - plant material must undergo a minimum of one year's conversion to Demeter production;
 - c) mature plants and rootstocks may require a longer conversion period.
- 6.5.1.4. Every licensee must have a detailed procedure stated in an approved Management Plan by which seeds and plant material are to be sourced in accordance with this section.
- 6.5.1.5. Synthetic root-promoting compounds may not be used.

6.5.2. **Propagation media**

Plant propagation and seed raising mixes:

- a) shall consist of at least 25% by volume of biodynamically prepared composts;
- b) all other additives shall be permitted materials as listed in these standards;
- c) peat may be used up to 75% by volume, but its proportion shall be kept as low as possible;
- d) the use of synthetic soil improving agents or soil substitutes is not permitted.

6.6. Biodiversity reserve

Principles:

Biodynamic farms maintain on-farm biodiversity.

- 6.6.1. No less than 10% of the farm area is normally kept as a biodiversity reserve.
- 6.6.2. Areas which may be considered as biodiversity reserve include:
 - a) farm forestry areas;
 - b) undisturbed native forest;
 - c) headlands;
 - d) Land seeded to annual/ perennial plants that are allowed to go through flowering. The plants may not be the main (intensive, commercially harvested) agricultural crop on the land unless it is green manure or grassland, and it has to be a crop pollinated by insects;
 - e) fallow land (part of the rotation or otherwise);
 - f) fence lines (width of undisturbed land can be counted);
 - g) native trees. Single trees appropriate to the location (100m² per tree) and tree lined avenues;

- h) hedges, field and stream bank tree groves;
- o) water races, ponds, wet lands, riparian areas;
- i) ruderal areas, (e.g. landslips), stone windrows and heaps;
- dry stone walls;
- k) unsealed natural paths and tracks;
- other biodiversity reserve contributions, including husbandry of rare or endangered plant and animal species;
- m) other elements approved in the Management Plan.
- 6.6.3. Where the biodiversity reserve is less than 10% of the total farm area, the Management Plan will set out other methods of achieving equivalent biodiversity within an agreed time. Such methods may include but are not limited to:
 - a) The maintenance of rare or endangered breeds of plants and animals;
 - b) Fostering bird or insect life by providing habitats;
 - c) Biodynamic plant and animal breeding.
- 6.6.4. The biodiversity reserve is to be part of the whole farm or block. A reserve that is not contiguous with certified land shall not normally be counted.

6.7. Biodynamic preparations

The biodynamic preparations shall be used as set out in Chapter 4. Biodynamic Preparations. In addition, biodynamic tree paste may be used.

Table 6-1 Fertilising and soil conditioning materials and amendments permitted in organic certification but where the Demeter conditions differ

Materials permitted by the organic certifier may be used according to that certifier's requirements, except where different or additional Demeter requirements are listed below

Material	Usage	Demeter Conditions
Biodynamic	See Chapter 4. for	Must be from an approved source
preparations	requirement to use the	
	preparations	
All brought-in	Composts, liquid manures,	Must not cause manure limits (may
plant and animal	mulches etc	be lower than organic limits) to be
materials		exceeded and must not include
		manure from unethical animal
		production.
All plant and	Composts and liquid	Biodynamic preparations used in all
animal materials	manures	composting and fermentation. (Use
		of animal materials uncomposted
		requires express permission from
		Demeter New Zealand)
Fish wastes		Not sourced from processing factory
		fishmeal or from fish farming
Fossil Carbon	Soil fertilisation or soil	Not permitted
e.g. peat or	amendment	
mined humates		

Table 6-2 Plant pest and disease materials and methods permitted in organic certification but where the Demeter conditions differ

Materials permitted by the organic certifier may be used according to that certifier's requirements, except where different or additional Demeter requirements are listed below

Purpose	Material or method	Demeter conditions
Control of any	Viruses e.g. granulosis,	Whole organisms only, no extracts
organism	Bacteria e.g. <i>Bacillus</i>	
	thuringiensis, Fungi e.g.	
	Trichoderma spp.	
Plant growth	Herbicides, including	Not permitted under any
regulation,	organically approved	circumstances
including weed	materials	
control		
Fungi and	Materials based on copper	Use discouraged. Only allowed on
bacterial control		permanent crops. Permission
		required from Demeter New
		Zealand
Control of any	Material based on mineral	Only before flowering except if plant
organism	oils	flowers year-round and only if
		effective plant oils are not available.
		Licensee must be able to justify use

7. Animal Production

7.1. General

Principles:

Biodynamic farmers organise optimal living conditions for their livestock, and bring in to the farm only animals from other similarly managed enterprises. Animal husbandry is based on a balanced integration of animals into the wider farm organism as a self-sustaining whole. The animals' role within the farm individuality includes:

- a) assisting in nutrient cycling;
- b) improving soil biological fertility through manures (especially cow manure) and organic matter accumulation under pasture;
- c) effective and appropriate land use;
- d) utilising waste and by products;
- e) improving biodiversity.

Livestock are an integral part of biodynamic agriculture and horticulture.

7.2. Pasture and Crops

For pasture establishment, pasture management and fodder crop production the principles and requirements of the arable section (Chapter 5.) apply.

7.3. Plan

Requirements:

All animal production and other activities in this chapter shall be according to procedures set out in a Management Plan approved by Demeter New Zealand.

7.4. Feeding

Principles:

Fodder produced on the farm forms the basis for the animals' nutrition, and self sufficiency in this respect is aimed at. Where fodder must be imported care is taken that the fodder is appropriate to biodynamic production.

7.4.1 Feed quality

Principles:

Pasture or other living plants are the principal fodder for animals on biodynamic farms. This may be augmented with conserved feed, principally vegetative matter such as silage, hay or straw produced on the farm, and suited to particular species.

Requirements:

7.4.1.1. The feeding of animal tissue or products, (including fishmeal) to ruminants or to other livestock not normally eating such materials is prohibited.

7.4.2. Brought-in feeds

Principles:

There are limits on the amount of fodder which can be brought in, and minimum quality requirements for such brought-in feed which apply to the feeding of fully Demeter certified livestock. The same principles apply to uncertified livestock while they are on the property.

Requirements:

7.4.2.1. Under normal circumstances:

- a) 80% shall be produced on-farm, calculated on a daily basis, and;
- b) the balance may be certified organic or Demeter or *In Conversion to Demeter*, and:
 - i) shall be Demeter certified if available, or if not;
 - ii) shall be In Conversion to Demeter certified if available, or if not;
 - iii) shall be certified organic.

- 7.4.2.2. Brought-in feed shall be material listed in Table 7-1 below.
- 7.4.2.3. Grazing off of livestock on Demeter certified land is permitted, and is counted as if the feed were produced on the farm.

7.5. Manurial waste disposal

Principles:

Composting/fermentation and application of animal wastes and manures is carefully managed to minimise nutrient loss, environmental pollution, or adverse effects on crop quality.

Composting and fermentation processes are guided by the biodynamic compost preparations 502 – 507.

Requirements:

- 7.5.1. All livestock farms where animal waste is accumulated, such as in milking sheds, piggeries, henhouses, or through animal behaviour (e.g. alpacas) shall follow an approved plan for its incorporation into the soil of the farm.
- 7.5.2. The plan shall protect waterways and groundwater from pollution.
- 7.5.3. During the breakdown of the waste, appropriate quantities of compost preparations 502 – 507 shall be used where appropriate. Starter material developed using the compost preparations (e.g. cow pat pit) may be used in the treatment of liquid effluent.
- 7.5.4. The licensee shall ensure that the system is well maintained and works as intended.

7.6. Supplementary or brought-in livestock

Principles:

Farms bringing in animals certified organic (but not Demeter certified) for fattening or for bringing balance to the enterprise may be Demeter certified, provided proper quarantine measures are taken, and all brought in stock is clearly and permanently identified. However, in most cases the stock does not become Demeter certified.

Requirements:

- 7.6.1. Brought-in uncertified stock cannot be certified for meat or products, except as in Table 7-2.
- 7.6.2. Brought-in stock which is certified organic can become Demeter certified according to Table 7-2.
- 7.6.3. Documentation of all brought-in stock shall be obtained from the supplier prior to bringing the stock onto the property.

7.7. Animal health and welfare

Principles:

Observant animal husbandry, including feeding, breeding and choice of breeds, and stockmanship lie at the heart of biodynamic stock management. It takes into account normal developmental and behavioural patterns for the species, so that innate behaviour can be expressed, e.g. through free ranging. Basic requirements as laid down in the codes of the Animal Welfare Advisory Committee (AWAC) are seen as a minimum. Details may be found on the Ministry for Primary Industries' website.

Management practices are modified as required to prevent or control metabolic, infectious or parasitic illnesses and sometimes include widening the variety of livestock and herbage species, for example because of complementary grazing habits. Stress and suffering are minimised in all farm procedures and the animals' own natural rhythms and cycles are respected. Adequate fodder and clean water, are provided.

- 7.7.1. Conventional chemotherapeutic treatments are to be used to save life or to prevent unnecessary suffering, or if compulsory by law.
- 7.7.2. Diseased or severely infected animals must receive timely treatment.
- 7.7.3. Animals treated with prohibited materials, whether for welfare reasons or not, lose certification for meat for life and for products (such as wool or milk) for one year.

7.7.4. Organic certification to the BioGro standard is a prerequisite for Demeter certification. Animals that have lost their organic status under the BioGro standard for any reason also lose their Demeter status at least until such time as their organic status under the BioGro standard is restored.

7.8. Surgical procedures

Principles:

Animals are managed as far as possible in their natural state, without mutilation. Horns, antlers, tails, noses, ears, testicles and other parts of animals are left intact wherever possible so that they can perform their natural functions. Surgical procedures to animals are undertaken only where the health or welfare of animals or farm staff is at risk. Before they are undertaken, alternative non-surgical procedures are investigated to ensure that surgery is justified.

Requirements:

- 7.8.1. Written approval from Demeter New Zealand is required in advance for dehorning cattle, bringing in dehorned cattle or retaining dehorned cattle on farm. Approval must be renewed annually.
- 7.8.2. Although polled breeds do not involve surgical procedures, they are not permitted for milk production.

7.9. Protection of land from the effects of therapeutic drugs

Principles:

The status of certified land is protected by ensuring that, where animals are treated with prohibited materials, the land is temporarily withheld from production of Demeter certified meat and other products.

- 7.9.1. When it becomes necessary, for welfare reasons, to treat animals with otherwise prohibited materials:
 - a) the land they are treated on, and;
 - b) any land they go onto during the withholding period of the drug;

must not be used for the production of Demeter food until the withholding period has concluded.

For the purposes of this section "food production" includes the grazing of certified animals, such as other members of the same herd that did not receive treatment.

- 7.9.2. When animals are brought in from other properties, the Animal Status Declaration is to be examined to ascertain whether they are within the withholding period, and if they are, the requirements of 7.9.1. are to be applied as if they were treated on the farm.
- 7.9.3. Where the licensee has treated animals with otherwise prohibited materials, and does not wish to return them to the herd or flock from which they came, they may be held in a separate area until the end of the withholding period

7.10. Record keeping and quarantine

Principles:

Land on which treatment is given is temporarily designated as quarantine land. It is clearly identified in farm records. Animals treated with restricted materials (whether on farm or elsewhere) are said to be quarantined until the end of the withholding period.

Requirements:

- 7.10.1. All land on which any treatment of any kind of therapeutic drug, whether restricted or not must be identified in the farm records as temporary quarantine land.
- 7.10.2. All animals treated must be unambiguously marked and identified at least for the period of decertification, not just the withholding period.
- 7.10.3. Untreated animals sharing grazing on temporary quarantine land must be identifiable until the end of the withholding period.

7.11. Commercial poultry production

For commercial poultry production refer to the *International Demeter Biodynamic Standard* for additional requirements.

Table 7-1 Animal feed materials permitted in organic certification but where the Demeter conditions differ

Materials permitted by the organic certifier may be used according to that certifier's requirements, except where different or additional Demeter requirements are listed below

Material	Demeter conditions
Animal proteins, such as meat meal	May not be fed to Demeter livestock of any type, nor to organic livestock while on Demeter land
Fish proteins, such as fish meal	May not be fed to Demeter livestock of any type, nor to organic livestock while on Demeter land
Vitamins	Natural vitamins only, no synthetic vitamins of any type
Trace elements	Demonstrated need

Table 7-2 Brought-in livestock status and products

Animal type	Certification status on arrival	Age on Arrival	Fed and managed to the BioGro and Demeter standards for:	Product	Status of product if certified organic to the BioGro standard and processed under Demeter contract
Cattle	Organic	Any	Since arrival	Milk	Demeter or In Conversion to Demeter, status same as property
Any	Organic	Any	One year or at least two thirds of life, whichever is the greater	Meat	Demeter or In Conversion to Demeter, status same as property
Mammals other than cattle	Organic	Any	4 months	Fibre	Demeter or In Conversion to Demeter, status same as property
Cattle	Conventional	Less than 7 days	Since arrival.	Milk	Demeter
Cattle	Conventional	More than 7 days old	One year post quarantine	Milk	In Conversion to Demeter

Animal type	Certification status on arrival	Age on Arrival	Fed and managed to the BioGro and Demeter standards for:	Product	Status of product if certified organic to the BioGro standard and processed under Demeter contract
Cattle	Conventional	More than 7 days old	Two years post quarantine	Milk	Demeter or In Conversion to Demeter, status same as property
Cattle	Conventional	More than 7 days old	Any period	Meat	Conventional
Mammals other than cattle	Conventional	Any	One year post quarantine	Fibre	In Conversion to Demeter
Mammals other than cattle	Conventional	Any	Two years post quarantine	Fibre	Demeter or In Conversion to Demeter, status same as property
Mammals other than cattle	Conventional	Any	Any period	Meat	Conventional

8. Harvest and Post-Harvest Management

Principles:

Harvesting and post-harvest management of Demeter certified produce maintains its living qualities and minimises any damaging effects.

8.1. Plan

Requirement:

All harvesting and other activities in this chapter shall be according to procedures set out in a Management Plan approved by Demeter New Zealand.

8.2. Storage areas

Requirements:

- 8.2.1. Produce of the same kind but of a lesser certification status shall not be stored in the same building or vicinity unless:
 - a) there is an approved documented process for ensuring separation of produce of a lesser certification (the situation known as parallel production);
 - all staff are aware of the documented procedures through documented training and awareness programs;
 - all staff adhere to the documented procedures;
 - d) the licensee or owner of the produce regularly reviews the system to ensure that documented requirements and product integrity are not compromised.

(Comment: this section applies, for example to *In Conversion to Demeter* oranges stored with full Demeter oranges, but not to *In Conversion to Demeter* apples stored with full Demeter oranges.)

8.3. Packaging and presentation

Principles:

Packaging and other presentation materials and methods are chosen to preserve the living quality and appearance of Demeter produce, and minimise impact on the environment.

Requirements:

8.3.1. International Demeter Biodynamic Standard (see www.demeter.net) gives requirements for the packaging of particular products. Included is a requirement that plastic packaging is to be biodegradable, recycled or fully recyclable and limited to sensitive fruits and vegetables such as fresh herbs, salads, berries, carrots and cherry tomatoes._The International Demeter Biodynamic Standard should be consulted for specific packaging requirements

8.4. Labelling

Principles:

Demeter produce is labelled in such a way as to give clear and accurate information to the consumer or trader and in accordance with principles in Chapter 3. above.

Requirements:

- 8.4.1. The requirements of Chapter 3. above apply to labelling of Demeter produce.
- 8.4.2. The Demeter flower symbol, the Demeter co-brand symbol, the words "Demeter", or "In Conversion to Demeter" may be placed on packaging only by persons licensed under these standards, or by their employees under their direct supervision.
- 8.4.3. Where either symbol is used, or the word Demeter is used to describe the product as a whole:
 - the product shall contain at least 90 percent fully Demeter certified ingredients;

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- the product may contain at most 10% certified organic ingredients or *In Conversion to Demeter* ingredients (declared according to 8.4.7. below) if Demeter ingredients are unavailable;
- the product may contain at most 5% conventionally produced ingredients (declared according to 8.4.7. below) if Demeter or certified organic ingredients are unavailable;
- d) the product shall not contain any prohibited material;
- e) the product may contain other ingredients such as additives not of agricultural origin only if they are authorised by the processing sections of the *International Demeter Biodynamic Standard* (see www.demeter.net);
- the product shall not contain any one ingredient from both Demeter and non-Demeter sources;
- g) the product shall have the recipe approved in advance by Demeter New Zealand;
- no ingredient is considered unavailable unless diligent and wide ranging effort can be shown to have been made to source it in the required quality, and Demeter New Zealand has agreed that it cannot be found;
- the percentages of ingredients in a product shall be calculated from the individual weights, but excluding salt and water.
- 8.4.4. Where the words "In Conversion to Demeter" are used to describe the product as a whole, the requirements of 8.4.3. above shall apply as if "In Conversion to Demeter" is substituted for "Demeter", wherever the sense allows.
- 8.4.5. There is no restriction on ingredients of a higher certification status being used in a product described as a whole as being of a lower certification, such as full Demeter ingredients in a product labelled *In Conversion to Demeter*. In deciding what can be used, the order of status is:

- a) Demeter;
- b) In Conversion to Demeter;
- c) other certified organic;
- d) in conversion to other certified organic;
- e) conventional.
- 8.4.6. Where a product does not qualify under 8.4.3. above for the use of either symbol or a description as Demeter, the symbols and the word may only be used in the ingredients list to describe an ingredient that does qualify. The colour, style and size of lettering shall be the same as for other non-qualifying ingredients in the ingredients list.
- 8.4.7. Any ingredients not meeting the status of the product as a whole must be clearly indicated in the ingredients list.
- 8.4.8. Labels shall not make claims about the nature of Demeter certification, biodynamic farming or the product that cannot be substantiated. For example, a statement "no pesticides have been used in the growing of this product" may not appear on a product where any plant protection material has been used in its production.
- 8.4.9. Where the Demeter co-brand symbol is used the labelling sections of the International Demeter Biodynamic Standard shall also apply (see www.demeter.net).

8.5. Processing

Principles:

Demeter produce is processed in a manner that preserves the living quality of the produce and eliminates all possibility of any kind of contamination or mixing with uncertified produce, and minimises any damaging effects.

- 8.5.1. Processing shall be according to the requirements of the processing chapters of the *International Demeter Biodynamic Standard* (available from www.demeter.net or Demeter New Zealand).
- 8.5.2. Processors shall be able to produce current documentary approval of their system by the relevant health authority.

Glossary of Terms Used

Approved: Approved in writing by Demeter New Zealand

Assessment: Review of audit reports and applicant documents to decide what certification may be given

Association: The Bio Dynamic Farming and Gardening Association in New Zealand (Inc.), trading as Biodynamics New Zealand

Audit: Process of physical examination of farm plus review of records to gather information for assessment

Auditor: Person appointed by Demeter New Zealand to carry out inspections of properties on its behalf

Biodiversity reserve: An area of the farm that is reserved to promote biodiversity, and not used for production

Biodynamic Association: The Bio Dynamic Farming & Gardening Association in New Zealand Incorporated, trading as Biodynamics New Zealand

Biodynamic preparations: Materials described in Chapter 4. of these standards

Brought-in: Includes all items that come onto the farm whether purchased (bought-in) or not. i.e. refers to bringing-in, not buying-in

Certification status: A comparison of the certification of produce with that of other produce

Certified organic: Certified by any organisation currently recognised as an organic certifier by Demeter New Zealand

Certified: In these standards means land or produce that is fully Demeter certified or *In Conversion to Demeter* certified as the case may be. In some cases context will require the meaning to include other organic certifications

Chain of custody: The retention of certified produce in the hands of persons licensed to describe it as Demeter certified and affix the Demeter trademark to it

Contractor: Any person who is not a licensee or the employee of a licensee, or a volunteer, but who undertakes any work on a certified property

Contract: A contract between the Association and the <u>person licensed to use the Demeter name</u> and trademarks

Conversion: Change-over of production to methods that meet these standards

Council: The Council of Biodynamics New Zealand

Critical non-compliance: A non-compliance resulting in immediate loss of certification and/or product recall

Cropping farm: Agricultural enterprise producing broad acre crops e.g. cereals, pulses, potatoes but not including vegetable market gardens or perennial orchards

Demeter annual report: A form filled out annually by farmers to give details of the previous year's farm activities

Demeter Assessment Group: Person or persons appointed by Demeter New Zealand to carry out assessments

Demeter Co-brand Symbol: Word Demeter stylised thus

demeter

Demeter farm: Any property or part property on which produce to which the Demeter trademark or the word Demeter may be applied is grown

Demeter Flower Symbol: This design



International Demeter Biodynamic Standard:, International Standard for the use and certification of Demeter, Biodynamic and related trademarks, available from www.demeter.net

Biodynamic Federation - Demeter International: International association of national Demeter and biodynamic organisations

Demeter New Zealand: The branch or section of Biodynamics New Zealand responsible for Demeter matters

Farm: All the land under the management of the licensee(s). Includes paths, roadways, races and amenity areas.

Farm Profile: A description (with appropriate maps) of physical and other characteristics of the farm that are unlikely to change very frequently

In Conversion to Demeter: Certified that the property and product have been farmed to these standards for at least one year but do not qualify for full Demeter certification

Licensee: Person (or corporate organisation) who has signed a contract for the use of Demeter Trademark; and, includes an applicant for use of Demeter Trademark except where the context requires otherwise

Livestock: Animals that are managed on certified land. Includes bees and other intentional pollinator insects and equines but not pets or working dogs

Major non-compliance: A non-compliance that must be corrected before a renewal certificate can be issued

Management Plan: A detailed description of the methods and materials to be used in managing the enterprise to these standards, including descriptions of the responses to reasonably foreseeable problems

Manager: Person, or group of persons, whether owner or not, who is in day to day control of the enterprise, and in the case of a certified enterprise, able to ensure that Demeter standards are met

Minor non-compliance: A non-compliance that does not prevent renewal of a certificate but is to be corrected within a specified time

Non-compliance: Failure to meet some aspect of these standards

Normal: Indication that Demeter New Zealand has discretion to permit exceptions. Does not confer a discretion on the licensee.

Orcharding: Production from all perennial or permanent woody plants including vines, berryfruit and nut-trees. Also includes production of the plants themselves, such as in nurseries

Parallel production or handling: The production or handling of one type of produce with more than one certification status

Partial certification: Situation where only part of the enterprise, land or produce is certified

Permission: Written permission from Demeter New Zealand

Plant extract: Material produced by steeping plant material in a liquid such as potable water, plant oil or alcohol

Potable water: Water fit for human consumption

Product: Plant or animal or material derived from plants or animals

Prohibited material or method: Any material or method used in certified enterprises that is not explicitly authorised by these standards

Protocol: Written description of how a particular task is to be carried out so as to meet some aspect of these standards. May be part of a Management Plan

Quarantine land: Any area that is used for the treatment of livestock with materials normally prohibited on Certified Farms, but required to be used in animal welfare emergencies

Reconversion: Change of production methods to ensure that land or a product will in future meet these standards following a period when it did not

Restricted: A material or method for which express permission is to be obtained from Demeter New Zealand before use, or a material or method whose use on certified land, animals or plants is prohibited but nevertheless must be used in some cases, such as for animal welfare reasons.

Registration period: Period between a primary production enterprise being formally recorded as having begun conversion, and the approval of first certification. Also referred to as D0 year

Soil biological fertility: Process whereby soil organisms make nutrients available to plants

Standards: This document

Unavailable: Not able to be obtained in the quality (such as full Demeter, *In Conversion to Demeter*) required, after diligent and wide ranging effort has been made. Assumption that an ingredient is unavailable requires prior approval of Demeter New Zealand

Unethical livestock system: System of livestock management such as use of battery cages for hens and crates for sows that allow very little normal animal behaviour

9. Index

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