# MINISTRY FOR PRIMARY INDUSTRIES NEW ZEALAND EXPORT CERTIFICATION STANDARD

## **Seed Varietal Certification Requirements**

Requirements to be met by Seed Organisations to gain approval to undertake seed varietal certification activities

REVIEW	This MPI standard is subject to periodic review.
ENDORSEMENT	This MPI/standard is hereby endorsed.
Director Plants, Food & Environment MPI	MA
Date:	29 October 2012

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Appendix 1. "Seed Field Production Standards" See the following link: http://www.biosecurity.govt.nz/files/regs/stds/seed-field-production-standards.pdf

Appendix 2. "Varieties Eligible for Certification in NZ" See the following link: <u>http://www.biosecurity.govt.nz/files/regs/stds/seed-varieties-eligible-cert-nz.pdf</u>

## AMENDMENT RECORD AND IMPLEMENTATION SCHEDULE

Amendments to this standard originally issued on 19 March 2010 will be given a consecutive number and will be dated.

Please ensure that all amendments are inserted, obsolete pages removed, and the record below is completed.

Amendment No:	Date:	Specification:	Implementation Date:
1	29/10/2012	Update from Ministry of Agriculture and Forestry Biosecurity New Zealand (MAFBNZ) to Ministry for Primary Industries (MPI)	29/10/2012
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## 1.0 Introduction

This Standard specifies the Ministry for Primary Industries (MPI's) minimum technical requirements for the provision of seed varietal certification of seed for sowing.

It includes the requirements to be met by the following parties involved in the receipt of MPI seed varietal certification:

- Seed Growers,
- Seed Industry Organisations (Cleaning, Storing, Treating, Sampling & Inspection, Exporters ),
- the Seed Laboratory and Independent Verification Agencies

This standard is one of a set of standards that comprise the MPI New Zealand export Certification System.

This certification system operates through the delegation of authority by MPI to authorised Independent Verification Agencies (IVAs) and approved Organisations to carry out certification services and activities that contribute to the issuance of MPI seed varietal certification.

The standard "System Overview and Requirements" provides an overview of the policies and general requirements for MPI Plant (including Forestry) Export Certification system.

MPI has developed standards and technical requirements for the delegation of authority for the provision of MPI phytosanitary and seed export certification services and activities.

The series of export certification standards can be found on the MPI websites: http://www.biosecurity.govt.nz/regs/exports/plants/stds.

#### 1.1 Scope

This Standard provides the technical specifications for seed varietal certification. It also makes reference to the relevant MPI Export series of Standards and technical requirements for the receipt of phytosanitary certification. These specifications must be met to become MPI approved for undertaking activities associated with obtaining both seed varietal and phytosanitary certification.

Organisations seeking to gain and maintain MPI approval to participate in the MPI seed varietal certification system, must meet the seed varietal certification requirements of this Standard.

This certification system applies to seeds produced in New Zealand and allows for the verification of seed production procedures compliant with the rules and requirements of the various international organisations concerned with the international movement and testing of seed. These rules and requirements currently include those of the:

- (i) Organisation for the Economic Cooperation and Development (OECD), Seed Schemes
- (ii) European Union (EU),
- (iii) International Seed Testing Association (ISTA)
- (iv) New Zealand Seed Quality Management Authority (SQMA) relating to varietal trueness to type certification.
- (v) International Plant Protection Convention (IPPC) for phytosanitary certification

Within the seed varietal certification system for arable seeds, MPI is the New Zealand:(i) Designated authority for the OECD Seed Schemes;

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- (ii) Designated control agency for the EU Seed Scheme;
- (iii) Designated authority for ISTA;
- (iv) Certification authority for MPI, and
- (v) National Plant Protection Organisation under the IPPC, for the provision of phytosanitary certification.

New Zealand is a member country of the Organisation for Economic Co-operation and Development (OECD) and is a participating member of the OECD Seed Schemes. Participation in these schemes has resulted in MPI being the National Designated Authority for the administration of the Schemes Rules in New Zealand, and as such, also the Designated Authority for the International Seed Testing Association (ISTA). The rules of these Organisations are integrated within this Standard to form the New Zealand Seed Varietal Certification System, and includes the technical requirements for seed sampling and testing processes.

This Seed Varietal Certification system has been developed in consultation with the New Zealand Seed Quality Management Authority (SQMA) which comprises representatives from seed breeders, growers, processors and merchants along with MPI representation (ex-officio). The SQMA acts as the seed industry sector body overseeing the sector's management of regulatory and seed certification issues.

## 1.2 MPI Standards Governing Seed Phytosanitary Activities within the Seed Supply Chain of Custody



## 2.0 Process Pathway for "Seed Varietal Certification":

The following diagram identifies the key stages in the process pathway for the New Zealand seed varietal certification system.



## 3.0 Summary of Responsibilities for "Seed Varietal Certification"



## 4.0 Detailed Requirements for "Seed Varietal Certification"

### 4.1 Owner (or their Agent)

Register new varieties (refer to Section 1.1 of Appendix 1 "Seed Field Production Standard" - see: http://www.biosecurity.govt.nz/files/regs/stds/seed-field-production-standards.pdf )

#### 4.2 Seed Grower & Production Site

The seed grower must meet the following requirements to participate in this NZ seed certification programme:

 (i) Register once only for participation in the seed varietal certification system with the Seed Certification Bureau (AsureQuality Lincoln University | South Drive | PO Box 6 | Lincoln University | Canterbury | Ph (03) 358 1741 | Fax (03) 325 7088).

**Note**: registration requires a detailed farm plan of field(s) locality, road names, and all information to identify fields and their boundaries;

- (ii) Apply to grow certified seed (*see section 1.3 in Appendix 1*)
- (iii) Comply with requirements to grow certified seed as outlined in Appendix1, section 1.3;
- (iv) Allow the inspection of the crop by an authorised crop inspector.
- (v) Identify seed at harvest using MPI Field Dressed Seed Labels (refer Appendix 1, section 1.3.8 Identification of Seed after Harvest);
- (vi) Complete and submit a Growers Declaration Form to the Seed Certification Bureau;
- (vii) Record and destroy unused field labels.

#### 4.3 Supplier of Seed Varietal Certification Services

The Supplier of seed varietal certification services must:

- 4.3.1 Maintain a service contract with SQMA.
- 4.3.2 Be a MPI authorised IVA and meet the following requirements in conjunction with their MPI authorised IVA operating procedures (refer MPI Export Certification Standard: IVA Requirements).
  - 1. Nominating a person within their organisation who is responsible for communication with MPI Exports regarding their implementation of this seed varietal certification system;
  - 2 Have sufficient number of staff with the necessary competence to undertake the scope of seed varietal certification activities for which they are MPI-authorised;
  - 3 Operating competency assessment procedures that focus on ensuring staff are competent in the appropriate aspects of seed varietal certification.
  - 4 Maintaining ISTA accreditation of the seed lab undertaking activities contributing to the delivery of seed varietal certification.
  - 5 Maintaining a seed line traceability system that delivers:
    - A register of varieties eligible for certification in NZ and update MPI website of these varieties,
    - A register of records of grower applications, their unique production sites identifiers & seed lines,
    - Unique identification of registered seed lines,
    - The production & issuance of MPI/OECD field & machine dressed labels containing the following information;
      - The MPI logo,

- Variety and class of seed,
- Registered number of the grower who produced the seed, and
- The unique seed line reference number.
- A database of field inspection & test results.
- Identification & retention of "standard" seed samples.
- A linkage to the MPI Plant Exports certification system for the production of MPI phytosanitary & varietal certificates where required.
- 6 Maintaining Appendix 1. "Seed Field Production Standards" aligned and either at least equivalent to, or greater than, the appropriate OECD Seed Scheme Rules.
- 7 Maintaining Appendix 2. "Varieties Eligible for Certification in NZ". See: <u>http://www.biosecurity.govt.nz/files/regs/stds/seed-varieties-</u> <u>eligible-cert-nz.pdf</u>
- 8 Have procedures for updating Appendix 1 & 2 annually on the MPI website;
- 9 Documenting and operating a procedure that verifies the:
  - Destruction of unused MPI/OECD Field & Machine dressed labels within three working days of notification from the registered seed grower and/or MPI approved Organisation with whom they have been entrusted.
  - Corrective actions of downgraded seed lines (Class) within three working days after the MPI approved Organisation having received the downgrade notification.
- 10 Documenting and operating procedures for undertaking a programme of "Pre- and Post-Control Plot Tests", "Field Inspection" and "Certification of Registered Seed Lines" The procedures for pre- and post-control plot tests and field inspections must meet the following conditions:
  - The OECD Seed Scheme "Guidelines for Control Plot Tests & Field Inspection".
  - Only inspect sufficiently developed fields that allow seed varietal inspections to be undertaken (refer Section 1.5 in Appendix 1 "Seed Field Production Standard" – see: <u>http://www.biosecurity.govt.nz/files/regs/stds/seed-field-</u> production-standards.pdf.)
  - Isolation distances i.e. minimum distances must be observed for crosspollinating species (refer Section 1.3.6. in Appendix 1 – see: <a href="http://www.biosecurity.govt.nz/files/regs/stds/seed-field-production-standards.pdf">http://www.biosecurity.govt.nz/files/regs/stds/seed-field-production-standards.pdf</a>.)
  - Purity of resultant crop & site compliance to freedom from specific weed species (refer Section 1.3.7. in Appendix 1 see: <a href="http://www.biosecurity.govt.nz/files/regs/stds/seed-field-production-standards.pdf">http://www.biosecurity.govt.nz/files/regs/stds/seed-field-production-standards.pdf</a>).
  - For production site freedom from specific pests, comply with MPI Export Certification System Standard: "Pest Surveys".

#### 4.4 Seed Industry Organisations (post harvest handlers of seed including exporters)

- 4.4.1 All seed Organisations undertaking activities (*i.e. seed cleaning, storage, sampling, inspection, post certification security*) that contribute to the issuance of seed varietal certification must be MPI approved organisations under this standard and any other MPI Plant Exports Standards appropriate to the scope of their operations.
- 4.4.2 Seed Organisation's documented system must contain procedures for:
  - (i) Maintaining equipment and operating hygiene procedures prior to, during and following seed cleaning operations.

- (ii) Maintaining seed storage facilities in a clean and vermin proof condition.
- (iii) Maintaining traceability of eligible varieties of seed. That is *an inventory control record of seed lines eligible for receipt of MPI varietal certification that* records by line number the following:
  - the volume received
  - the volume distributed
  - to whom distributed
- (iv) The security of MPI/OECD machine dressed labels;
- (v) Undertaking seed sampling operations in accordance with ISTA sampling methods (refer section 1.3.11 of Appendix 1).
- (vi) Undertaking corrective downgrade actions of such lines within 3 days of notification to ensure:
  - The affected MPI certified lot is secured by;
    - clearly identifying the lot as no longer being certified (e.g. application of HOLD card" on the front of the lot in storage), and
    - only transferring the affected lot to another storage location having gained prior formal approval from the Seed Certification Bureau.
  - The Seed Certification Bureau is advised of the corrective action taken.
  - Subsequent corrective actions are advised to the Seed Certification Bureau"

#### 4.5 Seed Laboratory

The MPI Authorised Seed Laboratory for varietal certification must:

- (i) Hold current ISTA accredited organisation status (for cross-recognition by MPI);
- (ii) Make copies of ISTA audit reports available to MPI within 10 working days after their receipt from ISTA;
- (iii) Test seed lines and report results of analysis for varietal certification in timely and efficient manner.

### 5.0 References

MPI Export Certification Standards:

- System Overview and Requirements
- Independent Verification Agency Requirements
- Organisation Requirements
- Technical Requirements: Pest Survey
- Treatment Supplier Programme: Requirements for the Supplier of Official Treatments
- Pest Identification Requirements
- Technical Requirements: Phytosanitary Inspection

European Union Seed Directives (current)

ISTA (current) International Rules for Seed Testing.

ISTA (current) International Seed Testing Association Handbook on Seed Sampling. Ed. M. Kruse, ISTA, Switzerland.

ISTA website http://www.seedtest.org/en/home.html

OECD Schemes for the Varietal Certification or the Control of Seed Moving in International Trade (2009 or any subsequent version)

## 6.0 Definitions and Abbreviations

Please refer to MPI Export Certification Standards: System Overview and Requirements for definitions <u>http://www.biosecurity.govt.nz/commercial-exports/plant-exports/standards-system-overview</u> that are not listed in this section.

AOSCA	The "Association of Official Seed Certifying Agencies"
	New Zealand, through SQMA, is a member of AOSCA, the principal members of which are the United States and Canada. Varieties to be certified must meet the minimum standards of AOSCA and can either be listed as eligible for certification in New Zealand, or imported and produced solely for multiplication and re-export. Further information on the AOSCA Scheme is available from the Seed Certification Bureau.
Crop Inspection Officers	MPI-recognised person(s) responsible for inspecting and determining whether field crops meet specific seed varietal certification standards and isolation requirements as outlined in Appendix 1.5, 1.3.6 & 1.3.7.
Field Dressed Labels	MPI seed varietal certification system labels produced and issued by the SCB, to the grower for identification of field dressed seed that is compliant with the MPI seed varietal certification system specifications.
Germination	Germination refers to the emergence and development of normal seedlings from seed under ordinarily favourable conditions.
ISTA Accredited Laboratory	An International Seed Testing Association member laboratory accredited by ISTA according to ISTA accreditation standards and authorised to issue ISTA certificates.
Machine Dressed Labels	MPI labels produced and issued by the SCB, to seed cleaning organisations for the identification of machine cleaned seed that meets seed varietal certification standards.
OECD Seed Schemes	Organisation for Economic Co-operation and Development (OECD) Schemes for the Varietal Certification or Control of Seed Moving in International Trade.
Production Site Identification	Code A unique identification code which is assigned to each registered seed production site by the SCB as part of the MPI seed varietal & phytosanitary certification system.
Seed Certification Bureau (SC	<b>B</b> ) The SCB operates within the "Laboratory Businesses of AsureQuality" which is the Supplier authorised for the delivery of MPI (New Zealand) seed varietal certification.

#### Seed Cleaning Organisation (SCO)

	A MPI-approved Organisation undertaking mechanical cleaning of seed, labelling & traceability activities to meet seed certification standards.
Seed Laboratory (SL)	The SL is "part of AsureQuality's Laboratory Businesses" and operates with the SCB for the delivery of seed testing associated with the provision of MPI (New Zealand) seed varietal certification.
Seed Quality Management Au	<b>thority (SQMA)</b> New Zealand's seed industry body which establishes and implements national industry policies on all matters relating to the MPI certification and testing of seed in New Zealand.
Seed Varietal Certification Sy	<b>stem (SVCS)</b> A MPI seed certification system formalising seed varietal certification specifications for the provision of official assurances affecting compliance with their specifications.
Standard Seed Sample	(refer OECD Seed Scheme Rules)
Variety	For the purposes of varietal certification, the identity of a variety is defined by the description of its characteristics resulting from a given genotype or combination of genotypes, when it was first registered in the national list of varieties.
Varietal Identity	The identity of a variety is defined by the official description of its characteristics resulting from a given genotype or combination of genotypes.
Varietal Purity	Varietal purity is the proportion of plants or seeds within the population that conforms to the official description of the variety