



Appendix 1

**Seed Field Production Standards
2010 - 2011**



**MAF Biosecurity New Zealand
Seed Varietal & Phytosanitary Certification
Programme**

AMENDMENT RECORD and IMPLEMENTATION SCHEDULE

Amendments to Appendix 1 are produced by AsureQuality Limited on behalf of MAF Biosecurity New Zealand Plant Exports and New Zealand Seed Quality Management Authority 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	24/5/10	2010- 2011 Update	24/5/10
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Seed Field Production Standards 2010-2011

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1.0 SEED CERTIFICATION – GENERAL INTRODUCTION

Seed certification operates to ensure that varieties of important agricultural plant species maintain their identity through successive generations of multiplication for the ultimate benefit of end users.

An effective seed industry needs:

- Plant breeders to produce suitable varieties for the differing requirements in various parts of the country.
- An authority to supervise the multiplication of the seed produced by the breeder.
- Skilled and efficient farmers to grow the seed.
- Modern cleaning plants capable of removing impurities from the seed harvested.
- An efficient seed trade to expedite the flow of seed from producer to consumer both in New Zealand and to other countries.
- A means of ensuring that contaminated seed does not spread undesirable weeds through the country.
- Plant quarantine regulations, which can effectively prevent the entry of diseases, insects and undesirable species.
- A prompt and accurate seed testing service.

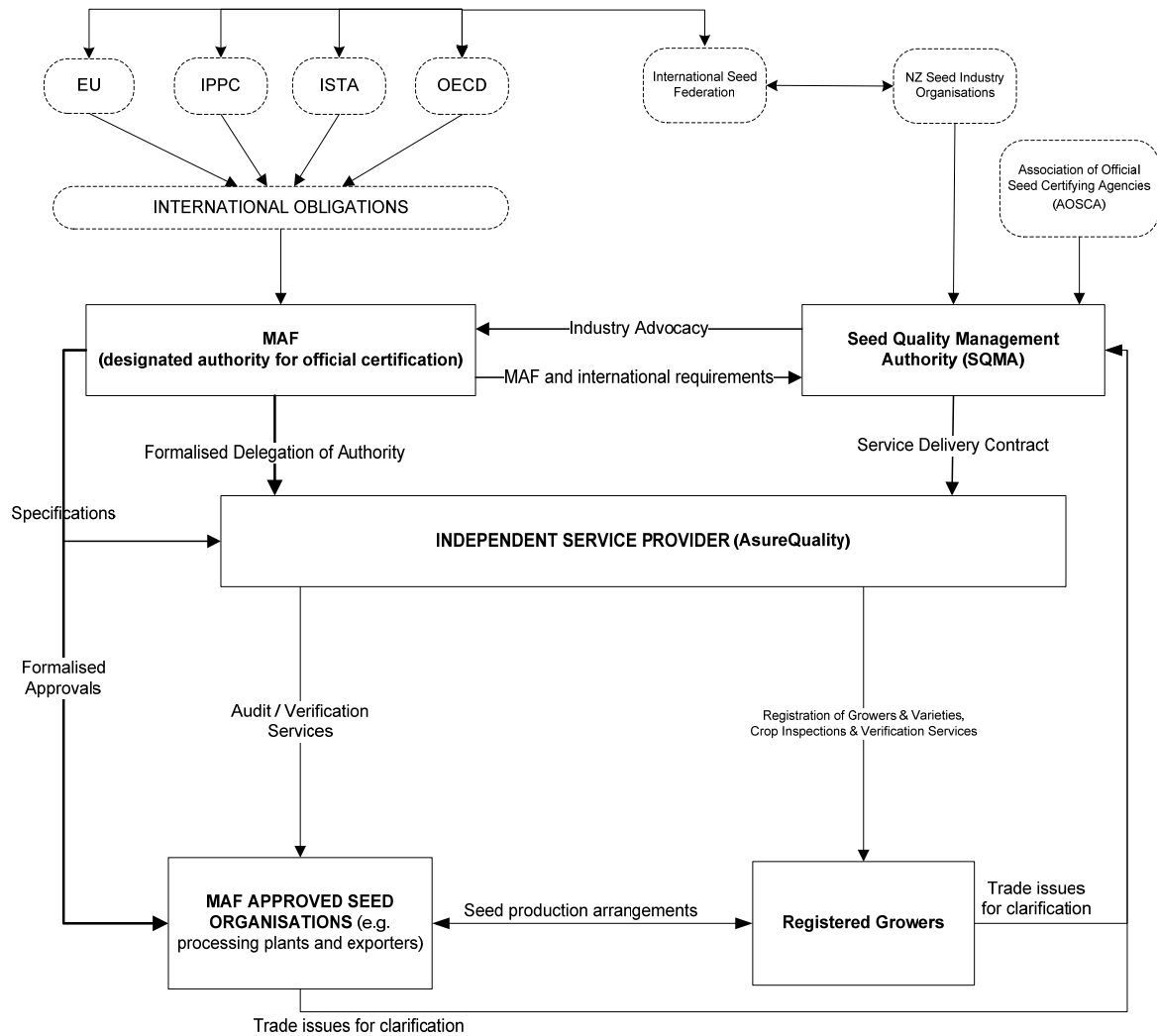
The New Zealand Seed Certification Scheme operates on a voluntary basis. There are no parliamentary acts or regulations governing its operation.

The scheme aims at providing the consumer with seed of high varietal purity but gives no guarantee of this other than to certify that an acceptable procedure has been followed to attain this goal. It gives no warranty as to the germination of the seed but requires a minimum standard of physical purity. Strict rules and standards must be observed during the production and processing of certified seed and these are amended from time to time to conform with domestic, international (OECD) and AOSCA requirements.

Satisfactory arrangements must be made for the maintenance of varieties at the pre-basic stages of multiplication. The maintainer of the variety, usually the breeder or an agent, is responsible for ensuring that multiplication of Breeders/Pre-Basic seed is carried out in a satisfactory manner so that only authentic, uncontaminated seed of the variety is released for further multiplication under the seed certification scheme. Assurance Quality staff must have access to records of maintenance of all varieties in the certification scheme.

The following diagram details the structure of the seed industries operating within the Seed Certification schemes in New Zealand.

Structure of Seed Industry for Official Certification



1.1 Register of Varieties Eligible for Certification

With the exception of those solely for multiplication and re-export, varieties accepted will be placed on the “New Zealand National List of Varieties Eligible for Certification”. The list can be found at:

<http://www.biosecurity.govt.nz/files/reg/stds/seed-varieties-eligible-cert-nz.pdf>

Refer to section 1.7 (page 11) for variety registration conditions. Enquiries concerning the List should be directed to:

Seed Industry Manager
AsureQuality Limited
PO Box 6
Lincoln University 7647

When a variety is no longer being maintained, it will be removed from the list.

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1.2 CLASSES AND SOURCES OF CERTIFIED SEED

There are four main classes in certification, viz. Breeders/Pre-Basic, Basic, Certified 1st Generation and Certified 2nd Generation seed.

Breeders Seed (Pre-Basic): Produced from nucleus material grown by the plant breeder.

Basic Seed: Produced from areas sown with Breeders seed. It is produced by selected growers under the supervision of the breeder or his agent.

Certified Seed 1st Generation: Produced from areas sown with Basic seed and is traded freely both in New Zealand and overseas.

Certified Seed 2nd Generation: Produce from areas sown with certified seed 1st Generation and applies to certain arable crops only. (See under standards for varieties).

1.3 CERTIFICATION REQUIREMENTS

1.3.1 MAFBNZ Approved Organisation System:

Any merchant, exporter and seed cleaning operator involved in seed certification must have a MAFBNZ approved organisation system detailing their operating procedures. Please contact the Seed Certification Bureau (SCB) for details.

1.3.2 Variety Registration:

A seed variety must be registered with the SCB for it to be eligible for certification. A Growers Application will not be accepted if the variety has not been listed. The procedure for variety registration is described on page 11. Registration forms can be downloaded from <http://www.seedlab.co.nz>

1.3.3 Grower Registration:

A Grower must be registered with the SCB to be eligible to grow certified seed. A Growers Application will not be accepted if the Grower is not registered. Please contact the SCB for registration details.

1.3.4 Application for Certification:

These must be on the form specified for the purpose and signed by the Grower or Growers agent. Applications received after the closing date set for that species incur a late entry fee and are accepted only if it is convenient for AsureQuality Limited to perform the work involved. Closing dates are on pages 14 to 16. Application forms can be downloaded from <http://www.seedlab.co.nz>

1.3.5 Proprietary Varieties:

Applications for certification of proprietary varieties cannot be accepted from growers who do not hold a contract or agreement with the owner of the variety. The SCB will act on information supplied by the variety owner or their agent to ensure this provision is met. Varieties bred in the past as public or common varieties, even those managed by an agent, are not subject to this requirement. Such varieties are generally not protected by Plant Variety Rights.

1.3.6 Origin of Seed Sown:

To establish the origin of the seed sown, documentary evidence in the form of labels must accompany each new application for certification.

1.3.7 Crop Site Requirements:

Growers entering areas for certification must ensure that every effort is made to prevent contamination of the resultant crop. The main sources of contamination are from:

- Inadequately cleaned sowing and harvesting equipment.
- Buried seed of other varieties / species.
- Threshed straw or hay of a different variety previously fed out on the area.

Certification of the area may be refused if, at field inspection, the crop is too weedy, is badly lodged or is insufficiently developed to enable a satisfactory inspection to be made. Note special conditions under Lotus (3.21), Red Clover (3.9), White Clover (3.11) and Strawberry Clover (3.10).

Certification takes into account the following criteria:

- *Origin of the seed:* The seed must be of an origin that makes it eligible for certification.
- *Paddock history:* Certain minimum time intervals must be observed between seed crops of different species and different varieties / classes of the same species. Previous cropping history requirements are set out under the species concerned from section 3.0. Note special conditions under Lotus (3.21), Red Clover (3.9), White Clover (3.11) and Strawberry Clover (3.10).

Note: Successive crops of the same variety and certification class may be sown in the same area without any time interval EXCEPT that successive crops of Peas and Beans may not be grown. **A harvest season is the period during which an area would normally be expected to produce a seed crop.** An area not harvested in any particular season, will for degrading purposes be considered to have passed through that season.

Crop means any crop grown for seed, fodder or any other purpose. Any seed sown which fails to establish is counted as a crop.

1.3.8 Isolation (Herbage species):

Minimum isolation distances must be observed between cross-pollinating species.

Grasses and Herbage Legumes	For areas 2ha or less	For areas larger than 2ha
------------------------------------	------------------------------	----------------------------------

To produce Breeders and Basic Seed	200m	100m
To produce 1st Generation Seed	100m	50m
Cruciferous Kinds (except kale)	For all areas	
To produce Basic Seed	400m	
To produce 1st Generation Seed	200m	
Kale	For all areas	
To produce Basic Seed	700m	
To produce 1st Generation Seed	400m	

Note: More detailed isolation requirements are included under individual species from section 3.0.

1.3.9 Freedom from specific diseases and weeds

Nodding Thistle (*Carduus nutans*)

Yellow Gromwell (*Amsinckia calycina*)

Any area or seed lot found to contain nodding thistle or yellow gromwell will be rejected from certification (see Note below).

Wild Oat (*Avena fatua*, *A. sterilis* spp. *ludoviciana*)

Any Cereal, Tetraploid Ryegrass and Brome grass found to contain Wild Oat at field inspection will be rejected from certification.

All other herbage species **EXCEPT** White and Red Clover, Lotus, Lucerne, Browntop, Timothy and Crested Dogstail sown to produce either Breeders or Basic Seed will be downgraded to 1st generation, if wild oats are found at field inspection.

Any seed lot will be rejected if wild oat is found at laboratory examination.

Before rejecting or downgrading because of Nodding Thistle, Yellow Gromwell or Wild Oats at field inspection the grower may be given the opportunity to rogue the area.

Note: Any seed lot containing Nodding Thistle, Yellow Gromwell or Wild Oat and rejected from certification at laboratory examination may be redressed and if it is then found to be free of contamination may be passed as certified in its original class.

1.3.10 Inspections:

All Cereals, Chicory, Caucasian / Strawberry / White Clovers (unless change of variety), Grasses, Linseed, Lucerne, Maize (open pollinated) and Plantain, are inspected at least once during the growing season.

All Brassica, Hybrid Clover, Red Clover and Pea, are inspected at least twice during the growing season.

All Change of Variety Strawberry Clover, White Clover and Hybrid Maize, are inspected at least three times during the growing season.

If it is considered that an area can be rogued satisfactorily the grower may be given this opportunity, which may require a further inspection.

1.3.11 Identification of Seed after Harvest:

All certified seed must be identified before leaving the paddock from which it was harvested. The SCB will issue a Growers Harvest Declaration and Field Dressed Seed Labels to the grower. The grower must use these labels to identify the seed at harvest. Before such seed is accepted for processing at the cleaning plant, the grower must supply the completed Growers Harvest Declaration form to the cleaning plant or the SCB. Unused labels must be destroyed.

1.3.12 Bulk Storage of Seed:

Bulk storage of certified seed either on the farm or in the merchant's store is permitted, provided the seed is identified to the satisfaction of AsureQuality Limited.

1.3.13 Seed Cleaning:

Cleaning of certified seed must be carried out by MAFBNZ approved seed cleaning organisations. Please contact the SCB for details.

1.3.14 Sampling for Analysis:

After cleaning, all certified seed must be sampled by a licensed sampling officer according to the rules of the International Seed Testing Association (ISTA). The AsureQuality SCB runs a seed sampling training course which must be successfully completed before prospective samplers are issued with a sampling license number. Samples are submitted for laboratory testing to obtain a certificate of analysis. Seed testing procedures are set in accordance with the rules of ISTA. Seed must meet purity standards appropriate to the kind and class of seed. Seed failing to meet the required standards is either downgraded or rejected, but may be re-cleaned and provided the requirements are met, can be re-certified in the class in which it originally passed field inspection. Germination standards are not applied. Seed is not finally certified until an analysis certificate issued by the National Seed Laboratory, Palmerston North, has been completed indicating that the standards for the appropriate class have been met.

(Purity of the resultant crop: as determined by the laboratory examination of an officially drawn sample).

1.3.15 Labelling and Sealing:

All certified seed must be labelled and sealed before sale. Labels show the species, variety, official reference number, region of production number and paddock identification where the seed was grown, label processing date and container weight. These details, together with purity and germination results are also reported on seed analysis certificates for every seed lot that is finally certified.

Label Type	Label Colour		
	NZ	OECD (all have a black strip along one side)	AOSCA
Breeders (Pre-Basic - OECD) (Experimental – AOSCA)	Buff	White with Purple Diagonal Stripe	White
Basic (Registered – AOSCA)	White	White	Light Purple
1st Generation (Certified – AOSCA)	Blue	Blue	Light Blue
2nd Generation	Red	Red	

1.3.16 Post Harvest Control:

As a further check on the efficient working of the seed certification scheme, samples from lots of seed that have been finally certified are tested for varietal purity (trueness to type). The main test used involves comparison of a seed lot sample against the standard variety sample growing in field plots. Laboratory methods appropriate for the particular species (eg root exudate UV fluorescence in perennial ryegrass, electrophoresis of seed proteins and chromosome counts in red clover) are also used.

1.4 OECD:

New Zealand participates in the Organization for Economic Co-operation and Development (OECD) Herbage and Oil Seed, Cereal Seed, Maize and Beet Seed Certification Schemes. The Ministry of Agriculture and Forestry is the Designated Authority for New Zealand.

1.5 ISTA:

The rules of the International Seed Testing Association are used for the seed testing component of seed varietal certification in New Zealand. The contracted seed laboratory for seed varietal certification must be ISTA accredited. The Ministry of Agriculture and Forestry is the Designated Authority for New Zealand.

1.6 AOSCA:

New Zealand is a member of the Association of Official Seed Certifying Agencies, 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. The Seed Quality Management Authority is the designated member for AOSCA. Further information on the AOSCA Scheme is available from the Seed Certification Bureau.

1.7 VARIETY REGISTRATION CONDITIONS

(for the Acceptance of Agricultural Varieties (Arable And Herbage) into the New Zealand Seed Certification Scheme):

All applications are to be made on the form “Application for Acceptance of Cultivars into the New Zealand Seed Certification Scheme” available from the SCB and sent to:

Seed Industry Manager
AsureQuality Limited
PO Box 6
Lincoln University 7647
The following information is required:

a) **Names**

Name of variety
Common name of species
Botanical name of species
Name and address of breeder
Name and address of breeder's agent (if applicable).

b) **Origin**

Give details of origin and breeding history of variety.

c) **Uniformity and Stability**

Evidence must be provided of the uniformity and stability of the variety having regard to the species concerned and the breeding systems used. An acceptable way of providing this evidence would be to indicate the period over which the generations of seed multiplication have been observed as being uniform and stable. If off-types have been observed, state their frequency and supply a description of them.

d) **Morphological Description**

A morphological description of the variety is required. Comparative information with other varieties of the same species currently in use should be included. The description of characters must agree with those given in respect of any Plant Variety Rights application and be in English.

e) **Agronomic Value**

There are no standards for agronomic value but applicants are required to indicate the anticipated use or place in New Zealand agriculture.

f) **Variety Maintenance (for varieties maintained in NZ)**

Describe the system followed for the production of Pre-Basic seed. The system must ensure the authenticity of the seed and may be subject to audit from time to time.

g) **Field and Laboratory Standards**

Indicate whether any special standards are required. Standards for field inspection and laboratory analysis of certified seed lots normally apply to all varieties of a particular species. However, some special variety characteristics (eg ultra-violet light fluorescence, seed weight) may justify the application of special standards or tolerances.

h) **Overseas Varieties**

- **Varieties for listing and further marketing in New Zealand.**

An authority from the overseas breeder giving permission for the variety to be listed in New Zealand must be obtained. Also required is a statement as to how the variety is to be maintained in New Zealand (e.g. Importation of Basic or Pre Basic Seed), the classes to be produced and the number of harvest seasons allowed.

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1. The overseas description (in English) of the variety must accompany the application. A further description of the variety based on New Zealand conditions may be required after the first growing season.
 2. A standard sample must be supplied (see point i below).
- **Varieties solely for multiplication and re-export.**

Entries for varieties in this category will be accepted for certification provided the following requirements are met:

1. An authority from the overseas breeder to multiply the variety in New Zealand must be supplied giving specific instructions as to the class of seed to be produced and the number of harvest seasons allowed.
2. A morphological description (in English) of the variety must accompany the application.
3. If the variety is to be certified under the OECD Scheme a letter from the designated authority in the country of origin agreeing to the multiplication may need to be provided to MAFBNZ, Plant Exports, P O Box 2526, Wellington, New Zealand.
4. Seed containers must be identified by official labels issued by the certifying authority in the country or state of origin.

Note: All information for both categories above must be lodged with the Seed Certification Bureau by the closing date for certification of the species concerned.

i) **Standard Samples**

A sample of seed of the variety, known as the standard reference sample must be supplied and will be held byASUREQuality Limited, Lincoln. Each year a portion of each sample will be used as a comparison against commercial certified seed lots of the variety in official plot tests. The standard sample should comprise seed of Breeders/Pre-Basic class.

Size and quality of samples

Species	Minimum size of standard sample (grams)	Minimum germination when supplied%
Beet	200	
Brassicas	200	90
Brome	500	90
Cereals	500	95
Clover & Lucerne	200	90 (includes hard seed)
Cocksfoot	200	85
Fescue	500	90
Festulolium	500	90
Linseed	200	90
Peas	500	95
Ryegrass	1,000	90
Other Grasses	200	90

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1.8 DATE STAMPING OF PUBLIC VARIETIES

(maintained by AgResearch Grasslandz):

At the request of AgResearch Grasslandz the following information is included for growers of public varieties:

“Non-proprietary AgResearch varieties of Basic class are eligible for entry into the NZ Seed Certification Scheme **only if sown within 3 harvest seasons of the date on the certification label.** This arrangement commenced with labels dated 1 January 1994. If lines of Basic Seed are blended from different years of harvest, the oldest seed line in the blend determines the date on the label”

Grasslands Huia

Grasslands Manawa

Grasslands Nui

Grasslands Pitau

Grasslands Tama

Grasslands Wairau

Grasslands Kahu

Grasslands Moata

Grasslands Pawera

Grasslands Ruanui

Grasslands Turoa

Note: Entries for the 2010/2011 season will be eligible only if labels are date stamped after 1st January 2007

1.9 APPLICATION FORMS AVAILABLE TO DOWNLOAD FROM THE WEB:

The following application forms can be downloaded from the AsureQuality web site:

1. Application for Acceptance of Cultivars into the New Zealand Seed Certification Scheme
2. Application For Certification Of Overseas Cultivars For Multiplication And Re-Export
3. Grower Application
4. Machine Dress Label / Seed Test Application

The web address is:

<http://www.seedlab.co.nz>

2.0 CLOSING DATES: OVERSEAS VARIETIES FOR MULTIPLICATION AND RE-EXPORT

Overseas varieties of species for which there is a set closing date should, where possible, be entered by that date, otherwise within 14 days of sowing. For other species where there is no set closing date the crop must be entered within 14 days of sowing. Agents should ensure that all necessary information concerning the variety has been lodged with the Seed Certification Bureau prior to entry to avoid having the entry returned to the grower as being not eligible for certification in New Zealand.

WHITE CLOVER - STRAWBERRY CLOVER - In the case of a change of variety, applications for certification must be submitted by the first Monday in May. Subsequent entries for the same area will be accepted at the normal time.

Note: Where a public holiday falls on the Monday specified, the closing date is extended one day to the Tuesday immediately following.

Late entries may incur a late fee and will be accepted only if convenient to AsureQuality Limited.

Closing Dates for Applications:

These are advertised in local newspapers prior to the closing date for each species.

Month	Date	Species
February	First Monday	Kale Beet (for Spring sown crops)
May	First Monday	Rape Swede Turnip Fodder radish (Autumn sown crops) Beet (for Autumn sown crops) White clover (change of variety see page 15) Strawberry clover (change of variety see page 15)
July	First Monday	Cocksfoot Red Clover Serradella Pea (Sown prior to 1 July)
October	First Monday	Browntop Chicory Caucasian Clover Dorycnium Dogstail Fescue Fodder radish (Spring sown crops) Lentil Lotus Lupins Lucerne (Wairau only) Phalaris Plantain Prairie Grass Ryegrass Strawberry Clover Timothy Upland Brome White Clover (see page 15) Yorkshire Fog
November	First Monday	Barley Bean Linseed Pea (Sown after 1 July) Oat Ryecorn Triticale Wheat
January	First Monday	Lucerne (except Wairau)

3.0 SEED SPECIES FIELD AND LABORATORY STANDARDS – 2010-2011

3.1 Barley (*Hordeum vulgare* L.)

Previous Cropping History

NZ Domestic Scheme: An area must not have grown any other cereal in the previous harvest season but successive crops of the same variety and certification class may be grown on the same area without any time interval, provided that satisfactory varietal purity is maintained.

NB. Any crop grown under the NZ Domestic scheme rule will **not** be eligible for OECD certification.

OECD Scheme: An area must not have grown any other cereal in the previous **two** harvest seasons but successive crops of the same variety and certification class may be grown on the same area without any time interval, provided that satisfactory varietal purity is maintained.

Closing Date for Applications

Applications for certification must be submitted by the First Monday of November.

Field Inspection

Areas are to be inspected once, when in full ear.

Contamination and Isolation requirements

Class of seed produced	Contaminants (Any other variety, any other cereal, Loose smut)	Isolation requirements
Basic	None	Only a space sufficient to prevent mixture during harvest is required.
1st Generation	1 per 10 quadrats	
2nd Generation	1 per quadrat	

Note: Any crop found to contain wild oat, nodding thistle or yellow gromwell at field inspection will be rejected from certification.

Purity Standards

	Basic Seed	1 st Generation	2 nd Generation
Minimum pure seed	98.0%	98.0%	98.0%
Maximum other cereal	0.1%	0.1%	0.3%

3.2 Bean (*Phaseolus vulgaris* L.)

Previous Cropping History

Areas must not have grown any crop of beans during the previous two harvest seasons.

Closing Date for Applications

Application for certification must be submitted by the First Monday of November.

Field Inspection

Areas will be inspected twice -

- 1) First inspection at flowering stage.
- 2) Second inspection at green pod stage.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Any other variety, including off-types Lupins, Peas)	*Isolation requirements
Basic	None	100m
1st Generation	1 per 10 quadrats	100m
2nd Generation	1 per quadrat	100m

* From any other crop of a different bean variety.

Note: Any crop infected with Halo Blight or Common Blight will be rejected.

Purity Standards

	Basic Seed	1st Generation	2nd Generation
Minimum pure seed	98.0%	98.0%	98.0%
Maximum other Bean Varieties	0.1%	0.1%	0.3%

Note: In addition to the normal M.D. Sample a 1.5kg sample is to be sent to National Seed Laboratory Palmerston North for Blight testing. The sample should be enclosed in a plastic bag to prevent contamination from other samples.

3.3 Beet - Sugar Beet, Fodder Beet and Mangels (*Beta vulgaris* L.)

The following requirements cover the certification of Sugar Beet, Fodder Beet and Mangels in New Zealand:

Areas Eligible

Areas sown with Pre-Basic and Basic monogerm, precision, or natural seed of varieties certified in the country of origin.

Cropping History

The minimum previous cropping requirements are:

- No beet seed crop in previous five years.
- No beet crop in previous two years.
- A crop, which failed to establish after sowing, must be counted.
- Only one variety may be grown on any one farm in the same season.

Closing Dates

For Spring sown crops - 1st Monday in February

For Autumn sown crops - 1st Monday in May

Field Inspections

All areas must be inspected twice. First inspection when plants are in the early leaf stage. Second inspection is at flowering stage.

Isolation Requirements

The following minimum distances from any other beet seed crops are normally required and must be maintained throughout the flowering period of the crop.

a) Sugar Beet	Basic Seed	Certified Seed
Monogerm varieties of Sugar Beet from other varieties of Sugar Beet	1000m	600m
Varieties of Sugar Beet other than monogerm from other varieties of Sugar Beet	600m	300m
Sugar Beet from Fodder Beet and other sub-species of <i>Beta vulgaris</i>	1000m	1000m

b) Fodder Beet and Mangel	Basic Seed	Certified Seed
Monogerm varieties of Fodder Beet and Mangel from other varieties of Fodder Beet and Mangel	1000m	600m
Varieties of Fodder Beet and Mangel other than monogerm from other varieties of Fodder Beet and Mangel	600m	300m
Fodder Beet and Mangel from Sugar Beet and other sub-species of <i>Beta vulgaris</i>	1000m	1000m

The above distances also apply to isolation from plants or fields of beet grown for root production and flowering at the same time as the plants in the seed production fields.

The distances can be disregarded if there is sufficient protection from any undesirable foreign pollination. All sub-species of *Beta vulgaris* will cross-fertilise, viz: Sugar Beet, Fodder Beet, Mangels, Red Beet, Wild (Sea) Beet, Spinach Beet, Seakale Beet or Swiss Chard (Silver Beet).

Contaminants

Any other variety of the same sub-species or other sub-species of *Beta vulgaris*.

Crop condition - The cultural condition of the field and the stage of development of the crops as well as that of health and contamination by weeds, must be such that an adequate inspection can be carried out.

Purity Standards

	All Classes
Minimum pure seed	97.0%
Other seed	0.3%

Special Conditions for Monogerm Seed and Precision Seed.

Monogerm Seed: At least 90% of the germinated clusters shall give single seedlings and no more than 5% shall give three or more seedlings.

Precision Seed:

a) Sugar Beet:	At least 70% of the germinated clusters shall give single seedlings and no more than 5% shall give three or more seedlings.
b) Fodder Beet (including Mangel)	In seed of varieties with more than 85% diploids, at least 58% of the germinated clusters shall give single seedlings. In other seed, at least 63% of the germinated clusters shall give single seedlings. In both, no more than 5% shall give three or more seedlings

Labelling

Labels will give the following information:

- Kind
- Variety
- Reference No.
- Date of Sealing
- Region of Production
- For Monogerm seed - Overstamped 'Monogerm'
- For Precision seed - Overstamped 'Precision'
- Net Weight

3.4 Brome Grass (*Bromus* species)

Prairie grass (*Bromus willdenowii* Kunth)

Grazing brome (*Bromus stamineus* Desv.)

Upland brome (*Bromus sitchensis* Trin.)

Previous Cropping History

An area must not have grown any other Brome grass during the previous two harvest seasons but successive crops of the same variety and certification class may be grown on the same area without any time interval.

Closing Date for Applications

Applications for certification must be submitted by the first Monday of October.

Field Inspections

Areas are to be inspected once, at flowering

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Any other Brome Grass including off-types. *Smut)	Isolation requirements
Breeders	None	Must be isolated from any other crop of a different Bromus variety by 20 metres
Basic	None	
1 st Generation	1 per quadrat	

***Head Smut:** A minimum of 20 quadrats must be examined and the following standards apply:

Areas to produce	Breeders and Basic	No smutted plants in 20 quadrats
	1st Generation	Not more than 1 smutted plant in 20 quadrats
	All classes	More than 1 smutted plant - Reject

Degrading of Areas

Areas are eligible to produce -

Breeders for 1 harvest season - then degraded to Basic for 1 harvest season.

Basic for 1 harvest season - then degraded to 1st Generation for 1 harvest season.

1st Generation for 2 harvest seasons.

Note: A grower may take a second crop of Grasslands Dixon, Grasslands Lakota, Grasslands Matua and Grasslands Hakari in the same harvest season without degrading. If taking a second crop the area must be re-entered and re-inspected.

Purity Standards

	Basic Seed	1st Generation
Minimum pure seed	97.0%	96.0%
Other seed	0.3%	0.5%

Note: All seed should be treated with a mixture of Thiram and Benlate to prevent smut infestation, at the rate of 1kg per 100kg of seed.

3.5 Browntop (*Agrostis capillaris* L.)

Previous Cropping History

An area must not have grown any other Browntop during the previous two harvest seasons, but successive crops of the same variety and certification class may be grown on the same area without any time interval.

Closing Date for Applications

Applications for certification must be submitted by the first Monday of October.

Field Inspection

Areas are to be inspected once, at flowering

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Any other Browntop including off-types)	Isolation requirements	
		Less than 2ha	More than 2ha
Breeders	None	200m	100m
Basic	None	200m	100m
1st Generation	1 per quadrat	100m	50m

Degrading of Areas - Areas are eligible to produce -

Breeders for 2 harvest seasons - then degraded to basic for 4 harvest seasons.

Basic for 2 harvest seasons - then degraded to 1st Generation for 4 harvest seasons.

1st Generation for 6 harvest seasons.

Note: An area is degraded once only and is not eligible for re-entry into certification at the end of the degraded period.

Punawai is a local variety. The following conditions apply:-

- Any crop within the prescribed area is eligible for entry into certification to produce Basic or 1st Generation Seed.
- Any area sown with Basic Seed outside the prescribed area is eligible for certification to produce 1st Generation Seed.
- The prescribed area is defined as: *That farm area situated at Ashburton Forks in the Ashburton County, Region of Production No. A1602.*

Purity Standards

	Basic Seed	1 st Generation
Minimum pure seed	98.0%	98.0%
Other seed	0.3%	0.5%

3.6 Chicory (*Cichorium intybus* L.)

Previous Cropping History

An area must not have grown any other chicory crop during the previous three harvest seasons, but successive crops of the same variety and certification class may be grown on the same area without any time interval.

Closing Date for Applications

Applications for certification must be submitted by the first Monday in October.

Field Inspections

Areas are to be inspected once, at flowering.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Any other chicory including off-types)	Isolation requirements
Breeders	None	100m from any other chicory
Basic	None	
1st Generation	1 per quadrat	

Degrading of Areas - Areas are eligible to produce -

Breeders for 2 harvest seasons then degraded to Basic for 4 harvest seasons.

Basic for 2 harvest seasons then degraded to 1st Generation for 4 harvest seasons.

1st Generation for 6 harvest seasons.

Note: An area is degraded once only and is not eligible for re-entry into certification at the end of the degraded period.

Purity Standards

	Basic Seed	1st Generation
Minimum pure seed	98.0%	95.0%
Other seed	0.2%	0.5%

3.7 Clover, Caucasian (*Trifolium ambiguum* Bieb)

Previous Cropping History

An area must not have grown any other Caucasian Clover during the previous five harvest seasons but successive crops of the same variety and certification class may be grown on the same area without any time interval.

Closing Date For Applications

Applications for certification must be submitted by the first Monday in October.

Field Inspections

Areas will be inspected once at flowering.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Any other Caucasian clover including off-types)	*Isolation requirements	
		Less than 2ha	More than 2 ha
Breeders	None	200 m	100 m
Basic	None	200 m	100 m
1st Generation	1 per quadrat	100 m	50 m

* Between different varieties of Caucasian clover.

Degrading of Areas - Areas are eligible to produce -

Breeders for 1 harvest season, then degraded to Basic for 3 harvest seasons.

Basic for 2 harvest seasons - then degraded to 1st Generation for 2 harvest seasons.

1st Generation for 4 harvest seasons.

Note: An area is degraded once only and is not eligible for re-entry into certification at the end of the degraded period.

Purity Standards

	Basic Seed	1 st Generation Seed
Minimum pure seed	99.0%	97.0%
Other seed	0.3%	1.0%

3.8 Clover, Hybrid (*Trifolium repens* L. x *Trifolium ambiguum* Bieb)

Previous Cropping History

If the sowing is a different variety from that previously sown on the area -

The area must not have grown red clover during the previous FIVE harvest seasons. In addition any red clover, which may establish from buried seed during this period must be eradicated annually by either cultivation or herbicide.

A minimum width between rows of 30 cm is required and it is recommended that areas be drilled up and down the paddock with headlands at each end. If the area is drilled round and round, corners should not be drilled out. This will facilitate roguing and spraying and assist in field inspections.

A grower may elect to undersow a spring crop or alternatively sow in the autumn with a companion grass but provision must be made to allow field inspection of the area to be carried out. Crops must be in a condition suitable for field inspection by August of the year immediately preceding harvest by either spraying and clearing companion crop residues and/or weeds from whole area, or by creating the required number of gaps (see below).

Where a grower elects to create gaps (quadrats) they must be an area of at least 12 square metres, the number required being as follows - 'In crops of 2 ha or less a minimum of 5 gaps is required and for areas larger than 2 ha one gap must be left for each .5 ha with a maximum of 20'. The gaps created should be randomly spaced and marked by a white stick or stake.

Failure to observe any of the above requirements may result in the area being rejected from certification at the first inspection.

Note: Paddocks which have been accepted for entry and fail to establish satisfactorily, are withdrawn, or rejected at field inspection and **not** subsequently harvested as uncertified or allowed to pass through a reproductive season may be resown with the same variety and re-entered the following or subsequent seasons but will be subject to change of variety rules as above.

Paddocks failing to meet the standards of variety change field inspection, which are subsequently taken as an uncertified seed crop in that season will **not** be eligible for the growing of any certified red clover crop for a further five years.

If the sowing is the same variety as that previously sown on the area -

Successive crops of the same variety and certification class may be sown on the same area without any time interval. If sowing the same variety but of a higher certification class than that previously sown on the area, a time interval of three harvest seasons must be observed.

Closing Date for Applications

Applications for certification must be submitted by the First Monday in May.

Field Inspections

For first entries of Breeders and Basic sown areas where there has been a change of variety, there will be **2** inspections.

First inspection spring
Second inspection early flowering stage

Note: Crops withdrawn or rejected

Paddocks withdrawn or rejected in the first year of variety change will not qualify as change of variety paddocks until a crop of that variety has passed.

A change of variety does not occur until a paddock has had two inspections in the course of one growing season and has passed field inspection.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Any other red clover including off-types)	*Isolation requirements	
		Less than 2ha	More than 2ha
Basic	None	1000m	1000m
1st Generation	1 per quadrat	500m	500m

* Between different varieties of Hybrid Clover and White Clover.

Degrading of Areas

Hybrid Clover is to be treated like an annual and degrading does not apply. It is eligible for one harvest only under certification and is not eligible for re-entry.

Purity Standards

	Basic Seed	1 st Generation
Minimum pure seed	99.0%	97.0%
Other seed	0.3%	0.7%*

*Other than suckling clover

3.9 Clover, Red (*Trifolium pratense* L.)

Previous Cropping History

If the sowing is a different variety from that previously sown on the area -

The area must not have grown red clover during the previous FIVE harvest seasons. In addition any red clover, which may establish from buried seed during this period must be eradicated annually by either cultivation or herbicide.

A minimum width between rows of 30 cm is required and it is recommended that areas be drilled up and down the paddock with headlands at each end. If the area is drilled round and round, corners should not be drilled out. This will facilitate roguing and spraying and assist in field inspections.

A grower may elect to undersow a spring crop or alternatively sow in the autumn with a companion grass but provision must be made to allow field inspection of the area to be carried out. Crops must be in a condition suitable for field inspection by August of the year immediately preceding harvest by either spraying and clearing companion crop residues and/or weeds from whole area, or by creating the required number of gaps (see below).

Where a grower elects to create gaps (quadrats) they must be an area of at least 12 square metres, the number required being as follows - 'In crops of 2 ha or less a minimum of 5 gaps is required and for areas larger than 2 ha one gap must be left for each .5 ha with a maximum of 20'. The gaps created should be randomly spaced and marked by a white stick or stake.

Failure to observe any of the above requirements may result in the area being rejected from certification at the first inspection.

Note: Paddocks which have been accepted for entry and fail to establish satisfactorily, are withdrawn, or rejected at field inspection and **not** subsequently harvested as uncertified or allowed to pass through a reproductive season may be resown with the same variety and re-entered the following or subsequent seasons but will be subject to change of variety rules as above.

Paddocks failing to meet the standards of variety change field inspection, which are subsequently taken as an uncertified seed crop in that season will **not** be eligible for the growing of any certified red clover crop for a further five years.

If the sowing is the same variety as that previously sown on the area -

Successive crops of the same variety and certification class may be sown on the same area without any time interval. If sowing the same variety but of a higher certification class than that previously sown on the area, a time interval of three harvest seasons must be observed.

Closing Date for Applications

Applications for certification must be submitted by the First Monday in July.

Field Inspections

Areas will be inspected twice.

First inspection Spring

Second inspection Early flowering stage

Note: All areas must be closed to stock prior to the first field inspection. As the closure to stock will vary from district to district, the local crop inspector will notify growers when areas should have stock removed. Growers will be required to advise the local crop inspector when this has been carried out and they will be notified as soon as field inspections are completed to enable the areas to be restocked. Failure of advice by growers will result in the area being rejected from certification.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Any other red clover including off-types)	*Isolation requirements	
		Less than 2ha	More than 2ha
Breeders	None	200m	100m
Basic	None	200m	100m
1st Generation	1 per quadrat	100m	50m

* Between different varieties of red clover

Degrading of Areas

Hamua, Colenso, Ceres Claret, Sensation and Grasslands Broadway areas are eligible to produce -

Breeders for 1 harvest season - then degraded to Basic for 3 harvest seasons.

Basic for 2 harvest seasons - then degraded to 1st Generation for 2 harvest seasons.

1st Generation for 4 harvest seasons.

Turoa, *Pawera and **G27 areas are eligible to produce -

Breeders for 2 harvest seasons - then degraded to Basic for 3 harvest seasons.

Basic for 2 harvest seasons - then degraded to 1st Generation for 3 harvest seasons.

1st Generation for 5 harvest seasons

*Grasslands Pawera must meet a minimum 1000 seed weight of 2.5g. However any sample with a 1000 seed weight between 2.5 and 3.0 grams may be held for a ploidy test and if found to be contaminated, the seed lot concerned will be rejected.

****G27** must meet a minimum 1000 seed weight of 2.3g. However any sample with a 1000 seed weight between 2.3 and 2.8 grams may be held for a ploidy test and if found to be contaminated, the seed lot concerned will be rejected.

Note: An area is degraded once only and is not eligible for re-entry into certification at the end of the degraded period.

Purity Standards

	Basic Seed	1st Generation
Minimum pure seed	99.5%	98.0%
Other seed	0.3%	0.5%

3.10 Clover, Strawberry (*Trifolium fragiferum* L.)

Previous Cropping History

If the sowing is a different variety from that previously sown on the area -

The area must not have grown strawberry clover during the previous FIVE harvest seasons. In addition any strawberry clover, which may establish from buried seed during this period must be eradicated annually by either cultivation or herbicide.

A minimum width between rows of 30 cm is required and a minimum sowing rate of 3kg/ha is strongly recommended. Sowing in the autumn as a pure stand is also recommended as this will allow an adequate inspection to be carried out and also facilitate any roguing which may be required. A further recommendation is that areas be drilled up and down the paddock with headlands at each end. If the area is drilled round and round, corners should not be drilled out. This will facilitate roguing and spraying and assist in field inspections.

Undersown spring crops. The area must be in a condition suitable for field inspection by the first Monday in May following sowing. Crop residues and weeds must be sprayed or cleared from the whole area, or the required number of gaps must be created similarly. (See below).

Autumn sown crops. Areas must be suitable for field inspection by 1 August following sowing. Clover rows must be distinguishable and grass and weed growth (where it may hinder inspection) controlled. Where a grower elects to create gaps (quadrats) they must be an area of at least 12 square metres, the number required being as follows - in crops of 2 ha or less, a minimum of five gaps is required and for areas larger than 2 ha one gap must be left for each 0.5 ha with a maximum of 20. The gaps created should be randomly spaced and marked by a white stick or stake.

Failure to observe these conditions may result in the area being either downgraded or rejected.

Note: Paddocks which have been accepted for entry and fail to establish satisfactorily, are withdrawn, or rejected at field inspection and **not** subsequently harvested as uncertified or allowed to pass through a reproductive season may be resown with the same variety and re-entered the following or subsequent seasons but will be subject to change of variety rules, i.e. minimum 30 cm between rows and three inspections.

Paddocks failing to meet the standards of variety change field inspection, which are subsequently taken as an uncertified seed crop in that season will **not** be eligible for the growing of any certified strawberry clover crop for a further five years.

If the sowing is the same variety as that previously sown on the area -

Successive crops of the same variety and certification class may be sown on the same area without any time interval. If sowing the same variety but of a higher certification

class than that previously sown on the area, a time interval of three harvest seasons must be observed.

Closing Date of Application

Applications for certification must be submitted by the first Monday of May for change of variety and the first Monday of October for non change of variety.

Change of Variety Crops

Applications for certification for both spring and autumn sown crops must be submitted by the first Monday in May. Subsequent entries for the same area will be accepted at the normal time.

Field Inspections

For the first entries where there has been a change of variety, there will be **3** inspections:

First Inspection	Seedling Stage
Second Inspection	Prior to Flowering
Third Inspection	At Flowering

For subsequent entries in this category, one inspection at flowering.

Note: Crops Withdrawn or Rejected

Paddocks withdrawn or rejected in the first year of variety change will not be treated as change of variety paddocks until a crop of that variety has passed field inspection.

A change of variety does not occur until a paddock has had three inspections in the course of one growing season and has passed field inspection.

Standards and Isolation Requirements

Class of seed produced	Contaminants (Any other strawberry clover including off-types)	*Isolation requirements	
		Less than 2ha	More than 2ha
Breeders	None	200m	100m
Basic	None	200m	100m
1st Generation	1 per quadrat	100m	50m

* Between different varieties of strawberry clover.

Degrading of Areas - Areas are eligible to produce –

Breeders for one harvest season - then degraded to Basic for four harvest seasons.

Basic for two harvest seasons - then degraded to 1st Generation for three harvest seasons.

1st Generation for five harvest seasons.

Purity Standards

	Basic Seed	1 st Generation
Minimum pure seed	99.0%	97.0%
Other seed	0.3%	0.5%

3.11 Clover, White (*Trifolium repens* L.)

Previous Cropping History

If the sowing is a different variety from that previously sown on the area -

The area must not have grown white clover during the previous FIVE harvest seasons. In addition any white clover that may establish from buried seed during this period must be eradicated annually by either cultivation or herbicide.

A minimum width between rows of 30cm is required and a minimum sowing rate of 3kg/ha is strongly recommended. Sowing in the autumn as a pure stand is also recommended as this will allow an adequate inspection to be carried out and also facilitate any roguing which may be required. A further recommendation is that areas be drilled up and down the paddock with headlands at each end. If the area is drilled round and round, corners should not be drilled out. This will facilitate roguing and spraying and assist in field inspections.

Undersown spring crops. By the first Monday in May following sowing, the area must be in a condition suitable for field inspection by either spraying and clearing crop residues and weeds from whole area, or creating the required number of gaps similarly (see below).

For autumn sown crops. Areas must be suitable for field inspection by 1 August following sowing. Clover rows must be distinguishable and grass and weed growth (where it may hinder inspection) controlled. Where a grower elects to create gaps (quadrats) they must be an area of at least 12 square metres, the number required being as follows - 'In crops of 2 ha or less a minimum of 5 gaps is required and for areas larger than 2 ha one gap must be left for each .5 ha with a maximum of 20'. The gaps created should be randomly spaced and marked by a white stick or stake.

Failure to observe these conditions may result in the area being either downgraded or rejected.

Note: Paddocks which have been accepted for entry and fail to establish satisfactorily, are withdrawn, or rejected at field inspection and **not** subsequently harvested as uncertified or allowed to pass through a reproductive season may be resown with the same variety and re-entered the following or subsequent seasons but will be subject to change of variety rules, i.e. minimum 30 cm between rows and three inspections.

Paddocks failing to meet the standards of variety change field inspection, which are subsequently taken as an uncertified seed crop in that season will **not** be eligible for the growing of any certified white clover crop for a further five years.

If the sowing is the same variety as that previously sown on the area -

Successive crops of the same variety and certification class may be sown on the same area without any time interval. If sowing the same variety but of a higher certification

class than that previously sown on the area, a time interval of three harvest seasons must be observed.

Closing Date of Application

Applications for certification must be submitted by the first Monday of May for change of variety and the first Monday of October for non change of variety.

Change of variety crops.

(i) Applications for certification where there has been a change of variety, must be submitted by the first Monday in May. Subsequent entries for the same area will be accepted at the normal time.

(ii) For crops undersown in the autumn and not intended for harvest in the next harvest season, the closing date will be the first Monday in May prior to the season of harvest.

Field Inspections

For first entries of Nucleus, Breeders and Basic sown areas where there has been a change of variety, there will be **3** inspections.

First Inspection Seedling stage

Second Inspection Prior to flowering

Third Inspection At flowering

For subsequent entries of areas in this category one inspection at flowering.

Note: Crops withdrawn or rejected:

Paddocks withdrawn or rejected in the first year of variety change will not qualify as change of variety paddocks until a crop of that variety is passed.

A change of variety does not occur until a paddock has had three inspections in the course of one growing season and has passed field inspection.

Standards and Isolation Requirements

Class of seed produced	Contaminants (Any other white clover including off-types)	*Isolation requirements	
		Less than 2ha	More than 2ha
Breeders	None	200m	100m
Basic	None	200m	100m
1st Generation	1 per quadrat	100m	50m

* Between different varieties of white clover

Degrading of Areas - Areas are eligible to produce -

Breeders for 1 harvest season - then degraded to Basic for 3 harvest seasons.

Basic for 2 harvest seasons - then degraded to 1st Generation for 2 harvest seasons.

1st Generation for 4 harvest seasons.

An area is degraded once only and is not eligible for re-entry into certification at the end of the degraded period.

Purity Standards

	Basic Seed	1st Generation
Minimum pure seed	99.0%	97.0%
Other seed	0.3%	0.7%*

*Other than suckling clover

3.12 Cocksfoot (*Dactylis glomerata* L.)

Previous Cropping History

An area must not have grown any other cocksfoot during the previous two harvest seasons but successive crops of the same variety and certification class may be grown on the same area without any time interval.

Closing Date for Application

Applications for certification must be submitted by the First Monday of July.

Field Inspection

Areas are to be inspected once at flowering.

Contamination and Isolation Requirements

Class of seed produced	*Contaminants (Off-types, ryegrass)	**Isolation requirements	
		Less than 2ha	More than 2ha
Breeders	None	200m	100m
Basic	None	200m	100m
1st Generation	1 per quadrat	100m	50m

*For areas to produce 1st Generation, ryegrass contamination may be disregarded at field inspection.

**Between different varieties of cocksfoot

Degrading of Areas - Areas are eligible to produce -

Breeders for 3 harvest seasons - then degraded to Basic for 5 harvest seasons.

Basic for 3 harvest seasons - then degraded to 1st Generation for 5 harvest seasons.

1st Generation for 8 harvest seasons.

Note: An area is degraded once only and is not eligible for re-entry into certification at the end of the degraded period.

Purity Standards

	Basic Seed	1 st Generation
Minimum pure seed	90.0%	85.0%
Other seed	0.3%	2.0%

Note: For Basic seed no more than a trace of ryegrass is allowed in the working sample.

3.13 Crested Dogstail (*Cynosurus cristatus* L.)

Previous Cropping History

Two harvest seasons between different varieties of dogstail.

Closing Date for Applications

Applications for certification must be submitted by the first Monday of October.

Field Inspection

Areas are to be inspected once at flowering.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Off-types)	Isolation requirements	
		Less than 2ha	More than 2ha
Breeders - Basic	Nil	200m	100m
1st Generation	1 per quadrat	100m	50m

Degrading of Areas

Grasslands Aspiring - Areas are eligible to produce -

Breeders for one harvest season then degraded to Basic for one harvest season.

Basic for one harvest season then degraded to 1st Generation for one harvest season.

1st Generation for two harvest seasons.

Southland Crested Dogstail is classified as an annual and down-grading does not apply.

Southland Crested Dogstail is a local variety. The following conditions apply -

- Any crop within the prescribed area is eligible for entry into certification to produce Basic or 1st Generation Seed.
- Any area sown with Basic seed OUTSIDE the prescribed area is eligible for certification to produce 1st Generation Seed.
- The prescribed area is defined as: *That area bounded by the Clutha River from its mouth to Beaumont then along State Highway 8 to the Moa Seed Farm Junction and the area of Southland Land District.*

Purity Standards

	Basic Seed	1 st Generation
Minimum pure seed	99.5%	96.0%
Other seed	0.3%	2.0%

3.14 Fescue, Tall (*Festuca arundinacea* Schreber)

Previous Cropping History

An area must not have grown any other Fescue, Festulolium or Ryegrass during the previous two harvest seasons but successive crops of the same variety and certification class may be grown on the same area without any time interval.

Closing Date for Applications

Applications for certification must be submitted by the First Monday in October.

Field Inspection

Areas are to be inspected once at flowering.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Off-types, ryegrass)	Isolation requirements					
		Less than 2ha			More than 2ha		
		<i>Fescue Festulolium</i>	<i>Ryegrass</i>	<i>Fine Fescue</i>	<i>Fescue Festulolium</i>	<i>Ryegrass</i>	<i>Fine Fescue</i>
Breeders	None	200m	200m	5m	100m	100m	5m
Basic	None	200m	200m	5m	100m	100m	5m
1st Generation	1 per quadrat	100m	20m	5m	50m	20m	5m

Degrading of Areas - Areas are eligible to produce -

Breeders for 2 harvest seasons - then degraded to Basic for 4 harvest seasons.

Basic for 2 harvest seasons - then degraded to 1st Generation for 4 harvest seasons.

1st Generation for 6 harvest seasons.

Note: An area is degraded once only and is not eligible for re-entry into certification at the end of the degraded period.

Purity Standards

	Basic Seed	1st Generation
Minimum pure seed	99.0%	98.0%
Other seed	0.3%*	1.5%

* Maximum permitted ryegrass and/or cocksfoot seed is Trace %.

3.15 Fescue Fine (*Festuca rubra* L.)
(Amenity Types)

Previous Cropping History

An area must not have grown any other fescue during the previous two harvest seasons, but successive crops of the same variety and certification class may be grown on the same area without any time interval.

Closing Date for Applications

Applications for certification must be submitted by the first Monday in October.

Field Inspection

Areas are to be inspected once at flowering.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Off-types, ryegrass)	Isolation requirements			
		Less than 2ha		More than 2ha	
		<i>Fine Fescue</i>	<i>Tall Fescue, Ryegrass and Festulolium</i>	<i>Fine Fescue</i>	<i>Tall Fescue Ryegrass and Festulolium</i>
Breeders	None	200m	5m	100m	5m
Basic	None	200m	5m	100m	5m
1st Generation	1 per quadrat	100m	5m	50m	5m

Degrading of Areas - Areas are eligible to produce -

Breeders for 2 harvest seasons - then degraded to Basic 4 harvest seasons.

Basic for 2 harvest seasons - then degraded to 1st Generation for 4 harvest seasons.

1st Generation for 4 harvest seasons.

Note: An area is degraded once only and is not eligible for re-entry into certification at the end of the degraded period.

Purity Standards

	Basic Seed	1 st Generation
Minimum pure seed	99.0%	98.0%
Other seed	0.3%*	1.0%**

* Maximum permitted ryegrass and/or cocksfoot seed is trace %.

** Maximum permitted ryegrass and/or cocksfoot seed is 0.2%.

3.16 Festulolium Spp

Previous Cropping History

An area must not have grown any other Festulolium, Ryegrass or Fescue during the previous two harvest seasons but successive crops of the same variety and certification class may be grown on the same area without any time interval.

Closing Date for Applications

Applications for certification must be submitted by the first Monday of October.

Field Inspection

Areas are to be inspected once at flowering.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Off-types, ryegrass)	Isolation requirements			
		Less than 2ha		More than 2ha	
		<i>Tall Fescue, Ryegrass and Festulolium</i>	<i>Fine Fescue</i>	<i>Tall Fescue, Ryegrass and Festulolium</i>	<i>Fine Fescue</i>
Breeders	None	200m	5m	100m	5m
Basic	None	200m	5m	100m	5m
1st Generation	1 per quadrat	100m	5m	50m	5m

Degrading of Areas - Areas are eligible to produce -

Breeders for 1 harvest season - then degraded to Basic for 3 harvest seasons.

Basic for 2 harvest seasons - then degraded to 1st Generation for 2 harvest seasons.

1st Generation for 4 harvest seasons.

Note: An area is degraded once only and is not eligible for re-entry into certification at the end of the degraded period.

Purity Standards

	Basic Seed	1 st Generation
Minimum pure seed	99.0%	98.0%
Other seed	0.3%	0.7%

3.17 Fodder Radish (*Raphanus sativus* L.)

Previous Cropping History

An area must not have grown any other cruciferous crop in the past 5 harvest seasons but successive crops of the same variety and certification class may be sown on the same area without any time interval.

Closing Date for Applications

Applications for certification of Autumn sown areas must be submitted by the first Monday in May and for all other areas by the first Monday in October.

Field Inspection

Areas will be inspected twice –
Inspection at early leaf stage
Second inspection at flowering

Contamination and Isolation requirements

Class of seed produced	Contaminants (Any other variety, any other crucifer)	*Isolation requirements
Basic	None	400m
1st Generation	1 per quadrat	200m

*Must be isolated from other fodder radish varieties. There is normally no cross pollination with the other commonly grown cruciferous crops.

Purity Standards

	Basic Seed	1st Generation
Minimum pure seed	99.0%	98.0%

3.18 Kale (*Brassica oleracea* L.)

Previous Cropping History

An area must not have grown any other brassica crop during the past 5 harvest seasons but successive crops of the same variety and certification class may be grown on the same area without any time interval.

Closing Date for Applications

Applications for certification must be submitted by the First Monday of February.

Field Inspections

Areas will be inspected twice

First Early leaf stage

Second Flowering

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Any other variety, any other brassica)	*Isolation requirements
Basic	None	700m
1st Generation	1 per quadrat	400m

* Kale crops may be grown without isolation from crops of rape, turnips and swedes, but must be isolated from different varieties of kale. No isolation is required between kale crops of the same variety.

Purity Standards

	Basic Seed	1st Generation
Minimum pure seed	99.0%	99.0%

3.19 Lentil (*Lens culinaris* Medicus)

Previous cropping history

An area must not have grown any crop of lentils during the previous three harvest seasons.

Closing date for applications

Applications for certification must be submitted by the first Monday in October.

Field inspection

Areas will be inspected once at flowering

Contamination and isolation requirements

Class of seed Produced	Contaminants (Any other variety, off types, vetches or peas)	*Isolation requirements
Basic	None	50m
1st Generation	1 per 10 quadrats	50m
2nd Generation	1 per quadrat	50m

* From any other lentil variety

Purity standards

	Basic Seed	1st Generation	2nd Generation
Minimum pure seed	98.0%	98.0%	98.0%
Maximum other crop seeds	0.2%	0.5%	0.5%

3.20 Linseed (*Linum usitatissimum* L.)

Previous Cropping History

An area must not have grown any flax or linseed crop in the previous 5 years.

Closing Date for Applications

First Monday in November.

Field Inspection

Areas are to be inspected once at flowering.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Any other varieties)	Isolation requirements
Breeders	None	Must be isolated by a definite barrier or a space sufficient to prevent mixture during harvest.
Basic	None	
1st Generation	1 per 10 quadrats	
2nd Generation	1 per quadrat	

Purity Standards

	Basic Seed	1st Generation	2nd Generation
Minimum pure seed	99.0%	99.0%	99.0%
Other seed	0.1%	0.1%	0.1%

3.21 Lotus (*Lotus uliginosus* Schk.)

Birdsfoot Trefoil (*Lotus corniculatus* L.)

Previous Cropping History

If the sowing is a different variety from that previously sown on the area -

The area must not have grown lotus during the previous FIVE harvest seasons. In addition any lotus, which may establish from buried seed during this period must be eradicated annually by either cultivation or herbicide.

A minimum width between rows of 30cm is required and it is recommended that areas be drilled up and down the paddock with headlands at each end. If the area is drilled round and round, corners should not be drilled out as this will facilitate roguing and spraying and assist in field inspections.

A grower may elect to undersow a spring crop or alternatively sow in the autumn with a companion grass but provision must be made to allow field inspection of the area to be carried out. Crops must be in a condition suitable for field inspection by August of the year immediately preceding harvest by either spraying and clearing companion crop residues and/or weeds from whole area, or by creating the required number of gaps (see below).

Where a grower elects to create gaps (quadrats) they must be an area of at least 12 square metres, the number required being as follows - 'In crops of 2 ha or less a minimum of 5 gaps is required and for areas larger than 2 ha one gap must be left for each .5 ha with a maximum of 20'. The gaps created should be randomly spaced and marked by a white stick or stake.

Failure to observe any of the above requirements may result in the area being rejected from certification at the first inspection.

Note: Paddocks which have been accepted for entry and fail to establish satisfactorily, are withdrawn, or rejected at field inspection and **not** subsequently harvested as uncertified or allowed to pass through a reproductive season may be resown with the same variety and re-entered the following or subsequent seasons but will be subject to change of variety rules as above.

Paddocks failing to meet the standards of variety change field inspection, which are subsequently taken as an uncertified seed crop in that season will **not** be eligible for the growing of any certified lotus crop for a further five years.

If the sowing is the same variety as that previously sown on the area -

Successive crops of the same variety and certification class may be sown on the same area without any time interval. If sowing the same variety but of a higher certification

class than that previously sown on the area, a time interval of three harvest seasons must be observed.

Closing Date for Applications

Applications for certification must be submitted by the First Monday of October.

Field Inspection

Areas are to be inspected once at flowering.

Contamination and Isolation Requirements

Class of seed produced	*Contaminants (Any other lotus - including off-types)	*Isolation requirements	
		Less than 2ha	More than 2ha
Breeders	None	200m	100m
Basic	None	200m	100m
1st Generation	1 per quadrat	100m	50m

*Between different lotus varieties of the same species. No isolation is required between *L.uliginosus* and *L.corniculatus*.

Degrading of Areas - Areas are eligible to produce -

Breeders for 2 harvest seasons - then degraded to Basic for 3 harvest seasons.

Basic for 2 harvest seasons - then degraded to 1st Generation for 3 harvest seasons.

1st Generation for 5 harvest seasons.

Note: An area is degraded once only and is not eligible for re-entry into certification at the end of the degraded period.

Purity Standards

	Basic Seed	1 st Generation
Minimum pure seed	99.0%	97.0%
Other seed	0.3%	0.5%*

* Other than White Clover and Suckling Clover.

3.22 Lucerne (*Medicago sativa* L.)

Previous Cropping History

An area must not have grown any other lucerne during the previous three harvest seasons but successive crops of the same variety and certification class may be grown on the same area without any time interval.

Closing Date for Applications

Applications for certification must be submitted by the first Monday of January.

Note: For Wairau only - first Monday of October.

Field Inspection

Areas are to be inspected once at flowering.

Contamination Requirements

Class of seed produced	Contaminants (Off-types. Any other lucerne variety)
Breeders	None
Basic	None
1st Generation	1 per quadrat

Isolation Requirements - distances must not be less than the specifications below:

Areas to produce:	Less than 2ha	More than 2ha
Seed for further multiplication	200m	100m
Seed not for further multiplication (i.e. seed for fodder production)	100m	50m

No isolation is required between areas of the same variety.

Note: Notwithstanding the isolation provisions shown, a grower may elect to create isolation by -

- i) Mowing or grazing a strip wide enough to create the specified distance, or
- ii) Erecting a temporary fence across the area at a similar distance from the cross-fertilising crop.

Where the grower elects to mow the isolation zone the action should, if taken in the area entered for certification, be delayed until after flowering. If the isolation zone is taken from an adjacent cross fertilising crop the action must be taken before flowering.

If a grower elects to erect a temporary fence the two portions of the crop are to be treated as part paddocks. The isolation zone may then be harvested as uncertified seed.

Degrading of Areas

Areas will be eligible to produce -

Nucleus sown	Breeders for two harvest seasons, then degraded to Basic for three harvest Seasons.
Breeders Sown	Basic for two harvest seasons, then degraded to 1 st Generation for four harvest seasons.
Basic Sown	1 st Generation for six harvest seasons.

Where the stage of growth is such that visual symptoms of Bacterial Wilt are unlikely to be detected at field inspection a sample of 100 grams of seed is to be sent to the National Seed Laboratory, Palmerston North for a serological test. The sample should be enclosed in a plastic bag to prevent contamination from other samples.

Note: All areas of Wairau will be rejected if Bacterial Wilt is found either at field inspection or as a result of the serological test.

Purity Standards

	Basic Seed	1st Generation
Minimum pure seed	98.0%	98.0%
Other seed	1.0%*	1.0%*

* Including a maximum of 0.5% red clover.

3.23 Lupin (*Lupinus* spp.)

Previous Cropping History

An area must not have grown any other Lupin during the previous 2 harvest seasons but successive crops of the same variety and certification class may be grown on the same area without any time interval.

Closing Date for Applications

Applications for certification must be submitted by the First Monday in October.

Field Inspection

Areas are to be inspected once at flowering.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Any other variety, including off-types, peas, beans)	*Isolation requirements
Basic	None	100m
1st Generation	1 per 10 quadrats	100m
2nd Generation	1 per quadrat	100m

* Must be isolated from any other crop of a different lupin variety.

Purity Standards

	Basic Seed	1st Generation	2nd Generation
Minimum pure seed	98.0%	98.0%	98.0%
Maximum other crop seeds	0.1%	0.1%	0.3%

3.24 Maize (*Zea mays* L.)

Types

Hybrid and open pollinated varieties.

Classes and Areas Eligible

Areas sown with Pre-Basic and Basic Seed of varieties certified in the country of origin.

Note: If foreign varieties are to be certified under the OECD Maize Scheme, technical conditions must be agreed in advance of sowing with the Designated Authority in the country of origin.

Definition of Terms

Inbred Line: A sufficiently uniform and stable line, obtained either by artificial self-fertilisation accompanied by selection over several successive generations or by equivalent operations.

Single Cross Hybrid: The first generation of a cross between two inbred lines.

Double Cross Hybrid: The first generation of a cross between two single cross hybrids.

Three-way Cross Hybrid: The first generation of a cross between an inbred line and a single cross hybrid.

Top Cross Hybrid: The first generation of a cross between an inbred line or single cross hybrid and an open-pollinated variety.

Intervarietal Hybrid: The first generation of a cross between plants grown from Basic Seed of two open-pollinated varieties.

Open Pollinated: Seed produced as a result of natural pollination which when reproduced retains its distinguishing characters.

Rules For The Production Of Hybrid Maize

Closing Date for Applications

There is no set closing date but applications for certification must be lodged within 14 days of sowing.

Previous Cropping History

There are no requirements as to previous cropping but where maize follows maize one additional inspection must be carried out to determine the freedom of the seed crop from plants, which have volunteered from the preceding crop.

Isolation Requirements

Seed crops must be isolated from any possible source of contaminating pollen.

To produce Basic Seed	400m
To produce 1st Generation Seed	200m

The above isolation distances may be reduced by the sowing of additional border rows of the pollen parent immediately adjacent to the seed crop. These must be sown at the same time as the pollen parent rows within the crop and on the side from which contamination is expected. Each such additional row will equal 10 metres of distance.

Isolation by time will be considered if there are no receptive silks on the seed parent during the period pollen is being shed by the contaminating crop.

Seed Crop Inspection

A minimum of three inspections must be made when the silks of the seed parent are receptive, to determine whether detasselling and isolation requirements have been carried out in a satisfactory manner.

Where maize is sown following another maize crop at least one additional inspection must be made to determine the freedom of the seed crop from plants that have volunteered from the preceding crop. Volunteer plants must not exceed 0.05% immediately prior to detasselling or the commencement of the pollination period of the crop.

The crop must be in a fit state to permit accurate determination of varietal purity. Crops will be rejected from certification in which more than 0.1% of off-type plants in the pollen parent have shed pollen. At the time of last inspection the seed parent shall not contain more than 0.1% of off-type plants.

Detasselling for the Production of Hybrid Varieties

The following applies when 5% or more seed parent plants have receptive silks.

A crop will be rejected from certification if on any one inspection more than 1% of the seed parent plants possess tassels, which have shed or are shedding pollen, or if the total for three inspections on different dates exceeds 2%. Sucker tassels, portions of tassels or tassels on the main plants will be counted as shedding pollen when 50 mm or more of the central stem, the side branches or a combination of the two have their anthers extended from their glumes and are shedding pollen.

Where shedders are observed counts are to be taken throughout the area.

Each count will consist of 200 consecutive plants in a seed parent row or 100 consecutive plants in each of two adjacent seed parent rows.

In crops of 2 ha or less a minimum of 5 counts must be carried out and for areas larger than 2 ha 1 additional count must be made for each 0.5 ha with a maximum of 20.

Inspection must confirm that both the seed bearing and pollen shedding plants are true to the description supplied to the certifying authority.

Male Sterile Seed Parent

A male sterile seed parent can be used to produce Certified Seed by two methods.

- a) By blending seed produced by the sterile seed parent with seed produced by the fertile seed parent. The ratio of male sterile seed to male fertile parent seed shall not exceed 2 to 1

or

- b) By using a pollen parent that contains a specific restorer line or lines so that not fewer than one-third of the plants grown from the resulting hybrid will produce pollen, which appears normal in all respects.

Rules For The Production Of Open Pollinated Maize

Closing Date for Applications

There is no set closing date but applications must be lodged within 14 days of sowing.

Previous Cropping History

There are no requirements as to previous cropping but where maize follows maize one additional inspection must be carried out to determine the freedom of the seed crop from plants that have volunteered from the preceding crop.

Isolation Requirements

To produce Basic Seed	400m
To produce 1st Generation Seed	200m

Seed Crop Inspection

One inspection at flowering.

When maize is sown following maize an additional inspection must be made to ensure freedom from plants that may volunteer from the previous crop.

Field Standards

Not more than 0.05% off-types or other varieties. (Counts as for hybrid varieties.)

Sampling And Post-Control. Basic and Certified Seed

The applicant is responsible for ensuring that harvested seed is identified by labels supplied by the certifying authority and kept separate from other seed during harvesting and processing.

Seed lots will not be finally certified until a Certificate of Analysis issued by the National Seed Laboratory on an officially drawn sample confirms that the required purity standard has been met.

One seed lot will not exceed 40,000 kg.

A part of every sample submitted for analysis will be retained by the Official Seed Testing Station for post-control plot testing in the next growing season following sampling.

Seed Purity Standards

	Basic Seed	1st Generation
Minimum pure seed	99.5%	99.5%

Labelling

All classes of certified seed offered for sale must have an official certification label issued by the certifying authority attached to each container. Labels must give the following information:

Name and address of Certifying Authority.

Class: Pre Basic/Basic/1st Generation

Species: *Zea mays*

Variety name:

Open pollinated/cross/inbred line.

Reference No: NZ

Region of Production: (Farm number and paddock letter)

Date

Weight

3.25 Oat (*Avena sativa* L.)

Previous Cropping History

NZ Domestic Scheme: An area must not have grown any other cereal in the previous harvest season but successive crops of the same variety and certification class may be grown on the same area without any time interval, provided that satisfactory varietal purity is maintained.

NB. Any crop grown under the NZ Domestic scheme rule will **not** be eligible for OECD certification.

OECD Scheme: An area must not have grown any other cereal in the previous **two** harvest seasons but successive crops of the same variety and certification class may be grown on the same area without any time interval, provided that satisfactory varietal purity is maintained.

Closing Date for Applications

Applications for certification must be submitted by the First Monday of November.

Field Inspection

Areas are to be inspected when in full ear.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Any other variety, any other cereal, Loose smut)	Isolation requirements
Basic	None	Only a space sufficient to prevent mixture during harvest is required.
1st Generation	1 per 10 quadrats	
2nd Generation	1 per quadrat	

Note: Any crop found to contain wild oats, yellow gromwell or nodding thistle at field inspection will be rejected from certification.

Purity Standards

	Basic Seed	1st Generation	2nd Generation
Minimum pure seed	98.0%	98.0%	98.0%
Maximum other cereal seeds	0.1%	0.1%	0.3%

3.26 Pea (*Pisum sativum* L.)

Previous Cropping History

Areas must not have grown any crop of peas during the previous 2 harvest seasons.

Closing Dates for Applications

Applications for certification of areas sown prior to July 1 must be submitted by the First Monday in July and for all other areas by the First Monday in November.

Field Inspections - Two inspections

Field Peas

1st when plants are 25cm high
2nd at flowering.

Garden Peas

1st at flowering
2nd following pod formation

Contamination Requirements

Class of seed produced	Contaminants (Any other variety, including off-types, lupins, beans)
Basic	None
1st Generation	1 per 10 quadrats
2nd Generation	1 per quadrat

Isolation Requirements

	Autumn Sown (prior 1 August)	Spring Sown (after 1 August)
Garden Peas and White Flowered Field Peas	100 metres from each other and all other pea crops.	A. Must be isolated from each other by a definite barrier or a space sufficient to prevent mixture during harvest. B. Must be isolated by 50 metres from Maple pea crops (purple flowered field peas). C. Must be isolated by 100 metres from all autumn sown pea crops.
Maple Peas (Purple flowered field types)	100 metres from each other and all other pea crops.	100 metres from Autumn sown pea crops and 50 metres from any other pea crops.

Purity Standards

	Basic Seed	1st Generation	2nd Generation
Minimum pure seed	98.0%	98.0%	98.0%
Maximum other pea varieties	0.1%	0.1%	0.3%

NOTE: Crops must be free of bacterial blight at field inspection.

3.27 Phalaris (*Phalaris aquatica* L.)

Reed Canary Grass (*Phalaris arundinacea* L.)

Previous Cropping History

An area must not have grown any other Phalaris during the previous 2 harvest seasons, but successive crops of the same variety and certification class may be grown on the same area without any time interval.

Closing Date for Applications

Applications for certification must be submitted by the First Monday of October.

Field Inspection

Areas are to be inspected once at flowering.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Any other Phalaris species and off-types)	Isolation requirements
Breeders	None	100 metres from any other variety of <i>Phalaris aquatica</i> or other <i>Phalaris</i> species.
Basic	None	
1st Generation	1 per quadrat	

Degrading of Areas - Areas are eligible to produce -

Breeders for 1 harvest season - then degraded to Basic for 9 harvest seasons.

Basic for 2 harvest seasons then degraded to 1st Generation for 8 harvest seasons.

1st Generation for 10 harvest seasons.

Note: An area is degraded once only and is not eligible for re-entry into certification at the end of the degrading period.

Purity Standards

	Basic Seed	1 st Generation
Minimum pure seed	99.0%	98.0%
Other seed	0.3%	1.0%

3.28 Plantain (*Plantago lanceolata* L.)

Previous Cropping History

An area must not have grown any other Plantain crop during the previous three harvest seasons, but successive crops of the same variety and certification class may be grown on the same area without any time interval.

Closing Date for Applications

Applications for certification must be submitted by the first Monday in October.

Field Inspections

Areas are to be inspected once, at flowering.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Any other plantain including off-types)	Isolation requirements
Breeders	None	100m from any other plantain variety
Basic	None	
1st Generation	1 per quadrat	

Degrading of Areas - Areas are eligible to produce -

Breeders for 2 harvest seasons then degraded to Basic for 4 harvest seasons.

Basic for 2 harvest seasons then degraded to 1st Generation for 4 harvest seasons.

1st Generation for 6 harvest seasons.

Note: An area is degraded once only and is not eligible for re-entry into certification at the end of the degraded period.

Purity Standards

	Basic Seed	1st Generation
Minimum pure seed	98.0%	96.0%
Other seed	0.2%	0.5%

3.29 Rape (*Brassica napus* L.)

Previous Cropping History

An area must not have grown any other brassica crop during the past 5 harvest seasons but successive crops of the same variety and certification class may be grown on the same area without any time interval.

Closing Date for Applications

Applications for certification must be submitted by the First Monday in May.

Field Inspection

Areas will be inspected twice

First inspection Early leaf stage.

Second inspection Flowering.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Any other variety, any other Brassica)	*Isolation requirements
Basic	None	400m
1st Generation	1 per quadrat	200m

* Must be isolated from other Rape varieties, Turnips, Swedes and infestations of other Brassica plants including Wild Turnip, sufficient to be a source of cross pollination. Need not be isolated from Kale and crops of the same variety.

Purity Standards

	Basic Seed	1st Generation
Minimum pure seed	99.0%	99.0%

3.30 Ryecorn (*Secale cereale* L.)

Previous Cropping History

NZ Domestic Scheme: An area must not have grown any other cereal in the previous harvest season but successive crops of the same variety and certification class may be grown on the same area without any time interval, provided that satisfactory varietal purity is maintained.

NB. Any crop grown under the NZ Domestic scheme rule will **not** be eligible for OECD certification.

OECD Scheme: An area must not have grown any other cereal in the previous **two** harvest seasons but successive crops of the same variety and certification class may be grown on the same area without any time interval, provided that satisfactory varietal purity is maintained.

Closing Date for Applications

Applications for certification must be submitted by the First Monday of November.

Field Inspection

Areas are to be inspected when in full ear.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Any other variety, any other cereal)	*Isolation requirements
Basic	None	100m
1st Generation	1 per 10 quadrats	100m
2nd Generation	1 per quadrat	100m

*Must be isolated from any other crop of a different ryecorn variety and Triticale. For crops of the same variety, only a space sufficient to prevent mixture during harvest is required.

Note: Any crop found to contain wild oat, yellow gromwell or nodding thistle at field inspection will be rejected from certification.

Purity Standards

	Basic Seed	1 st Generation	2 nd Generation
Minimum pure seed	98.0%	98.0%	98.0%
Maximum other cereal seeds	0.1%	0.1%	0.3%

3.31 Ryegrass, Hybrid (*Lolium x boucheanum* Kunth)

Previous Cropping History

An area must not have grown any other Ryegrass during the previous 2 harvest seasons but successive crops of the same variety and certification class may be grown on the same area without any time interval.

Closing Date for Applications

Applications for certification must be submitted by the First Monday of October.

Field Inspection

Areas are to be inspected once at flowering.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Off-types, ryegrass)	*Isolation requirements					
		Less than 2ha			More than 2ha		
		<i>Ryegrass and Festulolium</i>	<i>Fescue</i>	<i>Fine Fescue</i>	<i>Ryegrass and Festulolium</i>	<i>Fescue</i>	<i>Fine Fescue</i>
Breeders	None	200m	200m	5m	100m	100m	5m
Basic	None	200m	200m	5m	100m	100m	5m
1st Generation	1 per quadrat	100m	20m	5m	50m	20m	5m

***Isolation** – Diploid / Tetraploid Ryegrass – The isolation requirement between a Diploid and a Tetraploid Ryegrass shall be 5 meters (there is a small risk of cross pollination between a Diploid and Tetraploid Ryegrass therefore it is recommended to leave the first outside header run out of the certified seed lot).

Wild oats - Any Tetraploid Ryegrass found to contain wild oat at field inspection will be rejected from certification. In the case of light infestations the grower may be given the opportunity to rogue the area.

Degrading of Areas - Areas are eligible to produce -

Breeders for 1 harvest season - then degraded to Basic for 3 harvest seasons.

Basic for 2 harvest seasons - then degraded to 1st Generation for 2 harvest seasons.

1st Generation for 4 harvest seasons.

Note: An area is degraded once only and is not eligible for re-entry into certification at the end of the degraded period.

Purity Standards

	Basic Seed	1 st Generation
Minimum pure seed	99.0%	98.0%
Other seed	0.3%	0.7%

Note: Grasslands Greenstone must meet a minimum 1000 seed weight of 3.5g.

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3.32 Ryegrass, Italian (*Lolium multiflorum* Lam.)

Previous Cropping History

An area must not have grown any other ryegrass during the previous two harvest seasons but successive crops of the same variety and certification class may be grown on the same area without any time interval.

Closing Date for Applications

Applications for certification must be submitted by first Monday of October.

Field Inspection

Areas are to be inspected once at flowering.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Off-types, ryegrass)	*Isolation requirements					
		Less than 2ha			More than 2ha		
		<i>Ryegrass and Festulolium</i>	<i>Fescue</i>	<i>Fine Fescue</i>	<i>Ryegrass and Festulolium</i>	<i>Fescue</i>	<i>Fine Fescue</i>
Breeders	None	200m	200m	5m	100m	100m	5m
Basic	None	200m	200m	5m	100m	100m	5m
1st Generation	1 per quadrat	100m	20m	5m	50m	20m	5m

***Isolation** – Diploid / Tetraploid Ryegrass – The isolation requirement between a Diploid and a Tetraploid Ryegrass shall be 5 meters (there is a small risk of cross pollination between a Diploid and Tetraploid Ryegrass therefore it is recommended to leave the first outside header run out of the certified seed lot).

Wild oats - Any Tetraploid Ryegrass found to contain Wild Oat at field inspection will be rejected from certification. In the case of light infestations the grower may be given the opportunity to rogue the area.

Degrading - Degrading procedures do not apply.

Note: Grasslands Tama only. A grower may harvest a second crop in the same harvest season without degrading. If taking a second crop the area must be re-entered and re-inspected.

Purity Standards

	Basic Seed	1 st Generation
Minimum pure seed	99.0%	98.0%
Other seed	0.3%	0.7%

Note: Grasslands Moata - Seed cleaning must be such that a minimum 1000 seed weight of 3.5g is obtained.

3.33 Ryegrass, Perennial, Forage (*Lolium perenne* L.)
(Forage Types)

Previous Cropping History

An area must not have grown any other ryegrass during the previous two harvest seasons but successive crops of the same variety and certification class may be grown on the same area without any time interval.

Closing Date for Applications

Applications for certification must be submitted by the first Monday of October.

Field Inspection

Areas are to be inspected once at flowering.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Off-types, ryegrass)	*Isolation requirements					
		Less than 2ha			More than 2ha		
		<i>Ryegrass and Festulolium</i>	<i>Fescue</i>	<i>Fine Fescue</i>	<i>Ryegrass and Festulolium</i>	<i>Fescue</i>	<i>Fine Fescue</i>
Breeders	None	200m	200m	5m	100m	100m	5m
Basic	None	200m	200m	5m	100m	100m	5m
1st Generation	1 per quadrat	100m	20m	5m	50m	20m	5m

***Isolation** – Diploid / Tetraploid Ryegrass – The isolation requirement between a Diploid and a Tetraploid Ryegrass shall be 5 meters (there is a small risk of cross pollination between a Diploid and Tetraploid Ryegrass therefore it is recommended to leave the first outside header run out of the certified seed lot).

Wild oats - Any Tetraploid Ryegrass found to contain Wild Oat at field inspection will be rejected from certification. In the case of light infestations the grower may be given the opportunity to rogue the area.

Degrading of Areas - Areas are eligible to produce -

Breeders for 1 harvest season - then degraded to Basic for 3 harvest seasons.

Basic for 2 harvest seasons - then degraded to 1st Generation for 2 harvest seasons.

1st Generation for 4 harvest seasons.

Note: An area is degraded once only and is not eligible for re-entry into certification at the end of the degraded period.

Purity Standards

	Basic Seed	1st Generation
Minimum pure seed	99.0%	98.0%
Other seed	0.3%	0.7%

3.34 Ryegrass, Perennial, Amenity (*Lolium perenne* L.)
(*Amenity Types*)

Previous Cropping History

An area must not have grown any other Ryegrass during the previous two seasons but successive crops of the same variety and certification class may be grown on the same area without any time interval.

Closing Date for Applications

Applications for certification must be submitted by the first Monday of October.

Field Inspection

Areas are to be inspected once at flowering.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Off-types, ryegrass)	*Isolation requirements					
		Less than 2ha			More than 2ha		
		<i>Ryegrass and Festulolium</i>	<i>Fescue</i>	<i>Fine Fescue</i>	<i>Ryegrass and Festulolium</i>	<i>Fescue</i>	<i>Fine Fescue</i>
Breeders	None	200m	200m	5m	100m	100m	5m
Basic	None	200m	200m	5m	100m	100m	5m
1st Generation	1 per quadrat	100m	20m	5m	50m	20m	5m

***Isolation** – Diploid / Tetraploid Ryegrass – The isolation requirement between a Diploid and a Tetraploid Ryegrass shall be 5 meters (there is a small risk of cross pollination between a Diploid and Tetraploid Ryegrass therefore it is recommended to leave the first outside header run out of the certified seed lot).

Wild oats - Any Tetraploid Ryegrass found to contain Wild Oat at field inspection will be rejected from certification. In the case of light infestations the grower may be given the opportunity to rogue the area.

Degrading of Areas - Areas are eligible to produce -

Breeders for 1 harvest season - then degraded to Basic for 3 harvest seasons.

Basic for 2 harvest seasons - then degraded to 1st Generation for 2 harvest seasons.

1st Generation for 4 harvest seasons.

Note: An area is degraded once only and is not eligible for re-entry into certification at the end of the degraded period.

Purity Standards

	Basic Seed	1st Generation
Minimum pure seed	99.0%	98.0%
Other seed	0.3%	0.7%
Maximum fluorescence	1.0%	2.0%

3.35 Swede (*Brassica napus* L. var. *napobrassica*)

Previous Cropping History

An area must not have grown any other Brassica crop during the past 5 harvest seasons but successive crops of the same variety and certification class may be grown on the same area without any time interval.

Closing Date for Applications

Applications for certification must be submitted by the First Monday in May.

Field Inspection

Areas will be inspected twice:

First Early leaf stage.

Second Flowering.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Any other variety, any other Brassica)	*Isolation requirements
Basic	None	400m
1st Generation	1 per quadrat	200m

* Must be isolated from other Swede varieties, Rape, Turnips, and infestations of other Brassica plants, including Wild Turnip, sufficient to be a source of cross pollination. Need not be isolated from Kale and crops of the same variety.

Purity Standards

	Basic Seed	1st Generation
Minimum pure seed	99.0%	99.0%

3.36 Timothy (*Phleum pratense* L.)

Previous Cropping History

An area must not have grown any other timothy during the previous 2 harvest seasons but successive crops of the same variety and certification class may be grown on the same area without any time interval.

Closing Date for Applications

Applications for certification must be submitted by the First Monday of October.

Field Inspection

Areas are to be inspected once at flowering.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Early flowering types)	*Isolation requirements (Must be isolated from any other crop of a different timothy variety).	
		Less than 2ha	More than 2ha
Breeders	None	200m	100m
Basic	None	200m	100m
1st Generation	1 per quadrat	100m	50m

Degrading of Areas - Areas are eligible to produce -

Breeders for 2 harvest seasons - then degraded to Basic for 6 harvest seasons.

Basic for 2 harvest seasons - then degraded to 1st Generation for 6 harvest seasons.

1st Generation for 8 harvest seasons.

Note: An area is degraded once only and is not eligible for re-entry into certification at the end of the degraded period.

Purity Standards

	Basic Seed	1 st Generation
Minimum pure seed	99.5%	98.0%
Other seed	0.3%	1.0%

3.37 Triticale (*X Triticosecale* Wittm.)

Previous Cropping History

NZ Domestic Scheme: An area must not have grown any other cereal in the previous harvest season but successive crops of the same variety and certification class may be grown on the same area without any time interval, provided that satisfactory varietal purity is maintained.

NB. Any crop grown under the NZ Domestic scheme rule will **not** be eligible for OECD certification.

OECD Scheme: An area must not have grown any other cereal in the previous **two** harvest seasons but successive crops of the same variety and certification class may be grown on the same area without any time interval, provided that satisfactory varietal purity is maintained.

Closing Date for Applications

Applications for certification must be submitted by the first Monday in November.

Field Inspection

Areas are to be inspected when in full ear.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Any other variety, any other cereal)	Isolation requirements
Basic	None	50m from other triticale varieties, 100m from Ryecorn.
1st Generation	1 per 10 quadrats	
2nd Generation	1 per quadrat	

Note: Any crop found to contain Nodding Thistle, Wild Oat or Yellow Gromwell at field inspection will be rejected from certification.

Purity Standards

	Basic Seed	1 st Generation	2 nd Generation
Minimum pure seed	98.0%	98.0%	98.0%
Maximum other cereal seeds	0.1%	0.1%	0.3%

3.38 Turnip (*Brassica rapa* L.)

Previous Cropping History

An area must not have grown any other brassica crop during the past 5 harvest seasons but successive crops of the same variety and certification class may be grown on the same area without any time interval.

Closing Date for Applications

Applications for certification must be submitted by the First Monday in May.

Field Inspection

Areas will be inspected twice:-

First Early leaf stage.

Second Flowering.

Field Inspection - Standards and Isolation Requirements

Class of seed produced	Contaminants (Any other variety, any other brassica)	*Isolation requirements
Basic	None	400m
1st Generation	1 per quadrat	200m

*Must be isolated from other Turnip varieties, Rape, Swedes and infestations of other Brassica plants, including Wild Turnip, sufficient to be a source of cross pollination. Need not be isolated from Kale and crops of the same variety.

Purity Standards

	Basic Seed	1st Generation
Minimum pure seed	99.0%	99.0%

3.39 Wheat (*Triticum aestivum* L.)

Previous Cropping History

NZ Domestic Scheme: An area must not have grown any other cereal in the previous harvest season but successive crops of the same variety and certification class may be grown on the same area without any time interval, provided that satisfactory varietal purity is maintained.

NB. Any crop grown under the NZ Domestic scheme rule will **not** be eligible for OECD certification.

OECD Scheme: An area must not have grown any other cereal in the previous **two** harvest seasons but successive crops of the same variety and certification class may be grown on the same area without any time interval, provided that satisfactory varietal purity is maintained.

Closing Date for Applications

Applications for certification must be submitted by the First Monday in November.

Field Inspection

Areas are to be inspected when in full ear.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Any other variety, any other cereal, Loose smut)	Isolation requirements
Basic	None	Only a space sufficient to prevent mixture during harvest is required (See Notes below).
1st Generation	1 per 10 quadrats	
2nd Generation	1 per quadrat	

Note 1: 50 metres isolation required for Monad, Norseman, Regency, Sapphire and Tribute from any other variety of wheat.

Note 2: 100 metres isolation required for Torlesse (Breeders, Basic and 1st Generation only) and Karamu from any other variety of wheat.

Note 3: There is no 2nd Generation class for Monad, Caprimus and Torfrida.

Any crop found to contain wild oat, yellow gromwell or nodding thistle at field inspection will be rejected from certification.

Purity Standards

	Basic Seed	1st Generation	2nd Generation
Minimum pure seed	98.0%	98.0%	98.0%
Maximum other cereal seeds	0.1%	0.1%	0.3%

3.40 Yorkshire Fog (*Holcus lanatus* L.)

Previous Cropping History

An area must not have grown any other Yorkshire fog during the previous 2 harvest seasons, but successive crops of the same variety and certification class may be grown on the same area without any time interval.

Closing Date for Applications

Applications must be submitted by the First Monday of October.

Field Inspection

Areas are to be inspected once at flowering.

Contamination and Isolation Requirements

Class of seed produced	Contaminants (Any other Yorkshire Fog including off-types)	Isolation requirements
Breeders	None	Must be isolated by 100m from any other crop of a different Yorkshire fog variety.
Basic	None	
1st Generation	1 per quadrat	

Degrading of Areas - Areas are eligible to produce -

Breeders for 1 harvest season, then degraded to Basic for 1 harvest season.

Basic for 1 harvest season, then degraded to 1st Generation for 1 harvest season.

1st Generation for 2 harvest seasons.

Purity Standards

	Basic Seed	1st Generation
Minimum pure seed	99.0%	98.0%
Other seed	0.5%	1.0%