



Department of
Primary Industries and
Regional Development

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Seed Certification Rules

DDLS Seed Testing and Certification

Issue No. 6

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Current versions of these Rules, relevant forms and information relating to seed testing and certification services are available at the DPIRD website:

<https://www.agric.wa.gov.au/plant-biosecurity/ddls-seed-testing-and-certification-services>

All paperwork related to seed certification should be submitted to the administration email address. This address is monitored to provide business continuity.

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1. An introduction to seed certification

The main objective of the certified seed scheme is to supply the Australian agricultural industry with seed of consistent high quality.

There are many aspects to a successful seed industry:

- The breeding of quality varieties that are suited to the region
- Experienced seed producers capable of multiplying those varieties into the number of tonnes required by industry
- Skilled seed processors able to remove contaminants from the seed produced
- An efficient and highly skilled seed testing service
- An accredited seed Certification Agency to oversee the multiplication process and deliver training
- An efficient seed trade to ensure seed effectively reaches domestic and international markets

Certified seed offers advantages to merchants, producers, and buyers. Merchants know the product they are selling is the correct variety and that it has been uniformly cleaned, accurately sampled, independently tested, and correctly labelled. Growers produce a quality product and receive a premium price. Buyers have confidence that they are receiving the variety and quality they are expecting.

Uncertified seed may not be the correct variety or it may not have been representatively sampled or truthfully labelled. Unlabelled harvester samples may have properties which are difficult to detect, such as incorrect varietal identification, low germination levels or high levels of inert matter or other seeds (including weeds).

DDLs Seed Testing and Certification (STAC) has been accredited by the National Association of Testing Authorities (NATA) to act on behalf of the Australian Seeds Authority to deliver the following quality assured seed certification schemes:

OECD Scheme

- Cereals
- Crucifers and other oil or fibre species
- Grasses and legumes
- Pasture species
- Subterranean clover and similar species
- Including the field inspection of crops and supervision of sampling, processing, packaging, and labelling of Pre-Basic, Basic, and Certified seed

Australian Seed Certification Scheme

- Field crop species (Grasses and legumes)
- Including the field inspection of crops and supervision of processing, sampling, testing, packaging, and labelling of Pre-Basic, Basic, and Certified seed

These Schemes are based on the following Basic principles:

- Only varieties that are officially recognised as distinct and having value in at least one country will be included in the scheme
- All Certified seed produced must be related directly through one or more generations to authentic Basic seed of the variety
- Post control tests are conducted by the Certification Agency to determine the successful operation of the Schemes

2. The Australian Seeds Authority (ASA)

2.1. Introduction

- 2.1.1. The Australian Government, represented by and acting through the Department of Agriculture, Fisheries and Forestry (DAFF) has licensed the Australian Seeds Authority Limited (ASA) to perform all the functions of the National Designated Authority. ASA is accountable to DAFF through a range of reporting obligations and is subject to participation in performance audits by DAFF to establish compliance with licence requirements.
- 2.1.2. ASA is required under the Australian Government licence to administer the OECD Seed Schemes in Australia and appoint by contractual arrangements appropriately qualified providers of seed certification services as designated certification agencies for the purpose of implementing operational aspects of the Rules and Regulations of the Schemes.
- 2.1.3. The Australian Seed Certification Scheme is a national scheme offered to the Australian seed industry by several certification agencies designated by the ASA. The Scheme facilitates the adoption of harmonised technical standards and quality control procedures for the production, processing and labelling of certified seed.
- 2.1.4. The ASA is responsible for supervising the implementation of both the OECD and the Australian Seed Certification Schemes in Australia.
- 2.1.5. To meet this obligation ASA has commissioned the National Association of Testing Authorities (NATA), as a peak independent authority in Australia for the accreditation of inspection bodies, to implement a national accreditation scheme for certification agencies.
- 2.1.6. NATA accreditation of STAC requires compliance with the international quality management systems standard “ISO/IEC 17020 General criteria for the operation of various types of bodies performing inspection” plus demonstrated technical competence.
- 2.1.7. STAC has achieved NATA accreditation for its delivery of the OECD Seed Schemes and Australian Seed Certification Scheme, has executed an accreditation agreement with ASA and has been designated by ASA to act on its behalf in implementing operational aspects of the Rules and Regulations of the OECD and Australian Seed Certification Schemes in Australia.

2.2. Responsibilities of the Australian Seeds Authority

The Rules and Directions of the OECD Seed Schemes impose a wide range of responsibilities on the ASA. An overview of these responsibilities, including the co-ordination of the Australian Seed Certification Scheme, is outlined below. For a more comprehensive list of responsibilities contact ASA.

- 2.2.1. Representing Australia at the annual meeting of National Designated Authorities and all communications with the OECD including payment of Australia’s annual contribution for participation in the schemes.

- 2.2.2. Determining, in consultation with designated certification agencies and the seed industry through the ASA Technical Advisory Committee (ASATAC), rules and technical standards for the Australian Seed Certification Scheme.
- 2.2.3. Maintaining and publishing a national list of varieties which have been accepted in Australia as eligible for certification in the OECD and Australian Seed Certification Schemes, notifying OECD of any changes or additions to the OECD list and consultation with variety maintainers to determine maintenance plans and procedures.
- 2.2.4. All administration relating to the authorisation of multiplication of Australian listed varieties outside Australia, arranging the supply by maintainers of morphological descriptions and standard samples and approving methods for seed sampling and laboratory testing of seed lots.
- 2.2.5. Liaising with relevant authorities in other countries regarding repacking and relabelling of seed in that country and the exchange of relevant information for the final certification of exported seed.

2.3. Responsibilities of DDLS Seed Testing and Certification

STAC is designated to act on behalf of ASA in meeting the remaining responsibilities of the Designated Certification Agency specified in the OECD Rules.

2.4. Acceptance of varieties for certification

To be eligible for certification under the OECD or Australian Seed Certification Schemes, a variety must be listed with the ASA on the National list of plant varieties eligible for seed certification in Australia.

For a current list of eligible varieties visit the ASA website or contact ASA direct.

All applications for listing are to be made on the form “Application for Acceptance of a Plant Variety into Seed Certification Schemes in Australia” available from the ASA and should be returned to:

Mr Bill Fuller
Chief Executive Officer
Australian Seeds Authority Ltd.
PO Box 1122 Thornbury VIC 3071
Mobile: +61 488 400 988
E-mail: bfuller@aseeds.org.au

2.5. Relevant documentation and links

[The Australian Seeds Authority website](https://aseeds.com.au/) and relevant documents can be viewed at:

<https://aseeds.com.au/>

[OECD Seed Schemes](https://www.oecd.org/en/topics/seeds.html) can be viewed at:

<https://www.oecd.org/en/topics/seeds.html>

[OECD List of varieties eligible for certification](https://www.oecd.org/content/dam/oecd/en/topics/policy-sub-issues/seeds/Full%20variety%20list.pdf) can be viewed at:

<https://www.oecd.org/content/dam/oecd/en/topics/policy-sub-issues/seeds/Full%20variety%20list.pdf>

[National Association of Testing Authorities \(NATA\) website](https://nata.com.au/)

<https://nata.com.au/>

3. DDLS Seed Testing and Certification

DDLS Seed Testing and Certification (STAC) is a project under the DPIRD Diagnostic Laboratory Services (DDLS) business unit of the Department of Primary Industries and Regional Development.

STAC provides a range of services including seed testing, crop and potato certification, post-entry quarantine services, industrial hemp compliance inspections and training services to clients in Western Australia and across Australia.

STAC is a designated Certification Agency by the Australian Seeds Authority and delivers certification of field crops and pasture species under the OECD and the Australian Seed Certification Schemes.

STAC is an accredited member laboratory of the International Seed Testing Association (ISTA) (Accreditation number - AUD07) and as such delivers internationally recognised seed testing services. STAC can issue various certificates that can facilitate the international trade of seed.

4. Definitions

In these rules, unless the contrary intention appears:

Act (BAM Act)	means the <i>Biosecurity and Agriculture Management Act 2007</i>
Agency	means the Department of Primary Industries and Regional Development (DPIRD) (State Government)
Applicant	means the person who signs the application for inspection who shall be a property owner or Licensee
Authorisation	the protocol which recognises the competence of persons to whom certain official activities may be delegated
Authorised Breeders Seed	Early generation seed, under the control of the Breeder, of new varieties with a suitable morphological description, that are intended to be registered with ASA, but is as yet unlisted. Upon successful listing with the ASA is eligible to produce Certified seed at a generation agreed by the Breeder and consistent with the maintenance plan
Authorised Certified (AC) Seed	Certified seed that the Certification Agency can authorise for further multiplication based on high genetic purity in the absence of suitable Basic Seed
Authorised Officer	means an officer of the Agency Authorised by the Director General of the Department of Primary Industries and Regional Development
Authorised Sampler	(AS) a person trained according to a nationally agreed standard, Authorised by STAC and recognised as eligible to sample certified seed
Authorised Seed Processor	(ASP) the seed processing operation Authorised by STAC to process, package, and label certified seed
Basic seed	derived from areas sown with Breeders or Pre-Basic seed and produced under the co-responsibility of the Breeder and STAC
Breeders seed	the nucleus material grown by the plant Breeder
C1	Certified First Generation (C1) seed is seed derived from areas sown with Basic seed
C2	Certified Second Generation (C2) seed is seed derived from areas sown with Basic seed or Certified 1st generation (C1) seed Authorised for re-sowing

Certification Agency	means DDLS Seed Testing and Certification (STAC) who is an Agency Authorised by the Australian Seeds Authority to deliver seed certification schemes in Australia.
DAFF	Department of Agriculture, Fisheries and Forestry (Commonwealth Government)
Inspector	means a person nominated by an Authorised Officer
ISTA	means the International Seed Testing Association
LGCS	means Limited Generation Certification Scheme
Maintainer	means a person or organisation responsible for the breeding and/or maintenance of a variety. A list of maintainers can be found on the ASA National list of plant varieties eligible for seed certification in Australia
OECD	means the Organisation for Economic Co-operation and Development
Other seed	means seed of any species other than that of the species being certified
Owner	includes a lessee and a property manager but not a contractor
Person	includes a registered partnership of two or more people operating from one address but not a private agreement between two or more people operating from different addresses
Pre-Basic seed	means seed grown from areas sown with Breeders seed and produced under the supervision of the Breeder and/or STAC
Provisional seed	Seed lots eligible for certification where only the germination standards have not been met due to a high level of hard seededness.
RAN	Registered Area Number is a unique 5 digit code allocated to a crop for the purpose of traceability. It relates to a single crop in a paddock for 1 season
Seed lot	means a quantity of seed, being part or all of a seed line, presented for inspection and testing at one time and harvested from a single registered area on a property
Seed Testing Station	means the Seed Testing Station of the Department of Primary Industries and Regional Development
STAC	means DDLS Seed Testing and Certification (STAC). A project under the DPIRD Diagnostic Laboratory Services

(DDLS) business unit of the Department of Primary Industries and Regional Development, responsible for delivering seed certification schemes and seed testing

5. Application for property inspection

- 5.1. Any property owner may apply for registration of crops or pasture for the purpose of producing certified seed of species and varieties for which schemes have been approved. However, an Authorised Officer may refuse registration if a person has failed in the past to abide by the conditions detailed in these Rules.
- 5.2. Applications for certification of varieties will be accepted if the variety appears on the Australian Seeds Authority (ASA) National List of Plant Varieties Eligible for Certification in Australia. However, applications for Authorised Breeders seed will be accepted.
- 5.3. Applications must be made on Form 501 (available on our website or on request) and must be forwarded each year to reach the Agency by August 31, unless special approval is given by an Authorised Officer. A separate form shall be used for each and every property for which an application is made.
- 5.4. The following information is required on each application for registration:
 - Name of property owner
 - Postal address
 - Licensee (if applicable)
 - Payee (person responsible for all charges)
 - Physical address of property
 - Variety/ies to be inspected
 - Field history, including the source of seed used for sowing (refer to appropriate scheme for specific requirements)
 - Seed production class (generation of production for the current season)
 - A detailed farm plan with site details drawn to scale and suitable for use as a master plan for current and future sowings must be attached
 - Signature and postal address of the applicant, who shall be the property owner or lessee
- 5.5. Applications may be withdrawn only in writing and providing the property has not been inspected and the inspector can be contacted. Withdrawal will be accepted by telephone providing written advice follows.
- 5.6. Late applications will be accepted if convenient to the Agency and may be subject to a late fee.

6. Property inspection

- 6.1. Each property for which application has been made will be visited by an inspector at the appropriate stage or stages of crop growth.
- 6.2. The area must be reasonably accessible to the inspector.
- 6.3. The condition of the crop or pasture must enable a satisfactory inspection to be made.
- 6.4. Where inspection is requested for only part of a larger area, each separate area must be clearly defined by some physical means, e.g. A line of pegs, a fence, or a contour bank. Areas which are not clearly defined will not be inspected or certified.
- 6.5. The Agency reserves the right to inspect crops only in those zones and circumstances in which it is considered the schemes can be satisfactorily and conveniently implemented.
- 6.6. For each particular variety the area submitted for inspection must, in the opinion of the inspector, be capable of producing seed containing not less than the minimum varietal purity laid down in the individual crop standards.
- 6.7. Areas may be rejected where found to contain plants, the seeds of which are prohibited or declared under the BAM Act. The status of organisms under the BAM Act is listed on the Western Australia Organism List.
- 6.8. Crops may be rejected if the inspector is satisfied that the incidence of one or more diseases or weeds is such as to adversely affect the quality of the seed.

7. Crop registration

- 7.1. Advice regarding the result of the inspection will be forwarded to each applicant soon after property inspection.
- 7.2. A unique Registered Area Number (RAN) will be allocated to each defined area. The RAN will be comprised of a unique five digit number and forms part of the identification process.
- 7.3. Registration applies for one season only.

8. Subterranean clover and similar species

OECD Seed Schemes include a scheme for 'Subterranean Clover and Similar Species'. It covers varieties of self-pollinating annual legume herbage plants that have genetic stability in the region of seed production.

Because the varieties of subterranean clover and similar species are self-seeding with variable dormancy periods it is often not possible to determine the generation of the seed being harvested as they may be a mixture of generations.

Species eligible for the 'Subterranean Clover and Similar Species' scheme include but are not limited to:

- Subterranean clover (*Trifolium subterraneum*)
- Biserrula (*Biserrula pelecinus*)
- Bladder clover (*Trifolium spumosum*)
- Annual medics (*Medicago* sp.)
- Yellow serradella (*Ornithopus compressus*)

Varieties within the 'Subterranean Clover and Similar Species' scheme are defined in two ways. Varieties that are visually indistinguishable are certified under the Limited Generation Certification Scheme (LGCS) and those that are visually distinguishable are certified under an Open Certification Scheme.

8.1. Limited Generation Certification Scheme (LGCS)

The Limited Generation Certification Scheme is a seed scheme for the production of visually indistinguishable varieties of eligible species. The scheme is intended to ensure varietal integrity through limiting the number of generations permitted from Basic Seed or Authorised Certified seed.

8.1.1. Seed for sowing

- To participate in the scheme a producer must sow seed approved for the purpose. Basic seed or Authorised Certified seed will normally be required to be sown.
- Authorised Certified seed meeting the physical certification standards may be labelled with appropriate certified seed labels and is suitable for further production of certified seed.

8.1.2. Unsown strip

- At the time of sowing Basic or Authorised Certified (AC) seed producers must leave an unsown strip in the paddock. The strip must be approximately three metres wide and form a circuit of the paddock one-third of the way into the pasture.
- Failure to leave an adequate unsown strip, or the use of unauthorised treatments specifically on the strip, may render the crop ineligible for certification.

8.1.3. Application for property inspection

- Applications for first year sowings must be accompanied with the bag labels of the seed sown and/or a list of the seed lot codes and bag label numbers.
- Sowing date and seeding rate must be detailed for each first year crop.

8.1.4. Crop designation and stand life

- A maximum of four harvests of Certified seed is permitted from Basic seed or crops established with Authorised Certified seed.
- The certification authority reserves the right to increase the number of successive generations permitted for a particular crop where the crop is likely to continue to meet certification standards. Certification on this basis may require confirmation tests to be conducted, at the growers cost, to determine varietal purity.

8.2. Open Certification Scheme

Varieties of eligible species may be certified under the Open Certification scheme if it is possible to visually identify the variety as different from all others that are grown in the region. Refer to Appendix 1 for individual crop standards.

9. Seed harvest

- 9.1. STAC must be notified at least five working days before harvesting any crops eligible to produce Pre-Basic seed. An Authorised Officer may arrange to inspect harvesting machinery, storage containers and seed transfer equipment prior to harvest.
- 9.2. Certified seed may be produced only from areas of crops that have been allocated a Registered Area Number.
- 9.3. All equipment must be thoroughly cleaned before commencing the harvest of each separate registered area. This is particularly important where different varieties are involved.
- 9.4. Harvesting must be carried out in a manner that will avoid varietal contamination of the seed crop.
- 9.5. If, in the opinion of an inspector, insufficient care has been taken, the harvested seed may not be certified.
- 9.6. Harvested seed awaiting treatment must be placed in sound, clean, adequately marked storage containers. Either bags or bulk storage may be used. Each container of seed must be closed and identified with its variety, and registered area number. Bulk storage bins must be well constructed and of a design acceptable to an Authorised Officer.
- 9.7. Seed must be delivered to an Authorised Seed Processor (ASP) and accompanied by a declaration signed by the grower. The declaration must be on the form 'Request and Authority for Seed Certification' (Form 702).

10. Seed processing

- 10.1. Seed may be submitted for processing only at a Seed Processor Authorised for that purpose by STAC and must be processed in accordance with the Authorised Seed Processors manual. Authorised Seed Processors are audited annually by an officer from STAC.
- 10.2. To identify the source of seed presented for processing and certification it is necessary for a declaration to be made on the official 'Request and Authority for Seed Certification' form (Form 702).
 - The first section of the form (Part A) must be signed by the person who accepts responsibility for the payment of certification charges.
 - The second section of the form (Part B) must be signed by the owner of the property from which the seed was harvested, or by a person approved by the Authorised Officer.
 - The third section of the form (Part C) must be signed by the supervisor in charge of the seed processing plant where the seed was processed, stating that the quantity of seed described is all or part of the line referred to in the second section of the declaration.
 - The fourth section of the form (Part D) must be signed by the Authorised Sampler responsible for drawing the sample.
- 10.3. All lines of uncleaned seed consigned to a seed processor must be accompanied by a declaration form with the first and second sections completed.
- 10.4. STAC must be notified before cleaning any seed lines eligible to produce Pre-Basic or Basic seed. An Authorised Officer may arrange to inspect cleaning machinery, storage containers and seed transfer equipment prior to processing.
- 10.5. Seed should be processed to the highest standard possible consistent with the impurities present and, in any case, shall conform to the requirements detailed for that particular species set out in the individual crop standards (see Appendices 1 and 2).
- 10.6. Certified seed must be packed into new, clean bags. Each bag must be affixed with the appropriate OECD or domestic certified seed label.

- 10.7. All certified seed lots will be allocated a unique seed lot code by the ASP. The seed lot code will comprise:
- Four letters: AUS/W/ - national cypher for certified seed produced in Western Australia
 - Two numerals: The season of seed testing, represented by the last two digits of the year ending June 30
 i.e. for 2024/2025 would be 25
 - Two letters: The ASP ID cypher as registered with the ASA, i.e. AA
 - Series of numerals: A consecutive seed lot number, i.e. 001, 002, 003
 - For example: **AUS/W/25AA001**
- 10.8. The seed lot code shall be marked on each bag in capital letters and numbers and visible when stacked on a pallet.
- 10.9. Seed lots rejected for certification must have the tags removed, recorded and returned to STAC. Seed lots may be regraded and packed in the same bags. The seed lot code shall be extended to include the number of times regraded and packed, i.e. /1, /2, etc.

11. Seed sampling and testing

- 11.1. Processed seed will not be tested until a completed declaration for each seed lot presented is received by the Seed Testing Station (Form 702).
- 11.2. The sampling of seed lots must be undertaken manually or automatically under the supervision of an Authorised Sampler who has been trained by STAC. Authorised Samplers agree to follow the procedures and standards as documented in the ASA Sampling Manual.
- 11.3. Manual sampling of processed seed may only be done by Authorised Samplers. The manual sampling process is audited according to the requirements outlined in the manual by an Authorised Officer from STAC to ensure compliance.
- 11.4. Automatic seed sampling devices and their operation must be approved by an Authorised Officer in accordance with the ASA Sampling Manual before samples taken will be allowed for certification.
- 11.5. Each container from which a seed sample has been taken by an automatic sampling device will be closed by the ASP supervisor as soon as reasonably convenient by sewing into the container a label provided by an inspector for the purpose of identifying the seed in the container.
- 11.6. Bulk silo containers must be clearly numbered and the number recorded on the declaration covering the seed lots so enclosed.
- 11.7. Each seed lot will be tested once except when its character has been changed by further treatment, in which case it will be given a new seed lot code and re-sampled.
- 11.8. Samples will be officially tested for pure seed content and germination at the Seed Testing Station and may also be examined for varietal purity.
- 11.9. Seed awaiting clearance must remain in the ASP where it was processed unless special arrangements have been made with an Authorised Officer.

- 11.10. At all stages between seed harvesting and the official release of seed, precautions must be taken to maintain the condition of the seed and avoid any contamination likely to impair its quality.
- 11.11. Testing of processed seed may be refused or labels may be removed from bags awaiting certification where adequate safeguards have not been taken to prevent contamination prior to, or in the course of processing or handling the seed.
- 11.12. A seed lot is not deemed to be certified unless it meets the standards of purity and germination applicable to particular species and varieties detailed under these Rules and until it is contained in a sewn or otherwise closed container bearing appropriate certification labels.
- 11.13. Where certified seed is to be re-packed in smaller packages than those in which the seed was originally packed, the lot may be repacked and relabelled in accordance with the Authorised Seed Processors manual.
- 11.14. Seed lots that have been rejected for certification must have the labels removed. The labels must be clearly marked with label range and related seed lot code and returned to STAC.

12. Finalising certification

A number of different steps are taken by STAC to ensure varietal purity and standards for certification are met by seed lots.

12.1. Seed analysis certificate

After official purity and germination tests have been completed a 'Seed Analysis Certificate' will be issued for every seed lot. This will be forwarded to the person responsible for the payment of certification fees as declared.

The person responsible for certification charges, may request a copy of a certificate to be provided to a third party.

12.2. Provisional certification

Provisional certification of seed lots where only the germination standards have not been met due to a high level of hard seededness. In these instances, the seed lot can only be used by the seed producer and a yellow provisional seed tag will be issued and sown into bags of the seed lot.

12.3. Post Control Testing

Conducted to audit the overall seed certification process and its ability to maintain high standards of varietal purity.

A portion of seed drawn from the official sample submitted for final certification will be used to conduct post control testing at a rate not less than that prescribed by the Australian Seeds Authority.

13. Legislation and the Australian Seed Federation Code of Practice

The sale of certified seed in Australia must comply with any applicable State or Territory legislation and / or the Australian Seed Federation National Code of Practice for Seed Labelling and Marketing. The Code of Practice is available from the [ASF website](http://www.asf.asn.au): www.asf.asn.au

Where varieties are registered under the Australian Plant Breeder's Rights Act (1994), STAC may provide details of crops and seed lots produced to the plant breeder, owner and/or maintainer of the variety to maintain intellectual property (IP) rights beholden to them.

IP Australia website: <https://www.ipaustralia.gov.au/plant-breeders-rights>

14. Explanatory notes

Participants should be warned that the Department of Primary Industries and Regional Development will take civil action to recover outstanding monies from any person who fails to pay within 90 days, fees raised by the Agency for participation in any of these schemes.

There may be occasions when participants in these schemes require explanations of the results of services associated with the schemes, to be provided by the Agency. Participants are strongly urged to raise such matters as soon as possible and preferably within six months of the completion of services, to facilitate prompt resolution of issues.

15. Fees, charges and levies

The fees and charges relating to participation in seed certification schemes and seed testing are published annually by the Department of Primary Industries and Regional Development. Contact STAC for current fees.

In addition to certification and seed testing service fees, STAC collects industry fees and levies.

The Australian Seeds Authority applies fees for hectares certified, tonnes produced, issuance of ISTA certificates and the authorisation of seed processors and seed samplers. These fees are reviewed annually on 1st of October and are available from the Australian Seeds Authority website.

Agrifutures Australia (formerly known as Rural Industries Research and Development Corporation (RIRDC)) manage a Commonwealth Pasture Seed Levy which is collected by STAC on certain species. These levies are collected and returned to the Levies Revenue Service (DAFF). More information can be sourced from the [LRS website](https://www.agriculture.gov.au/ag-farm-food/levies/rates#field-crops): <https://www.agriculture.gov.au/ag-farm-food/levies/rates#field-crops>

Appendix 1 - Individual crop standards for pasture legumes

The following individual crop standards outline the requirements for certified crops and standards for certified seed lots for each pasture legume species

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1.1. Annual medic – Distinguishable (*Medicago* spp.)

To be read in conjunction with Rule 8.2 - Open Certification Scheme.

Varieties eligible

For a variety to be eligible for this scheme, it must be visually distinguishable from all other annual medic varieties. Contact STAC for further information.

Seed source

Pre-Basic seed is eligible to produce Basic seed.

No specific seed source is required to produce Certified seed although the use of a seed lot approved by STAC is recommended.

Field history

It is recommended that no annual medic plants have been present on the area sown during the previous three years. Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Varietal purity
Basic seed (minimum)	99.5%
Authorised Certified seed (minimum)	98.0%
Certified seed (minimum)	95.0%

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	99.0%	98.0%
Germination (minimum % by count)	70%	70%
Other Seed (maximum % by mass)	0.2%*	2.0%**

* Nominated species – Burr medic (see explanatory note 3 in Appendix 4)

**Of which no single species (other than Burr medic) shall be greater than 0.5%

1.2. Annual medic – Indistinguishable (*Medicago* spp.)

To be read in conjunction with Rule 8.1- Limited Generation Certification Scheme.

Varieties eligible

Many medic varieties are visually indistinguishable. For clarification of the suitable scheme for your variety and situation contact STAC.

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history

No annual medic plants have been present on the area sown during the previous three years. Successive crops of the same variety and category may be grown on the same field without any time interval.

Unsown strip

For new plantings an unsown strip must be left (Rule 8.1.2)

Isolation requirement	Basic Seed	Certified seed
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Varietal purity
Basic seed (minimum)	99.5%
Authorised Certified seed (minimum)	98.0%
Certified seed (minimum)	95.0%

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	99.0%	98.0%
Germination (minimum % by count)	70%	70%
Other Seed (maximum % by mass)	0.2%*	2.0%**

* Nominated species – Burr medic (see explanatory note 3 in Appendix 4)

**Of which no single species (other than Burr medic) shall be greater than 0.5%

1.3. Arrowleaf clover (*Trifolium vesiculosum*)

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history

Field must not have grown or been sown to Arrowleaf clover during the previous three years. Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
Arrowleaf clover plants from non-approved seed sources for crops greater than 2ha	100m	50m
Arrowleaf clover plants from non-approved seed sources for crops smaller than 2ha	200m	100m
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Basic Seed	Certified seed
Off-types or other varieties of Arrowleaf clover	1 per 30 m ²	1 per 10 m ²
Plants of other species, the seeds of which are difficult to distinguish from the variety being certified in a laboratory test, or which will easily cross-pollinate with the crop being grown for seed	1 per 30 m ²	1 per 10 m ²

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	99.0%	98.0%
Germination (minimum % by count)	60%	60%
Other Seed (maximum % by mass)	1.0%*	1.0%

* Nominated species – other *Trifolium* spp. (see explanatory note 3 in Appendix 4)

1.4. Balansa clover (*Trifolium michelianum*)

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history

Field must not have grown or been sown to Balansa clover during the previous three years. Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
Balansa clover plants from non-approved seed sources for crops greater than 2ha	100m	50m
Balansa clover plants from non-approved seed sources for crops smaller than 2ha	200m	100m
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Basic Seed	Certified seed
Off-types or other varieties of Balansa clover	1 per 30 m ²	1 per 10 m ²
Plants of other species, the seeds of which are difficult to distinguish from the variety being certified in a laboratory test, or which will easily cross-pollinate with the crop being grown for seed	1 per 30 m ²	1 per 10 m ²

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	99.0%	98.0%
Germination (minimum % by count)	65%	65%
Other Seed (maximum % by mass)	0.2%*	1.0%

* Nominated species – other *Trifolium* spp. (see explanatory note 3 in Appendix 4)

1.5. **Biserrula** (*Biserrula pelecinus*)

To be read in conjunction with Rule 8.1- Limited Generation Certification Scheme.

Varieties eligible

All varieties of Biserrula are currently under the Limited Generation Certification Scheme.

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history

No Biserrula plants have been present on the area sown during the previous three years. Successive crops of the same variety and category may be grown on the same field without any time interval.

Unsown strip

For new plantings an unsown strip must be left (Rule 8.1.2)

Isolation requirement	Basic Seed	Certified seed
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Varietal purity
Basic seed (minimum)	99.5%
Authorised Certified seed (minimum)	98.0%
Certified seed (minimum)	95.0%

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	98.0%	98.0%
Germination (minimum % by count)	70%	70%
Other Seed (maximum % by mass)	0.5%	0.5%

1.6. Bladder clover (*Trifolium spumosum*)

To be read in conjunction with Rule 8.1- Limited Generation Certification Scheme.

Varieties eligible

Currently there is only 1 variety of Bladder clover.

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history

No Bladder clover plants have been present on the area sown during the previous three years. Successive crops of the same variety and category may be grown on the same field without any time interval.

Unsown strip

For new plantings an unsown strip must be left (Rule 8.1.2)

Isolation requirement	Basic Seed	Certified seed
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Varietal purity
Basic seed (minimum)	99.5%
Authorised Certified seed (minimum)	98.0%
Certified seed (minimum)	95.0%

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	99.0%	98.0%
Germination (minimum % by count)	70%#	70%#
Other Seed (maximum % by mass)	1.0%*	1.0%

* Nominated species – other *Trifolium* spp. (see explanatory note 3 in Appendix 4)

Including maximum 20% Hard Seed

1.7. Crimson clover (*Trifolium incarnatum*)

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history

Field must not have grown or been sown to Crimson clover during the previous three years. Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
Crimson clover plants from non-approved seed sources for crops greater than 2ha	100m	50m
Crimson clover plants from non-approved seed sources for crops smaller than 2ha	200m	100m
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Basic Seed	Certified seed
Off-types or other varieties of Crimson clover	1 per 30 m ²	1 per 10 m ²
Plants of other species, the seeds of which are difficult to distinguish from the variety being certified in a laboratory test, or which will easily cross-pollinate with the crop being grown for seed	1 per 30 m ²	1 per 10 m ²

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	98.0%	98.0%
Germination (minimum % by count)	65%	65%
Other Seed (maximum % by mass)	1.0%*	1.0%

* Nominated species – other *Trifolium* spp. (see explanatory note 3 in Appendix 4)

1.8. Eastern star clover (*Trifolium dasyurum*)

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history

Field must not have grown or been sown to Eastern star clover during the previous three years. Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
Eastern star clover plants from non-approved seed sources for crops greater than 2ha	100m	50m
Eastern star clover plants from non-approved seed sources for crops smaller than 2ha	200m	100m
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Basic Seed	Certified seed
Off-types or other varieties of Eastern star clover	1 per 30 m ²	1 per 10 m ²
Plants of other species, the seeds of which are difficult to distinguish from the variety being certified in a laboratory test, or which will easily cross-pollinate with the crop being grown for seed	1 per 30 m ²	1 per 10 m ²

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	98.0%	98.0%
Germination (minimum % by count)	65%	65%
Other Seed (maximum % by mass)	1.0%*	1.0%

* Nominated species – other *Trifolium* spp. (see explanatory note 3 in Appendix 4)

1.9. French serradella (*Ornithopus sativus*)

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history

Field must not have grown or been sown to French serradella during the previous three years. Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
French serradella plants from non-approved seed sources for crops greater than 2ha	100m	50m
French serradella plants from non-approved seed sources for crops smaller than 2ha	200m	100m
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Basic Seed	Certified seed
Off-types or other varieties of French serradella	1 per 30 m ²	1 per 10 m ²
Plants of other species, the seeds of which are difficult to distinguish from the variety being certified in a laboratory test, or which will easily cross-pollinate with the crop being grown for seed	1 per 30 m ²	1 per 10 m ²

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	90.0%	90.0%
Germination (minimum % by count)	75% [#]	75% [#]
Other Seed (maximum % by mass)	1.0%	1.0%

[#] Including Hard Seed

1.10. Gland clover (*Trifolium glanduliferum*)

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history

Field must not have grown or been sown to Gland clover during the previous three years. Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
Gland clover plants from non-approved seed sources for crops greater than 2ha	100m	50m
Gland clover plants from non-approved seed sources for crops smaller than 2ha	200m	100m
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Basic Seed	Certified seed
Off-types or other varieties of Gland clover	1 per 30 m ²	1 per 10 m ²
Plants of other species, the seeds of which are difficult to distinguish from the variety being certified in a laboratory test, or which will easily cross-pollinate with the crop being grown for seed	1 per 30 m ²	1 per 10 m ²

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	98.0%	98.0%
Germination (minimum % by count)	65%	65%
Other Seed (maximum % by mass)	1.0%*	1.0%

* Nominated species – other *Trifolium* spp. (see explanatory note 3 in Appendix 4)

1.11. Lucerne (*Medicago sativa*)

Seedling inspection

A completed Application form must be lodged with the Agency at least 30 days before initial land preparation is commenced. A seedling inspection will be conducted for regenerating paddocks to establish the seedling percentage.

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history

Field must not have grown or been sown to Lucerne during the previous three years. Successive crops of the same variety and category may be grown on the same field with a minimum 1 year interval. New crops that contain mature plants at the seedling inspection will be rejected.

Isolation requirement	Basic Seed	Certified seed
Lucerne plants from non-approved seed sources for crops greater than 2ha	100m	50m
Lucerne plants from non-approved seed sources for crops smaller than 2ha	200m	100m
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Basic Seed	Certified seed
Off-types or other varieties of Lucerne	1 per 30 m ²	1 per 10 m ²
Seed produced from regenerated seedlings in the second and subsequent years (maximum)	Nil	15%
Plants of other species, the seeds of which are difficult to distinguish from the variety being certified in a laboratory test, or which will easily cross-pollinate with the crop being grown for seed	1 per 30 m ²	1 per 10 m ²

Stand life	Basic Seed	Certified seed
Maximum number of years	3	6

Where Basic seed crops are downgraded, certified seed may be produced for a further 3 years. A Lucerne crop that has thinned out significantly in a regenerating year may be rejected from certification.

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	99.0%	98.0%
Germination (minimum % by count)	70% [#]	70% [#]
Other Seed (maximum % by mass)	0.2%	0.5%

[#] Including Hard Seed

1.12. Purple clover (*Trifolium purpureum*)

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history

Field must not have grown or been sown to Purple clover during the previous three years. Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
Purple clover plants from non-approved seed sources for crops greater than 2ha	100m	50m
Purple clover plants from non-approved seed sources for crops smaller than 2ha	200m	100m
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Basic Seed	Certified seed
Off-types or other varieties of Purple clover	1 per 30 m ²	1 per 10 m ²
Plants of other species, the seeds of which are difficult to distinguish from the variety being certified in a laboratory test, or which will easily cross-pollinate with the crop being grown for seed	1 per 30 m ²	1 per 10 m ²

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	98.0%	98.0%
Germination (minimum % by count)	65%	65%
Other Seed (maximum % by mass)	1.0%*	1.0%

* Nominated species – other *Trifolium* spp. (see explanatory note 3 in Appendix 4)

1.13. Red clover (*Trifolium pratense*)

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history

Field must not have grown or been sown to Red clover during the previous three years. Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
Red clover plants from non-approved seed sources for crops greater than 2ha	100m	50m
Red clover plants from non-approved seed sources for crops smaller than 2ha	200m	100m
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Basic Seed	Certified seed
Off-types or other varieties of Red clover	1 per 30 m ²	1 per 10 m ²
Plants of other species, the seeds of which are difficult to distinguish from the variety being certified in a laboratory test, or which will easily cross-pollinate with the crop being grown for seed	1 per 30 m ²	1 per 10 m ²

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	99.0%	97.0%
Germination (minimum % by count)	60%	60%
Other Seed (maximum % by mass)	0.2%*	0.5%

* Nominated species – other *Trifolium* spp. (see explanatory note 3 in Appendix 4)

1.14. Rose clover (*Trifolium hirtum*)

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history

Field must not have grown or been sown to Rose clover during the previous three years. Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
Rose clover plants from non-approved seed sources for crops greater than 2ha	100m	50m
Rose clover plants from non-approved seed sources for crops smaller than 2ha	200m	100m
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Varietal purity
Basic seed (minimum)	99.5%
First generation seed for further multiplication (minimum)	98.0%
Certified seed (minimum)	95.0%

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	98.0%	98.0%
Germination (minimum % by count)	70 %	70%
Other Seed (maximum % by mass)	1.0%*	1.0%

* Nominated species – other *Trifolium* spp. (see explanatory note 3 in Appendix 4)

1.15. Persian clover (*Trifolium resupinatum*)

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history

Field must not have grown or been sown to Persian clover during the previous three years. Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
Persian clover plants from non-approved seed sources for crops greater than 2ha	100m	50m
Persian clover plants from non-approved seed sources for crops smaller than 2ha	200m	100m
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Basic Seed	Certified seed
Off-types or other varieties of Persian clover	1 per 30 m ²	1 per 10 m ²
Plants of other species, the seeds of which are difficult to distinguish from the variety being certified in a laboratory test, or which will easily cross-pollinate with the crop being grown for seed	1 per 30 m ²	1 per 10 m ²

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	99.0%	98.0%
Germination (minimum % by count)	60%	60%
Other Seed (maximum % by mass)	0.2%*	1.0%

* Nominated species – other *Trifolium* spp. (see explanatory note 3 in Appendix 4)

1.16. Slender serradella (*Ornithopus pinnatus*)

To be read in conjunction with Rule 8.1- Limited Generation Certification Scheme.

Varieties eligible

All varieties of Slender serradella are currently under the Limited Generation Certification Scheme.

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history

No Slender serradella plants have been present on the area sown during the previous three years. Successive crops of the same variety and category may be grown on the same field without any time interval.

Unsown strip

For new plantings an unsown strip must be left (Rule 8.1.2)

Isolation requirement	Basic Seed	Certified seed
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Varietal purity
Basic seed (minimum)	99.5%
Authorised Certified seed (minimum)	98.0%
Certified seed (minimum)	95.0%

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	90.0%	90.0%
Germination (minimum % by count)	75% [#]	75% [#]
Other Seed (maximum % by mass)	1.0%	1.0%

[#]Including Hard Seed

1.17. Strawberry clover (*Trifolium fragiferum*)

Seedling inspection

A completed Application form must be lodged with the Agency at least 30 days before initial land preparation is commenced. A seedling inspection will be conducted for regenerating paddocks to establish the seedling percentage.

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history

Field must not have grown or been sown to Strawberry clover during the previous three years. Successive crops of the same variety and category may be grown on the same field with a minimum 1 year interval. New crops that contain mature plants at the seedling inspection will be rejected.

Isolation requirement	Basic Seed	Certified seed
Strawberry clover plants from non-approved seed sources for crops greater than 2ha	100m	50m
Strawberry clover plants from non-approved seed sources for crops smaller than 2ha	200m	100m
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Basic Seed	Certified seed
Off-types or other varieties of Strawberry clover	1 per 30 m ²	1 per 10 m ²
Seed produced from regenerated seedlings in the second and subsequent years (maximum)	Nil	15%
Plants of other species, the seeds of which are difficult to distinguish from the variety being certified in a laboratory test, or which will easily cross-pollinate with the crop being grown for seed	1 per 30 m ²	1 per 10 m ²

Stand life	Basic Seed	Certified seed
Maximum number of years	3	6

Where Basic seed crops are downgraded, certified seed may be produced for a further 3 years. A Strawberry clover crop that has thinned out significantly in a regenerating year may be rejected from certification.

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	99.0%*	98.0%
Germination (minimum % by count)	70% [#]	70% [#]
Other Seed (maximum % by mass)	0.3%	1.0%

* Nominated species – other *Trifolium* spp. (see explanatory note 3 in Appendix 4)

[#] Including maximum 20% Hard Seed

1.18. Subterranean clover - Distinguishable (*Trifolium subterraneum*)

To be read in conjunction with Rule 8.2 - Open Certification Scheme.

Varieties eligible

For a variety to be eligible for this scheme, it must be visually distinguishable from all other Subterranean clover varieties. Contact STAC for further information.

Seed source

Pre-Basic seed is eligible to produce Basic seed.

No specific seed source is required to produce Certified seed although the use of a seed lot approved by STAC is recommended.

Field history

It is recommended that no Subterranean clover plants have been present on the area sown during the previous three years. Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Varietal purity
Basic seed (minimum)	99.5%
Authorised Certified seed (minimum)	98.0%
Certified seed (minimum)	95.0%

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	99.0%	98.0%
Germination (minimum % by count)	70% [#]	70% [#]
Other Seed (maximum % by mass)	0.1%	0.5%

[#]Including maximum 20% Hard Seed

1.19. Subterranean clover - Indistinguishable (*Trifolium subterraneum*)

To be read in conjunction with Rule 8.1- Limited Generation Certification Scheme.

Varieties eligible

Many Subterranean clover varieties are visually indistinguishable in the field. For clarification of the suitable scheme for your variety, contact STAC.

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history

No Subterranean clover plants have been present on the area sown during the previous three years. Successive crops of the same variety and category may be grown on the same field without any time interval.

Unsown strip

For new plantings an unsown strip must be left (Rule 8.1.2)

Isolation requirement	Basic Seed	Certified seed
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Varietal purity
Basic seed (minimum)	99.5%
Authorised Certified seed (minimum)	98.0%
Certified seed (minimum)	95.0%

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	99.0%	98.0%
Germination (minimum % by count)	70% [#]	70% [#]
Other Seed (maximum % by mass)	0.1%	0.5%

[#]Including maximum 20% Hard Seed

1.20. Sulla (*Hedysarum coronarium*)

Seedling inspection

A completed Application form must be lodged with the Agency at least 30 days before initial land preparation is commenced. A seedling inspection will be conducted for regenerating paddocks to establish the seedling percentage.

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history

Field must not have grown or been sown to Sulla during the previous three years. Successive crops of the same variety and category may be grown on the same field with a minimum 1 year interval. New crops that contain mature plants at the seedling inspection will be rejected.

Isolation requirement	Basic Seed	Certified seed
Sulla plants from non-approved seed sources for crops greater than 2ha	100m	50m
Sulla plants from non-approved seed sources for crops smaller than 2ha	200m	100m
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Basic Seed	Certified seed
Off-types or other varieties of Sulla	1 per 30 m2	1 per 10 m2
Seed produced from regenerated seedlings in the second and subsequent years (maximum)	Nil	15%
Plants of other species, the seeds of which are difficult to distinguish from the variety being certified in a laboratory test, or which will easily cross-pollinate with the crop being grown for seed	1 per 30 m2	1 per 10 m2

Stand life	Basic Seed	Certified seed
Due to the biennial and outcrossing nature of Sulla, only one regeneration year is permitted.	2	1

Where Basic seed crops are downgraded, certified seed may be produced for a further 1 year. A Sulla crop that has thinned out significantly in a regenerating year may be rejected from certification.

Seed Standards	Certified seed
Pure Seed (minimum % by mass)	90.0%
Germination (minimum % by count)	65%
Other Seed (maximum % by mass)	1.0%

1.21. Tedera (*Bituminaria bituminosa*)

Seed source

Breeders and Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history

Field must not have grown or been sown to Tedera during the previous three years. Successive crops of the same variety and category may be grown on the same field with a minimum 1 year interval.

Isolation requirement	Crops less than 2ha	Crops greater than 2ha
Tedera plants from non-approved seed sources	200m	100m
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Basic Seed	Certified seed
Off-types or other varieties of Tedera	1 per 30 m ²	1 per 10 m ²
Plants of other species, the seeds of which are difficult to distinguish from the variety being certified in a laboratory test, or which will easily cross-pollinate with the crop being grown for seed	1 per 30 m ²	1 per 10 m ²

Stand life	Basic Seed	Certified seed
Maximum number of years	3	4

Where Basic seed crops are downgraded, certified seed may be produced for a further 3 years. A Tedera crop that has thinned out significantly in a regenerating year may be rejected from certification.

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	98.0%	96.0%
Germination (minimum % by count)	50% [#]	45% [#]
Other Seed (maximum % by mass)	0.2%	0.5%

[#]Including hard seed

1.22. *Trigonella* (*Trigonella balansae*)

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history

Field must not have grown or been sown to *Trigonella balansae* during the previous three years. Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
<i>Trigonella</i> spp. plants from non-approved seed sources for crops greater than 2ha	100m	50m
<i>Trigonella</i> spp. plants from non-approved seed sources for crops smaller than 2ha	200m	100m
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Basic Seed	Certified seed
Off-types or other varieties of <i>Trigonella</i> spp.	1 per 30 m ²	1 per 10 m ²
Plants of other species, the seeds of which are difficult to distinguish from the variety being certified in a laboratory test, or which will easily cross-pollinate with the crop being grown for seed	1 per 30 m ²	1 per 10 m ²

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	99.0%	98.0%
Germination (minimum % by count)	70% [#]	70% [#]
Other Seed (maximum % by mass)	1.0%	1.0%

[#] Including Max 20% Hard Seed.

1.23. Yellow serradella (*Ornithopus compressus*)

To be read in conjunction with Rule 8.1- Limited Generation Certification Scheme.

Varieties eligible

All varieties of Yellow serradella are currently under the Limited Generation Certification Scheme.

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history

No Yellow serradella plants have been present on the area sown during the previous three years. Successive crops of the same variety and category may be grown on the same field without any time interval.

Unsown strip

For new plantings an unsown strip must be left (Rule 8.1.2)

Isolation requirement	Basic Seed	Certified seed
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Varietal purity
Basic seed (minimum)	99.5%
Authorised Certified seed (minimum)	98.0%
Certified seed (minimum)	95.0%

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	90.0%	90.0%
Germination (minimum % by count)	75% [#]	75% [#]
Other Seed (maximum % by mass)	1.0%	1.0%

[#]Including Hard Seed

1.24. White clover (*Trifolium repens*)

Seedling inspection

A completed Application form must be lodged with the Agency at least 30 days before initial land preparation is commenced. A seedling inspection will be conducted for regenerating paddocks to establish the seedling percentage.

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history

Field must not have grown or been sown to White clover during the previous three years. Successive crops of the same variety and category may be grown on the same field with a minimum 1 year interval. New crops that contain mature plants at the seedling inspection will be rejected.

Isolation requirement	Basic Seed	Certified seed
White clover plants from non-approved seed sources for crops greater than 2ha	100m	50m
White clover plants from non-approved seed sources for crops smaller than 2ha	200m	100m
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Basic Seed	Certified seed
Off-types or other varieties of White clover	1 per 30 m ²	1 per 10 m ²
Seed produced from regenerated seedlings in the second and subsequent years (maximum)	Nil	15%
Plants of other species, the seeds of which are difficult to distinguish from the variety being certified in a laboratory test, or which will easily cross-pollinate with the crop being grown for seed	1 per 30 m ²	1 per 10 m ²

Stand life	Basic Seed	Certified seed
Maximum number of years	2	4

Where Basic seed crops are downgraded, certified seed may be produced for a further 2 years. A White clover crop that has thinned out significantly in a regenerating year may be rejected from certification.

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	99.0%*	97.0%
Germination (minimum % by count)	60%	60%
Other Seed (maximum % by mass)	0.2%	2.0%

* Nominated species – other *Trifolium* spp. (see explanatory note 3 in Appendix 4)

Appendix 2 - Individual crop standards for field crop species

The following individual crop standards outline the requirements for certified crops and standards for certified seed lots for each field crop species.

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2.1. Barley (*Hordeum vulgare*)

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history	Basic Seed	Certified seed
No Barley to be grown or sown in the previous	3 years	3 years
No other cereals to be grown or sown in the previous	1 year	1 year

Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop standards	Varietal purity
Basic seed (minimum)	99.9%
First generation seed for further multiplication (minimum)	99.8%
Certified seed (minimum)	99.7%

Disease standards

Seed crops may be rejected at field inspection, or after laboratory inspection of harvested seed, if more than the prescribed tolerance of the following diseases is detected:

Disease	Level
Loose smut (<i>Ustilago nuda</i>) (maximum)	0.05%
Covered smut (<i>Ustilago hordei</i>) (maximum)	0.05%

Bulk certification

The producer may store on his property, or other approved site, first generation Certified seed in bulk lots for further production of Certified seed. Such seed shall have been previously processed and sampled at an Authorised Seed Processor.

Seed treatment

Processed seed must be treated with an approved fungicide at an approved application rate unless special arrangements have been made with an Authorised Officer.

Seed standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	99.0%	98.0%
Germination (minimum % by count)	85%	85%
Other Seed (maximum % by mass)	10/kg*	15/kg*

*Nominated species – See table in Appendix 3

2.2. Canola (*Brassica napus var. oleifera*)

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history	Basic Seed	Certified seed
No Brassica or cruciferous crop to be grown or sown in the previous	5 years	3 years

Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
For any plant of canola	400m	200m
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards – varietal purity	Varietal purity
Basic seed (minimum)	99.9%
Certified seed (minimum)	99.7%

Crop Standards – species purity	Basic Seed	Certified seed
Plants of other species, the seeds of which are difficult to distinguish from the variety being certified in a laboratory test, or which will easily cross-pollinate with the crop being grown for seed	1 per 30 m ²	1 per 10 m ²

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	99.0%	99.0%
Germination (minimum % by count)	85%	85%
Other Seed (maximum % by mass)	10/kg*	20/kg*

*Nominated species – See table in Appendix 3

2.3. Chickpea (*Cicer arietinum*)

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history	Basic Seed	Certified seed
No Chickpeas to be grown or sown in the previous	3 years	2 years
No other pulses to be grown or sown in the previous	1 year	1 year

Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
Isolation from all crops shall be sufficient as to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Basic Seed	Certified seed
Off-types or other varieties of Chickpeas	1 per 30 m ²	1 per 10 m ²
Plants of other species, the seeds of which are difficult to distinguish from the variety being certified in a laboratory test, or which will easily cross-pollinate with the crop being grown for seed	1 per 30 m ²	1 per 10 m ²

Bulk certification

The producer may store on his property, or other approved site, first generation Certified seed in bulk lots for further production of Certified seed. Such seed shall have been previously processed and sampled at an Authorised Seed Processor.

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	99.0%	98.0%
Germination (minimum % by count)	70%	70%
Other Seed (maximum % by mass)	10/kg*	15/kg*

*Nominated species – See table in Appendix 3

Disease tests	Requirement
Ascochyta blight (<i>Ascochyta rabiei</i>)	Mandatory
Botrytis grey mould (<i>Botrytis cinerea</i>)	Recommended

2.4. Common oat (*Avena sativa*)

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history	Basic Seed	Certified seed
No Common oat to be grown or sown in the previous	3 years	3 years
No other cereals to be grown or sown in the previous	1 year	1 year

Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop standards	Varietal purity
Basic seed (minimum)	99.9%
First generation seed for further multiplication (minimum)	99.8%
Certified seed (minimum)	99.7%

Disease standards

Seed crops may be rejected at field inspection, or after laboratory inspection of harvested seed, if more than the prescribed tolerance of the following diseases is detected:

Disease	Level
Loose smut (<i>Ustilago avenae</i>) (maximum)	0.05%
Covered smut (<i>Ustilago hordei</i>) (maximum)	0.05%

Bulk certification

The producer may store on his property, or other approved site, first generation Certified seed in bulk lots for further production of Certified seed. Such seed shall have been previously processed and sampled at an Authorised Seed Processor.

Seed treatment

Processed seed must be treated with an approved fungicide at an approved application rate unless special arrangements have been made with an Authorised Officer.

Seed standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	99.0%	98.0%
Germination (minimum % by count)	85%	85%
Other Seed (maximum % by mass)	10/kg*	15/kg*

*Nominated species – See table in Appendix 3

2.5. Common wheat (*Triticum aestivum*)

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history	Basic Seed	Certified seed
No Common wheat to be grown or sown in the previous	3 years	3 years
No other cereals to be grown or sown in the previous	1 year	1 year

Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop standards	Varietal purity
Basic seed (minimum)	99.9%
First generation seed for further multiplication (minimum)	99.8%
Certified seed (minimum)	99.7%

Disease standards

Seed crops may be rejected at field inspection, or after laboratory inspection of harvested seed, if more than the prescribed tolerance of the following diseases is detected:

Disease	Level
Covered smut or Common Bunt (<i>Tilletia caries</i> and <i>T. laevis</i>) (maximum)	Nil
Ergot (<i>Claviceps purpurea</i>) (maximum)	Nil
Ear cockle (<i>Anguina tritici</i>) (maximum)	Nil
Loose smut (<i>Ustilago tritici</i>) (maximum)	0.05%
Flag smut (<i>Urocystis tritici</i>) (maximum)	0.05%

Bulk certification

The producer may store on his property, or other approved site, first generation Certified seed in bulk lots for further production of Certified seed. Such seed shall have been previously processed and sampled at an Authorised Seed Processor.

Seed treatment

Processed seed must be treated with an approved fungicide at an approved application rate unless special arrangements have been made with an Authorised Officer.

Seed standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	99.0%	98.0%
Germination (minimum % by count)	85%	85%
Other Seed (maximum % by mass)	10/kg*	15/kg*

*Nominated species – See table in Appendix 3

2.6. Faba bean (*Vicia faba*)

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history

Field history	Basic Seed	Certified seed
No Faba beans to be grown or sown in the previous	3 years	2 years
No other pulses to be grown or sown in the previous	1 year	1 year

Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
Faba bean plants from non-approved seed sources for crops greater than 2ha	200m	100m
Faba bean plants from non-approved seed sources for crops smaller than 2ha	400m	200m
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Varietal purity
Basic seed (minimum)	99.7%
First generation seed for further multiplication (minimum)	99.0%
Certified seed (minimum)	98.0%

Bulk certification

The producer may store on his property, or other approved site, first generation Certified seed in bulk lots for further production of Certified seed. Such seed shall have been previously processed and sampled at an Authorised Seed Processor.

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	99.0%	98.0%
Germination (minimum % by count)	70%	70%
Other Seed (maximum % by mass)	10/kg*	15/kg*

*Nominated species – See table in Appendix 3

2.7. Field pea (*Pisum sativum*)

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history	Basic Seed	Certified seed
No Field peas to be grown or sown in the previous	3 years	2 years
No other pulses to be grown or sown in the previous	1 year	1 year

Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
Crops from approved sources or of other species shall be isolated to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Varietal purity
Basic seed (minimum)	99.7%
First generation seed for further multiplication (minimum)	99.0%
Certified seed (minimum)	98.0%
Bacterial blight of pea (<i>Pseudomonas syringae</i>)	Nil

Bulk certification

The producer may store on his property, or other approved site, first generation Certified seed in bulk lots for further production of Certified seed. Such seed shall have been previously processed and sampled at an Authorised Seed Processor.

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	99.0%	98.0%
Germination (minimum % by count)	70%	70%
Other Seed (maximum % by mass)	10/kg*	15/kg*

*Nominated species – See table in Appendix 3

Disease tests	Requirement
Pea Seed borne Mosaic virus (PSbMV)	Recommended

Note: If live pea weevil (*Bruchus pisorum*) are found in a seed lot, this will be indicated on all labels for the lot and on the Seed Analysis Certificate.

2.8. Lentil (*Lens culinaris*)

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history	Basic Seed	Certified seed
No Lentils to be grown or sown in the previous	3 years	2 years
No other pulses to be grown or sown in the previous	1 year	1 year

Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
Isolation from all crops shall be sufficient as to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Basic Seed	Certified seed
Off-types or other varieties of Lentils	1 per 30 m ²	1 per 10 m ²
Plants of other species, the seeds of which are difficult to distinguish from the variety being certified in a laboratory test, or which will easily cross-pollinate with the crop being grown for seed	1 per 30 m ²	1 per 10 m ²

Bulk certification

The producer may store on his property, or other approved site, first generation Certified seed in bulk lots for further production of Certified seed. Such seed shall have been previously processed and sampled at an Authorised Seed Processor.

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	99.0%	98.0%
Germination (minimum % by count)	70%	70%
Other Seed (maximum % by mass)	10/kg*	15/kg*

*Nominated species – See table in Appendix 3

2.9. Triticale (X *Triticosecale*) and Cereal rye (*Secale cereale*)

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history	Basic Seed	Certified seed
No Triticale or Cereal rye to be grown or sown respectively, in the previous	3 years	3 years
No other cereals to be grown or sown in the previous	1 year	1 year

Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
Mainly self-pollinating varieties of Triticale shall be isolated from other Triticale crops by	50m	20m
Mainly cross-pollinating varieties Triticale shall be isolated from other Triticale crops by	300m	250m
Rye shall be isolated from other Cereal rye crops by	300m	250m
Other cereal crops by	Barrier or 3m	Barrier or 3m

Crop standards

Varietal Purity	Basic seed	Certified seed	Certified seed
		1 st generation	2 nd generation
Mainly for self-pollinating varieties of Triticale	99.7%	99.0%	98.0%
Mainly for cross-pollinating varieties of Triticale and Cereal rye	1 in 30m ²	1 in 10m ²	1 in 10m ²

Bulk certification

The producer may store on his property, or other approved site, first generation Certified seed in bulk lots for further production of Certified seed. Such seed shall have been previously processed and sampled at an Authorised Seed Processor.

Seed treatment

Processed seed must be treated with an approved fungicide at an approved application rate unless special arrangements have been made with an Authorised Officer.

Seed standards		Basic Seed	Certified seed
Triticale Pure Seed	(minimum % by mass)	96.0%	96.0%*
Cereal rye Pure Seed	(minimum % by mass)	99.0%	98.0%
Germination	(minimum % by count)	85%	85%
Other Seed	(maximum % by mass)	10/kg*	15/kg*

*Nominated species – See table in Appendix 3

*Including a maximum of 2.0% broken seed

2.10. Narrowleaf lupin (*Lupinus angustifolius*)

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history	Basic Seed	Certified seed
No Narrowleaf lupins to be grown or sown in the previous	3 years	2 years
No other pulses to be grown or sown in the previous	1 year	1 year

Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
Isolation from all crops shall be sufficient as to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Basic Seed	Certified seed
Off-types or other varieties of Narrowleaf lupins	1 per 30 m ²	1 per 10 m ²
Bitter off-types of the same species	Nil	1 per 1000 m ²
Plants of other species, the seeds of which are difficult to distinguish from the variety being certified in a laboratory test, or which will easily cross-pollinate with the crop being grown for seed	1 per 30 m ²	1 per 10 m ²

Bulk certification

The producer may store on his property, or other approved site, first generation Certified seed in bulk lots for further production of Certified seed. Such seed shall have been previously processed and sampled at an Authorised Seed Processor.

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	99.0%	98.0%
Germination (minimum % by count)	70%	70%
Other Seed (maximum % by mass)	10/kg*	15/kg*
Bitter seed of any lupin species (max)	1/10kg	1/10kg

*Nominated species – See table in Appendix 3

Disease tests	Requirement
Cucumber mosaic virus (CMV)	Mandatory
Anthrachnose	Mandatory

2.11. White lupin (*Lupinus albus*)

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history	Basic Seed	Certified seed
No White lupins to be grown or sown in the previous	3 years	2 years
No other pulses to be grown or sown in the previous	1 year	1 year

Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
White lupin plants from non-approved seed sources for crops greater than 2ha	100m	50m
White lupin plants from non-approved seed sources for crops smaller than 2ha	200m	100m
Isolation from all crops shall be sufficient as to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Basic Seed	Certified seed
Off-types or other varieties of White lupins	1 per 30 m ²	1 per 10 m ²
Plants of other species, the seeds of which are difficult to distinguish from the variety being certified in a laboratory test, or which will easily cross-pollinate with the crop being grown for seed	1 per 30 m ²	1 per 10 m ²

Bulk certification

The producer may store on his property, or other approved site, first generation Certified seed in bulk lots for further production of Certified seed. Such seed shall have been previously processed and sampled at an Authorised Seed Processor.

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	99.0%	98.0%
Germination (minimum % by count)	70%	70%
Other Seed (maximum % by mass)	10/kg*	15/kg*
Bitter seed of any lupin species (max)	1/10kg	1/10kg

*Nominated species – See table in Appendix 3

Disease tests	Requirement
Anthraxnose	Mandatory

2.12. Yellow lupin (*Lupinus luteus*)

Seed source

Pre-Basic seed is eligible to produce Basic seed.

Only Basic, first generation Certified seed or seed approved by an Authorised Officer is permitted for sowing of crops intended for Certified seed production.

Field history	Basic Seed	Certified seed
No Yellow lupins to be grown or sown in the previous	3 years	2 years
No other pulses to be grown or sown in the previous	1 year	1 year

Successive crops of the same variety and category may be grown on the same field without any time interval.

Isolation requirement	Basic Seed	Certified seed
Yellow lupin plants from non-approved seed sources for crops greater than 2ha	100m	50m
Yellow lupin plants from non-approved seed sources for crops smaller than 2ha	200m	100m
Isolation from all crops shall be sufficient as to prevent mixture at harvest	Barrier or 3m	Barrier or 3m

Crop Standards	Basic Seed	Certified seed
Off-types or other varieties of Yellow lupins	1 per 30 m ²	1 per 10 m ²
Bitter off-types of the same species	Nil	1/1000m ²
Plants of other species, the seeds of which are difficult to distinguish from the variety being certified in a laboratory test, or which will easily cross-pollinate with the crop being grown for seed	1 per 30 m ²	1 per 10 m ²

Bulk certification

The producer may store on his property, or other approved site, first generation Certified seed in bulk lots for further production of Certified seed. Such seed shall have been previously processed and sampled at an Authorised Seed Processor.

Seed Standards	Basic Seed	Certified seed
Pure Seed (minimum % by mass)	99.0%	98.0%
Germination (minimum % by count)	70%	70%
Other Seed (maximum % by mass)	10/kg*	15/kg*
Bitter seed of any lupin species (max)	1/10kg	1/10kg

*Nominated species – See table in Appendix 3

Disease tests	Requirement
Anthraxnose	Mandatory

Appendix 3 – Nominated seeds – Reject levels for Basic and Certified seed of field crops

SPECIES	NOMINATED SEEDS										TOTAL OTHER SEED No/kg (Includes Nominated Seeds)	
	Other Cereals		Other Grain Legumes		Wild Oats		<i>Lolium</i> and <i>Phalaris</i> spp. (in total)		Vetch (all species)			
	Max No/kg		Max No/kg		Max No/kg		Max No/kg		Max No/kg			
	Cert	Basic	Cert	Basic	Cert	Basic	Cert	Basic	Cert	Basic	Cert	Basic
BARLEY	1	Nil	3	1	2	2	5	5	3	1	15	10
OATS	1	Nil	3	1	2	2	5	5	3	1	15	10
RYE	1	Nil	3	1	2	2	5	5	3	1	15	10
TRITICALE	1	Nil	3	1	2	2	5	5	3	1	15	10
WHEAT	1	Nil	3	1	2	2	5	5	3	1	15	10
CHICK PEAS	2	1	1	Nil	3	3	5	5	1	Nil	15	10
FABA & FIELD BEANS (including Broad Beans)	2	1	1	Nil	3	3	5	5	1	Nil	15	10
FIELD PEAS	2	1	1	Nil	3	3	5	5	1	Nil	15	10
LENTILS	2	1	1	Nil	3	3	5	5	1	Nil	15	10
LUPINS	2	1	1	Nil	3	3	5	5	1	Nil	15	10
CANOLA	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	20	10
Canola Basic & Certified Class: NIL <i>Brassica juncea</i> , <i>B. hirta</i> , <i>B. tournefortii</i> , <i>B. oxyrrhina</i> , <i>Raphanus raphanistrum</i> , <i>R. rugosum</i> & <i>Sisymbrium</i> spp.												
COTTON	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.2%	0.1%
SORGHUM	2	1	1	Nil	2	2	5	5	3	1	15	10

Note: This table is an extract from the Australian Seeds Authority - National Seed Quality Standards for Basic and Certified Seed.

Appendix 4 – Explanatory notes for the quality standards for Basic and Certified seed

1. All tests are to be carried out in accordance with the International Seed Testing Association (ISTA) Rules for Seed Testing 2011 or as amended from time to time.
2. The words “Pure Seed”, “Other Seed”, “Germination”, “Hard Seed” and “Fresh Ungerminated Seed” shall have the meaning ascribed to them in the ISTA Rules for Seed Testing 2011 or as amended from time to time.
3. Basic Seed – Other Seeds to include not more than 200 seeds/kg in total of Nominated Seeds and not more than 50 seeds/kg of any one Nominated Seed, unless otherwise stated. For all *Trifolium* spp. the maximum number of seeds of other *Trifolium* spp. is 200/kg. ISTA tolerances should be applied to all number counts. A one-way test at the 5% probability level is recommended.
4. Minimum germination standards for legume species exclude Hard Seed unless otherwise stated.
5. Minimum quality standards for Basic Seed may be waived where the quality of the Basic Seed to be used will not affect the genetic integrity of the crop or impede the ability of the crop to achieve certification, or where it is the only supply of Basic Seed available or likely to be available.
 Certification Agencies are required to consult with the CEO of ASA regarding the use of Basic Seed of a lower quality than the applicable quality standard contained in the ASA Technical Standards. If the seed does not meet the minimum germination standard, the CEO of ASA may seek advice from the Breeder of the variety, or other recognised expert, to confirm that using seed of a lower germination standard will not compromise the genetic integrity of the resultant seed crop.

Compiled by the Australian Seeds Authority Ltd – December 2010. Amended March 2013

Note: Appendix 4 is an extract from the Australian Seeds Authority - National Seed Quality Standards for Basic and Certified Seed.