



NATIONAL SEED QUALITY STANDARDS FOR BASIC AND CERTIFIED SEED

The ASA Technical Standards for the OECD and Australian Seed Certification Schemes prescribe minimum purity and germination standards for seed certified in Australia under both schemes and intended for marketing within Australia.

These standards apply to all varieties for which the variety maintainer has not specified higher standards.

A seed lot failing to meet the national quality standards cannot be marketed in Australia as Certified Seed and measures must be implemented to ensure that the seed lot is not released for sale until the certification labels are removed.

While the national standards must be applied for domestic sales, special provisions may be made on a case by case basis for seed intended for export markets.

Although physical seed quality is not strictly part of certification, the Australian seed industry has asked ASA to maintain quality standards as part of the certification process. The attached National Seed Quality Standards apply to all seed certified after 1 January 2011.

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13 December 2010

NATIONAL SEED QUALITY STANDARDS FOR BASIC AND CERTIFIED SEED
Effective for seed certified from 1 January 2011

NB: Please refer to the Explanatory Notes on Page 10 when using this document.

| Species | Class | Min % Pure Seed | Max % Other Seed | Min % Germ | Other Conditions / Comments |
|-------------------------------|---------------------------|--------------------|------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GRASSES | | | | | |
| <i>Bothriochloa insculpta</i> | Creeping Bluegrass | - | - | - | No varieties currently listed with ASA for certification in Australia |
| | Basic Certified | 50.0 | 5.0 | 20 | |
| <i>Cenchrus ciliaris</i> | Buffel Grass | 90.0 | 2.0 | 20 | |
| | Basic Certified | 90.0 | 2.0 | 20 | |
| <i>Chloris gayana</i> | Rhodes Grass (Diploid) | 80.0 | 4.0 | 20 | |
| | Basic Certified | 80.0 | 4.0 | 20 | |
| <i>Dactylis glomerata</i> | Cocksfoot | 90.0 | 0.3 | 75# | Nominated species – see Table 1 & Note 3. #Including fresh ungerminated seeds *To include not more than 1.0% species other than <i>Lolium</i> spp. #Including fresh ungerminated seeds |
| | Basic Certified | 90.0 | 3.0* | 75# | |
| <i>Ehrharta calycina</i> | Perennial Veldt Grass | - | - | - | No varieties currently listed with ASA for certification in Australia |
| | Basic Certified | 65.0 | 1.0 | 40 | |
| <i>Elytrigia elongata</i> | Tall Wheat Grass | 90.0 | 0.3 | 65 | Nominated species –see Table 1 & Note 3. |
| | Basic Certified | 85.0 | 2.0 | 65 | |
| <i>Eragrostis curvula</i> | Lovegrass | - | - | - | No varieties currently listed with ASA for certification in Australia Cv. Consol |
| | Basic Certified | 97.0 | 0.5 | 70 | |
| <i>Festuca arundinacea</i> | Tall Fescue | 99.0 | 0.3 | 75# | Nominated species –See Table 1 & Note 3. #Including fresh ungerminated seeds *To include not more than 1.0% species other than <i>Lolium</i> sp. #Including fresh ungerminated seeds |
| | Basic Certified | 96.0 | 3.0* | 75# | |
| <i>X Festulolium</i> | Festulolium | 99.0 | 0.3 | 75# | Nominated species –See Table 1 & Note 3. #Including fresh ungerminated seeds *To include not more than 1.0% species other than <i>Lolium</i> sp. #Including fresh ungerminated seeds |
| | Basic Certified | 96.0 | 3.0* | 75# | |

| Species | | Class | Min % Pure Seed | Max % Other Seed | Min % Germ | Other Conditions / Comments |
|--------------------------------------------------------|---------------------|-----------|--------------------|------------------------|---------------|----------------------------------------------------------------------------------|
| <i>Lolium multiflorum</i> | Italian Ryegrass | Basic | 99.0 | 0.3 | 75# | Nominated species – See Table 1 & Note 3. #Including fresh ungerminated seeds |
| | | Certified | 97.0 | 1.0 | 75# | #Including fresh ungerminated seeds |
| <i>Lolium perenne</i> | Perennial Ryegrass | Basic | 99.0 | 0.3 | 75# | Nominated species – See Table 1 & Note 3. #Including fresh ungerminated seeds |
| | | Certified | 97.0 | 1.0 | 75# | #Including fresh ungerminated seeds |
| <i>Lolium rigidum</i> | Annual Ryegrass | Basic | 99.0 | 0.3 | 75# | Nominated species – See Table 1 & Note 3. #Including fresh ungerminated seeds |
| | | Certified | 97.0 | 1.0 | 75# | #Including fresh ungerminated seeds |
| <i>Lolium x boucheanum</i> [<i>L. x hybridum</i>] | Hybrid Ryegrass | Basic | 99.0 | 0.3 | 75# | Nominated species – See Table 1 & Note 3. #Including fresh ungerminated seeds |
| | | Certified | 97.0 | 1.0 | 75# | #Including fresh ungerminated seeds |
| <i>Panicum maximum</i> | Guinea Grass | Basic | - | - | - | No varieties currently listed with ASA for certification in Australia |
| | | Certified | 40.0 | 0.7 | 25 | |
| <i>Paspalum notatum</i> | Bahia Grass | Basic | 60.0 | 2.0 | 60 | |
| | | Certified | 60.0 | 2.0 | 60 | |
| <i>Pennisetum clandestinum</i> | Kikuyu | Basic | 95.0 | 1.0 | 60 | |
| | | Certified | 95.0 | 1.0 | 60 | |
| <i>Pennisetum glaucum</i> | Pearl Millet | Basic | 99.0 | 0.5 | 75 | |
| | | Certified | 99.0 | 0.5 | 75 | |
| <i>Phalaris aquatica</i> | Phalaris | Basic | 99.0 | 0.3 | 75# | Nominated species – See Table 1 & Note 3 #Including fresh ungerminated seeds |
| | | Certified | 97.0 | 1.0 | 75# | #Including fresh ungerminated seeds |
| <i>Setaria incrassata</i> | Purple Pigeon Grass | Basic | - | - | - | No varieties currently listed with ASA for certification in Australia |
| | | Certified | 80.0 | 3.0 | 40 | |
| <i>Setaria sphacelata</i> | Setaria | Basic | 60.0 | 1.2 | 20 | |
| | | Certified | 60.0 | 1.2 | 20 | |

| Species | | Class | Min % Pure Seed | Max % Other Seed | Min % Germ | Other Conditions / Comments |
|----------------------------------|--------------------|--------------------|--------------------|------------------------|---------------|------------------------------------------------------------------------------------------------------------------------------------------|
| LEGUMES | | | | | | |
| <i>Aeschynomene americana</i> | Joint Vetch | Basic Certified | - 95.0 | - 2.0 | - 50 | No varieties currently listed with ASA for certification in Australia |
| <i>Biserrula pelecinus</i> | Biserrula | Basic Certified | 98.0 98.0 | 0.5 0.5 | 70 70 | |
| <i>Lathyrus sativus</i> | Grass Pea | Basic Certified | 98.0 98.0 | 0.5 1.0 | 75 75 | |
| <i>Leucaena leucocephala</i> | Leucaena | Basic Certified | - 98.0 | - 1.0 | - 60 | No varieties currently listed with ASA for certification in Australia |
| <i>Macroptilium atropurpurea</i> | Siratro | Basic Certified | 97.5 97.5 | 1.0 1.0 | 70# 70# | # Including Hard Seed. # Including Hard Seed. |
| <i>Medicago sativa</i> | Lucerne | Basic Certified | 99.0 98.0 | 0.1 0.5 | 70# 70# | # Including Max 20% Hard Seed. # Including Max 20% Hard Seed. |
| <i>Medicago spp..</i> | Annual Medics | Basic Certified | 99.0 98.0 | 0.2 2.0* | 70 70 | Nominated species – Burr medic (See Note 3) * To include not more than 0.5% seeds other than <i>Medicago polymorpha</i> (Burr medic). |
| <i>Ornithopus compressus</i> | Yellow Serradella | Basic Certified | 90.0 90.0 | 1.0 1.0 | 75# 75# | #Including Hard Seed. #Including Hard Seed. |
| <i>Ornithopus pinnatus</i> | Slender serradella | Basic Certified | 90.0 90.0 | 1.0 1.0 | 75# 75# | #Including Hard Seed. #Including Hard Seed. |
| <i>Ornithopus sativus</i> | French serradella | Basic Certified | 90.0 90.0 | 1.0 1.0 | 75# 75# | #Including Hard Seed. #Including Hard seed. |
| <i>Stylosanthes guianensis</i> | Stylosanthes | Basic Certified | - 90.0 | - 3.5 | - 60# | No varieties currently listed with ASA for certification in Australia #Including Hard seed. |

| Species | | Class | Min % Pure Seed | Max % Other Seed | Min % Germ | Other Conditions / Comments |
|--------------------------------|---------------------|--------------------|--------------------|------------------------|---------------|----------------------------------------------------------------------------------------------------------------------------------|
| <i>Stylosanthes hamata</i> | Caribbean Stylo | Basic Certified | 90.0 90.0 | 3.5 3.5 | 60# 60# | #Including Hard Seed. #Including Hard Seed. |
| <i>Trifolium alexandrinum</i> | Berseem Clover | Basic Certified | 99.0 98.0 | 0.2 1.0 | 80 80 | Nominated species – other <i>Trifolium</i> spp. (See Note 3) |
| <i>Trifolium dasyurum</i> | Eastern Star Clover | Basic Certified | 98.0 98.0 | 1.0 1.0 | 65 65 | Nominated species – other <i>Trifolium</i> spp. (See Note 3) |
| <i>Trifolium fragiferum</i> | Strawberry Clover | Basic Certified | 99.0 98.0 | 0.3 1.0 | 70# 70# | Nominated species – other <i>Trifolium</i> spp. (See Note 3) # Including Max 20% Hard Seed. # Including Max 20% Hard Seed. |
| <i>Trifolium glanduliferum</i> | Gland Clover | Basic Certified | 98.0 98.0 | 1.0 1.0 | 65 65 | Nominated species – other <i>Trifolium</i> spp. (See Note 3) |
| <i>Trifolium hirtum</i> | Rose Clover | Basic Certified | 98.0 98.0 | 1.0 1.0 | 70 70 | Nominated species – other <i>Trifolium</i> spp. (See Note 3) |
| <i>Trifolium incarnatum</i> | Crimson Clover | Basic Certified | 98.0 98.0 | 1.0 1.0 | 65 65 | Nominated species – other <i>Trifolium</i> spp. (See Note 3) |
| <i>Trifolium michelianum</i> | Balansa Clover | Basic Certified | 99.0 98.0 | 0.2 1.0 | 65 65 | Nominated species – other <i>Trifolium</i> spp. (See Note 3) |
| <i>Trifolium pratense</i> | Red Clover | Basic Certified | 99.0 97.0 | 0.2 0.5 | 60 60 | Nominated species – other <i>Trifolium</i> spp. (See Note 3) |
| <i>Trifolium purpureum</i> | Purple Clover | Basic Certified | 98.0 98.0 | 1.0 1.0 | 65 65 | Nominated species – other <i>Trifolium</i> spp. (See Note 3) |
| <i>Trifolium repens</i> | White Clover | Basic Certified | 99.0 97.0 | 0.2 2.0 | 60 60 | Nominated species – other <i>Trifolium</i> spp. (See Note 3) |
| <i>Trifolium resupinatum</i> | Persian Clover | Basic Certified | 99.0 98.0 | 0.2 1.0 | 60 60 | Nominated species – other <i>Trifolium</i> spp. (See Note 3) |

| Species | | Class | Min % Pure Seed | Max % Other Seed | Min % Germ | Other Conditions / Comments |
|------------------------------------------------|-------------------------------------|-----------|--------------------|------------------------|---------------|------------------------------------------------------------------------------------------------|
| <i>Trifolium spumosum</i> | Bladder Clover | Basic | 99.0 | 1.0 | 70# | Nominated species – other <i>Trifolium</i> spp. (See Note 3) # Including Max 20% Hard Seed. |
| | | Certified | 98.0 | 1.0 | 70# | # Including Max 20% Hard Seed. |
| <i>Trifolium semipilosum</i> | Kenya White Clover | Basic | - | - | - | No varieties currently listed with ASA for certification in Australia |
| | | Certified | 97.0 | 1.0 | 50 | Nominated species – other <i>Trifolium</i> spp. (See Note 3) |
| <i>Trifolium subterraneum</i> | Subterranean Clover | Basic | 99.0 | 0.1 | 70# | # Including Max 20% Hard Seed. |
| | | Certified | 98.0 | 0.5 | 70# | # Including Max 20% Hard Seed. |
| <i>Trifolium vesiculosum</i> | Arrowleaf Clover | Basic | 99.0 | 1.0 | 60 | Nominated species – other <i>Trifolium</i> spp. (See Note 3) |
| | | Certified | 98.0 | 1.0 | 60 | |
| <i>Vicia</i> spp. (other than <i>V. faba</i>) | Vetch (incl. Purple and Woolly Pod) | Basic | 99.0 | 0.5* | 65 | *To include not more than 0.1% seeds other than other <i>Vicia</i> spp. |
| | | Certified | 99.0 | 1.0* | 65 | *To include not more than 0.5% seeds other than other <i>Vicia</i> spp. |

| Species | | Class | Min % Pure Seed | Max % Other Seed | Min % Germ | Other Conditions / Comments |
|-----------------------------------------------|---------------------------|-----------|-----------------------|------------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------|
| FIELD CROPS & OTHER SPECIES | | | | | | |
| <i>Avena sativa</i> | Oats | Basic | 99.0 | 10/kg | 85 | Nominated species – See Table 2 |
| | | Certified | 98.0 | 15/kg | 85 | Nominated species – See Table 2 |
| <i>Brassica napus</i> var. <i>oleifera</i> | Canola | Basic | 99.0 | 10/kg | 85 | Nominated species – See Table 2 |
| | | Certified | 99.0 | 20/kg | 85 | Nominated species – See Table 2 |
| <i>Carthamus tinctorius</i> | Safflower | Basic | - | - | - | No varieties currently listed with ASA for certification in Australia |
| | | Certified | 99.0 | 15/kg | 70 | Nominated species – See Table 2 |
| <i>Cicer arietinum</i> | Chick Peas | Basic | 99.0 | 10/kg | 70 | Nominated species – See Table 2 |
| | | Certified | 98.0 | 15/kg | 70 | Nominated species – See Table 2 |
| <i>Gossypium spp.</i> | Cotton | Basic | 99.0 | 15/kg | 80 | |
| | | Certified | 98.0 | 15/kg | 80 | |
| <i>Helianthus annuus</i> | Sunflower | Basic | 97.0 | 0.2 | 75 | |
| | | Certified | 97.0 | 0.2 | 75 | |
| <i>Hordeum vulgare</i> | Barley | Basic | 99.0 | 10/kg | 85 | Nominated species – See Table 2 |
| | | Certified | 98.0 | 15/kg | 85 | Nominated species – See Table 2 |
| <i>Lens culinaris</i> | Lentils | Basic | 99.0 | 10/kg | 70 | Nominated species – See Table 2 |
| | | Certified | 98.0 | 15/kg | 70 | Nominated species – See Table 2 |
| <i>Linum usitatissimum</i> | Linseed (Incl. Linola) | Basic | - | - | - | No varieties currently listed with ASA for certification in Australia |
| | | Certified | 99.0 | 20/kg | 85 | Nominated species – See Table 2 |
| <i>Lupinus spp.</i> | Lupins | Basic | 99.0 | 10/kg | 70 | Nominated species – See Table 2. In WA – Bitter lupins Max 1/10kg. CMV testing is mandatory – infection level to be reported. |
| | | Certified | 98.0 | 15/kg | 70 | Nominated species – See Table 2. In WA – Bitter lupins Max 1/10kg. CMV testing is mandatory – infection level to be reported. |

| Species | | Class | Min % Pure Seed | Max % Other Seed | Min % Germ | Other Conditions / Comments |
|---------------------------------------------------|-----------------------|--------------------|-----------------------|------------------------|---------------|---------------------------------------------------------------------------------------------------------|
| <i>Phaseolus radiatus</i> | Mung Bean | Basic Certified | 99.0 99.0 | 0.4 0.4 | 85 85 | |
| <i>Pisum sativum</i> | Field Peas | Basic Certified | 99.0 98.0 | 10/kg 15/kg | 70 70 | Nominated species – See Table 2 Nominated species – See Table 2 |
| <i>Raphanus sativus</i> var. <i>oleiformis</i> | Fodder Radish | Basic Certified | 97.0 97.0 | 1.0 1.0 | 80 80 | |
| <i>Secale cereale</i> | Ryecorn | Basic Certified | 99.0 98.0 | 10/kg 15/kg | 85 85 | Nominated species – See Table 2 Nominated species – See Table 2 |
| <i>Sorghum bicolor</i> | Sorghum | Basic Certified | 99.0 98.0 | 10/kg 15/kg | 85 85 | Nominated species – See Table 2 Nominated species – See Table 2 |
| <i>Sorghum sudanense</i> | Sudan Grass | Basic Certified | 98.0 98.0 | 0.4 0.4 | 70 70 | |
| <i>Sorghum sudanense</i> x <i>S. bicolor</i> | Hybrid Sorghum | Basic Certified | 98.0 98.0 | 0.4 0.4 | 85 85 | |
| <i>Triticum aestivum</i> | Wheat | Basic Certified | 99.0 98.0 | 10/kg 15/kg | 85 85 | Nominated species – See Table 2 Nominated species – See Table 2 |
| x <i>Triticosecale</i> | Triticale | Basic Certified | 96.0 96.0* | 10/kg 15/kg | 85 85 | Nominated species – See Table 2 *Including max. 2.0% broken seed. Nominated species – See Table 2 |
| <i>Vicia faba</i> | Faba Beans | Basic Certified | 99.0 98.0 | 10/kg 15/kg | 70 70 | Nominated species – See Table 2 Nominated species – See Table 2 |
| <i>Vigna mungo</i> | Black Gram | Basic Certified | 99.0 99.0 | 0.4 0.4 | 85 85 | |
| <i>Zea mays</i> | Maize & Sweet Corn | Basic Certified | - 99.0 | - Nil | - 85 | No varieties currently listed with ASA for certification in Australia |

Table 1 – NOMINATED SEEDS – REJECT LEVELS FOR BASIC SEED OF GRASSES

| SPECIES | NOMINATED SEEDS (Maximum number/kg) | | | | | MAXIMUM TOTAL NOMINATED SEEDS No/kg |
|----------------------------|------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------------|--------------------------|---------------------|-------------------------------------------------|
| | NB: ISTA tolerances should be applied to all number counts. A one-way test at the 5% probability level is recommended. | | | | | |
| | <i>Dactylis glomerata</i> | <i>Festuca arundinacea</i> | <i>Lolium</i> spp. | <i>Phalaris aquatica</i> | <i>Setaria</i> spp. | |
| <i>Dactylis glomerata</i> | n/a | 50 | 50 | 50 | 50 | 200 |
| <i>Elytrigia elongata</i> | 50 | 50 | 50 | 50 | 50 | 200 |
| <i>Festuca arundinacea</i> | 50 | n/a | 50 | 50 | 50 | 200 |
| <i>Lolium multiflorum</i> | 50 | 50 | n/a | 50 | 50 | 200 |
| <i>Lolium perenne</i> | 50 | 50 | n/a | 50 | 50 | 200 |
| <i>Lolium rigidum</i> | 50 | 50 | n/a | 50 | 50 | 200 |
| <i>Lolium x boucheanum</i> | 50 | 50 | n/a | 50 | 50 | 200 |
| <i>Phalaris aquatica</i> | 50 | 50 | 50 | n/a | 50 | 200 |

NB: Refer also to Explanatory Note 3.

Table 2 – NOMINATED SEEDS – REJECT LEVELS FOR BASIC & CERTIFIED CLASS 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 |

EXPLANATORY NOTES

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.

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