

**Section 4**

**Wheat Classification**

**Procedures**

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## 4.1 Wheat Classification Procedures

### Check the Current Seasons Receival Standards Chart-Supplied by the Quality Services Department

The following procedure is to be used when classifying a load of wheat

1. Sample the load presented for delivery according to the 'Receival Sampling' procedure detailed in section 1 to produce a representative Grower Load Composite (GLC) sample.
2. From the GLC sample draw a subsample for protein and moisture testing. An 800-gram sample is needed for a whole grain Infratec instrument. Test the samples using the instrument provided according to the operating instructions in section 2 and record the results.
3. For all sites the following procedure is to be used for moisture determination.

#### In South Australia:

If the moisture content, measured by the whole grain Infratec is less than or = 13.5% the classification can continue.

#### In New South Wales (NSW)/Victoria (VIC):

The initial maximum receival standard for moisture is 12.5% for all grades. DBS rules for moisture apply for all grades where loads up to 13.0% moisture may be received depending on the stack average.

4. Fill the ½ litre measure and test the sample for the Test Weight and percentage of screenings according to the ½ litre and Agtator procedure in section 2 and record the results.
5. Closely inspect the screenings in the bottom catch pan for any defective wheat grains subject to NIL tolerance or contaminants. Pay particular attention for grain insects.
6. Inspect the grain in the top tray for excessive amounts of Unmillable Material above the screen (i.e. chaff, whiteheads, weed seedpods, etc.). If you believe that an excessive amount is present then measure the weight of the material present using the 1/2 litre measure.
7. Examine the grain remaining above the screen, for defective grains, for a period of 30 to 60 seconds under conditions of good lighting but without the use of magnification. If defective grains are found or you suspect that sprouted grain may be present due to the presence of swollen germs, then determine the percentage of defective grains in the sample by using the 300-grain Wheat Inspection Tray.

To fill the Wheat Inspection Tray, (300 grain tray) take a handful of wheat from above the screen and place it onto the tray and rock the tray on an angle until all the holes are filled and the excess grain falls off. Remove the remaining surplus grains by holding the tray on a slight angle and brushing the surface with your fingers.

Flip the tray so the grain falls into the three divisions of 100 grains each. This is for counting grains to calculate a percentage.

Up to 5 minutes can be spent inspecting the 300 grains and the 'Maggi' Lamp used as an aid if necessary.

Push the grains to one end and move grains with staining to the other end of the tray.

Select grains with fungal staining on the germ and brush end or the crease according to the colour charts for stained grain.

Turn each grain to clearly identify staining that may not be visible from only one side.

Count the fungal grains identified and divide by 3 to record as a percentage on the weighnote, mandatory if a load is being downgraded.

Where sprouted grain is found and the sampling office is supplied with Falling Number equipment (or its equivalent) then this test must be conducted. The Falling Number result rather than the % of sprouted grain will then determine the classification.

2000t Cell samples require counts for fungal staining which must be recorded on the reverse of the bag, the Excel spreadsheet or in OMS (when available)

8. Inspect the whole ½ litre sample (i.e. above and below the screen) for any contaminants. The level of contamination is determined by counting the number of items present in the whole sample.

**Nil Tolerance**

The definition of "nil" is a zero level in a ½ litre sample representative of the entire load or not detected visually at any stage of the receival process.

Loads containing defective grains and/or contaminants for which there is a nil tolerance in all grades are to be rejected. Loads are to be rejected whether the defective grains and/or contaminants are detected in the initial truckload, probe sample, half litre sample or any other subsample at any stage of the receival process.

9. If levels of any defects or contaminants exceed the limits for the ASW1 grade then the appropriate test code must be recorded along with the result and a description of the problem. Test Codes for all the relevant contaminants and defects are listed on the "Quality Receival Standards for Wheat" wall chart.

Any wheat, which is classified as a payment grade below the ASW standard, is known as 'Under Quality Wheat'. A sample of each load classified below the ASW1 standard should be kept on site in AusBulk sample bag and registered on the 'Under Quality Wheat Summary' form.

10. Ask the driver for the variety of wheat in the load and the paddock name (optional). Look up the variety code from the 'Wheat Variety Codes' wall chart and determine the highest grade allowable for that variety at your site and any discounts that apply. **If the highest grade for that variety is not available at your site, and the grain is of satisfactory quality, it is advisable to inform the grower of the nearest site that receives the higher grade. Likewise if there is a special grade in place for under quality wheat at another site that will allow the grower to gain a higher return for their grain, the agent should be aware of the special grade and make the grower aware.**
11. At Manual Load Entry (MLE) sites record the results of the quality tests along with the provisional and bin grade in the quality section of the Receival Weighnote according to the instructions in the Commodity Document Manual. Ensure that the quality test data entered is compatible with the classification; otherwise the weighnote will be held in error when it is entered at Head Office, delaying payment to the grower until the information is corrected.

At Operational Management System (OMS) sites enter the test results and the variety code onto the computer according to the instructions in the OMS User Guide. The computer can derive a list of the acceptable pay and bin grades in order of rank. However it is important to remember that this is only an aid for the classifier and does not absolve you from the responsibility of classifying the load.

All tests performed that alter the grade and their results shall be included on the weighnote. In order to perform this quickly and efficiently, the codes listed below shall be used. These codes are also listed on the Quality Receivals Standards for Wheat Chart.

Draw the appropriate amount of sample from the GLC sample to add to the Cell Composite or Bin Grade Composite samples (see section 1) and collect any other samples requested by Head Office.

\*Refers to a mandatory test and these results shall be included on the weighnote.

<b>Test</b>	<b>CODE</b>	<b>Test</b>	<b>Code</b>
Commodity – Wheat	WH	Ryegrass weed seeds present	RS
Moisture	MO*	Sand	ES
Protein	PR*	Small foreign seeds	SS
Test Weight	TW*	Snails – conical	SNC
Screenings (below)	SC*	Snails – round	SNR
Variety	VR*	Sprouted grains	SP
Bread Wheat (Durum)	BR	Sticks and stones	ST
Dead Grain Insects	DI	Unmillable material (above)	SA
Dry, green, sappy or frost affected	GS	Vitreous kernels	VK
Earcockle	EC	Other Non-Objectionable Material	OM
Earth	EA	Wheat Ergot	WE
Falling Number Assessment	FN	White Grain Disorder	WG
Field Insects	FI	Weed seed contaminants type 1	S1
Fungal Stained grains	FS	Weed seed contaminants type 2	S2
Grains infected with ball smut	SM	Weed seed contaminants type 3a	3A
Heat damaged and bin burnt	HD	Weed seed contaminants type 3b	3B
Head Scab	HS	Weed seed contaminants type 3c	3C
Insect damaged grains	ID	Weed seed contaminants type 4	S4
Loose smut	LS	Weed seed contaminants type 5	S5
Grains affected by field mould	MF	Weed seed contaminants type 6	S6
Grains affected by storage mould	MS	Weed seed contaminants type 7	S7
Pink fungal stained grains	PF	Weed seed contaminants type 8	S8
Ryegrass ergot	RE	TakeAll affected Grain	TA

## 4.2 AWB Wheat Receival Standards

The following standards apply to all Australian Wheat Board wheat receivals and to wheat receivals for other clients wishing to adopt these standards. The standards are broken into two parts, General Wheat Standards, which cover Premium Milling Grades, ASW1, AGP and Feed grades.

### 4.2.1 General Wheat Receival Standards

#### Definitions

The following definitions apply to all AWB Ltd wheat receivals and to wheat receivals for other clients wishing to adopt these standards.

#### Standards

##### 1. Test Weight

Measurement of the density of wheat, measured in kilograms per hectolitre.

##### 2. Moisture Content

The amount of water measured in a sample of wheat, representing a load of wheat tendered for deliver. Measured a % by weight.

##### 2.1 South Australia

Dynamic Bin Strategy(DBS) for moisture does **NOT** apply in South Australia.

##### 2.2 New South Wales/Victoria

The following Dynamic Binning Strategy rules apply.

Initial Receival Standard	When stack average is:	Then loads accepted:
Maximum 12.5%	Above 12.0%	Maximum 12.5%
	12.0% & below	Maximum 13.0%

Initial receival standard (maximum 12.5%) applies to first 500 tonnes received of all grades.

Monitoring is based on 500 tonne basis.

##### 3. Protein

Protein content of wheat measured as a % by weight. Recorded as a % based on 11% moisture content.

##### 4. Unmillable Material

##### 4.1 Screenings (below)

The screenings are the total (including small foreign seeds) material passing through a 2.0 mm screen into the catch pan. Determined on a weight-by-weight basis with the result expressed as a percentage.

##### 4.2 Unmillable Material Above the Screen

Measures the light material that usually rises to the top of the sample in the screening process. Includes whiteheads (with grains removed), chaff, backbone, wild radish, milk thistle, or other seedpods. It excludes other contaminants for which tolerances have been stated in these standards.

Measured as a percentage of the weight of the original half litre sample with the results expressed as a percentage.

### 4.3 Small Foreign Seeds

Small Foreign Seeds are all seeds (which are not wheat) and which do not have a tolerance in type 1-8 weed seeds that fall through the 2.0 mm screen and collect in the catch pan during the screening process.

These include but are not limited to the following:

Hedge Mustard (*Sisymbrium spp*), Ryegrass (*Lolium spp*), Lesser Canary Grass (*Phalaris minor*), Maltese Cockspur (*Centaurea melitensis*), Rapeseed (*Brassica rapa*), Peppergrass (*Lepidium spp*), Wild Radish Seed (*Raphanus raphanistrum*), Wild Red/Brown Turnip Seed (*Brassica tournefortii*), and Saltbush (*Atriplex spp*). A full list of small foreign seeds is listed in Section 4 of these standards.

Small foreign seeds are assessed on a weight-to-weight basis.

## 5. Defective Grains

Defective grains are wheat grains that have been damaged to some degree. All defective grain tolerances are assessed on the grain remaining above the screen, except for those defects, which have a NIL tolerance.

### 5.1 Sprouted Grains

Sprouted grains are those in which the covering of the germ is split. It includes early and any further advanced stage of growth of the germ. Kernels exhibiting early stages of sprouting are those where the covering of the germ is split but without further development of the shoot. Late stage of sprouting is when there is development of a clear shoot.

Grains, which have had the germ, knocked off or scalloped out due to header damage or grains with pinholes, are not included in this definition of sprouted grains.

The classification for sprouted grain is based on an initial tolerance for a percentage of sprouted grain provided that the falling number of the cell can be monitored on a daily basis to ensure that a minimum is achieved - Procedure 0518. Alternatively, if falling number equipment is available on site, then the wheat can be received according to the falling number result.

#### **The falling number result for an individual load overrides the percentage sprouted count.**

It is therefore essential that you contact your supervisor or the Business Centre as soon as you suspect that sprouted grain is likely to be delivered, so that the Sprouting Management Strategy procedure (PR0518) can be implemented.

As well as the tolerances listed below there are specific tolerances given for the premium grades listed under the receival standards for each grade.

Where a sample exhibits significant sprouting and the Falling Number is above the grade minimum due to excessive heat from grain drying operations, the grain shall be classified as FEED.

#### **5.1.1 Sites Without Falling Number Equipment**

Active Stack Management using the Sprouting Management Strategy procedure (PR0518) on visually assessed sprouted grain can only be implemented with the authority of Quality Services Department/Client Services Department.

Where Falling Number equipment is not available determine the percentage of sprouted grains in the ½ litre sample using the visual method described in the Wheat Classification Procedures, section 4.

#### **For receival into ASW1**

There is an initial tolerance for sprouted kernels in the ASW1 of up to 1% provided the individual running and daily site running samples achieve a minimum Falling Number of 300 seconds.

#### **For receival into AGP1**

There is an initial tolerance for sprouted kernels in the AGP1 grade of up to 3% provided the individual running and daily site running samples achieve a minimum Falling Number of 200 seconds.

#### **For receival into FED1**

If loads contain more than 3% by count of sprouted kernels, or the individual running and daily site running samples have a Falling Number of less than 200 seconds, the grain shall be classified as Australian Feed Wheat.

### 5.1.2 Sites With Falling Number Equipment

#### For receival into ASW1

Grain can be classified as ASW1 where kernels exhibit sprouting, providing the Falling Number of an individual load is 300 seconds or greater.

#### For receival into AGP1

Grain can be classified as AGP1 where kernels exhibit sprouting, providing the Falling Number of an individual load is 200 seconds or greater.

#### For receival into FED1

Grain must be classified as FED1 if the Falling Number on an individual load is less than 200 seconds.

#### Grain Affected by Grain Drying

Refers to a grain defect caused by overheating of grain during artificial drying. It can be detected where grain exhibits significant sprouting (greater than 10%) or other evidence of weather damage but no corresponding decrease in Falling Number. Grain damaged in the drying process shall be classified as FEED.

For all grain deliveries, grain temperature must not exceed 50C.

## 5.2 Stained Grains

5.2.1 Stained grain is a grain defect caused by exposure to wet and damp conditions during the growth and maturation phases resulting in a biochemical change and/or grains that have become infected with field fungi (but not progressed to the field mould stage). Symptoms may include a dark brown, grey or various shades of black discolouration on mainly the germ end, occasionally on the brush end, or in severe cases this discolouration may progress to other parts of grain such as the crease. The definition includes the commonly referred to terms blackpoint and blacktip.

5.2.2 Pink stained grains are those arising from infection by certain fungi, *Fusarium spp*, *Eppicoccum spp* or *Drechslera spp*. Included in the tolerance for Stained grain.

Also refer to Head Scab.

These grains have a pink discolouration usually concentrated along the crease and the brush end of the grain. Because of the risk of confusion with pickling compounds, any loads with pink/red-discoloured seeds should be temporarily declined until the reason for the discolouration can be determined.

## 5.3 Dry, Green, Sappy or Frost Distorted Grains

Dry, green, sappy or frost distorted grains are those arising from the harvesting of grain before it has matured, affected by frost during the maturation phase, affected by or during drying operations, or by any distortion occurring during plant growth due to the use of herbicides.

The definition does not include grain pinched as a result of dry conditions or disease during maturation.

## 5.4 Heat Damaged or Bin Burnt

Heat Damaged or Bin Burnt grains are those that have become discoloured because of the development of storage fungi due to high moisture conditions, a gradual increase in temperature during storage or an incorrect artificial drying technique. Grains appear light to dark brown and may emit an odour.

### 5.5 Mouldy Grains – field and storage mould

#### Field Mould

Grains that have been affected by the development of field fungi due to high moisture conditions. Grains may appear discoloured and when crushed may be soft and emit an odour. Grains are visibly mould affected.

#### Storage mould affected grains

Grains that have been affected by the development of fungi due to high moisture conditions while in storage. Grains may appear discoloured, visibly mould affected, and when crushed may be soft and emit an odour.

### 5.6 Grains Infected with Ball Smut (Stinking Smut)

Grains infected with Ball Smut (common name Stinking Smut or Bunt) are those infected by the spores of the fungus, *Tilletia caries*.

They have the appearance of pale, plump, slightly oversized wheat grains. These grains are easily crushed between the fingers and contain a mass of black powder (spores) with a distinctive rotten egg smell.

### 5.7 Insect Damaged Grains

Grains eaten in part by stored grain insects, and any field pest of wheat including *Heliothis spp.*

### 5.8 Staining due to Moist Plant Material

A grain defect caused by the adherence to the grain of any material as a consequence of the grain becoming sticky. Frequently moist plant material such as milk thistle exudate adheres to the grain, thereby causing adherence of contaminants such as soil, dust, plant parts and other material.

### 5.9 Head Scab

Grain defect caused by the fungus *Fusarium graminearum*. The same fungus may also infect different parts of the plant resulting in other disease manifestations such as crown rot, leaf blight and seedling blight.

Wheat affected by head scab is very white, crumble easily and the bran layer both outside and inside the grain appears stained. Diseased heads have a white powdery appearance. There may also be small dark spots and fungal growth with an orange to pink tinge. Affected grains may be lightly to severely shrivelled and the surface tends to be rough and scabby.

Refer also to Pink Stained grains.

### 5.10 Take All

Grain defect caused by infection by the fungus *Gaeumannomyces graminis*, often resulting in distortion of the grain. Take-all. This definition only applies to those which appear yellowish or white in colour and which have a hollowed-out appearance. The definition does not apply to those grains affected by frost or pinched as a result of dry conditions or other diseases during maturation.

### 5.11 White Grain Disorder

Grains affected by "White grain disorder" are those, which have been affected by the fungus *Botryosphaeria spp.* Grains appear white and are visually very similar to frost affected grains.

## 6. Contaminants

Contaminants are material other than wheat kernels, which have contaminated the sample and are generally assessed by a count over the whole 1/2 litre sample both above and below the screen.

### 6.1 Pickling Compounds

Pickling compounds are those chemicals added to grain as a seed treatment or as a seed dressing prior to sowing, and are usually associated with a colouring agent. Grains contaminated in this way may be identified by the unnatural surface colour and/or colour that rubs off.

The chemicals include fenaminosulf, triadimenol, carboxin, flutriafol, bitertanol and any other fungicide added to grain as a seed dressing.

These compounds are deliberately coloured (usually red but sometimes blue) so that they can be easily identified. They are highly poisonous chemicals and any evidence of contamination in a grain bulk may result in that grain being rejected for human or animal consumption.

Some crop marker dyes can leave a red stain on grains when harvested. While these are non-toxic, all loads with evidence of red staining must be issued a temporarily decline notice.

### 6.2 Chemicals Not Approved For Stored Grain

Chemicals not approved for stored grain, include

- a) Chemicals used on the growing crop in the State where the wheat was grown in contravention to the label
- b) Chemicals used on stored wheat in contravention to the label
- c) Chemicals not registered for use on stored wheat
- d) Chemicals not referred to or in excess of those listed in AWB "Treatment Recommendations and Outturn Tolerances 2003/04 sEason"
- e) Grain containing any artificial colour, pickling compounds or market dyes commonly used during crop spraying operations which have stained the grain
- f) Grain treated with or contaminated by Bioresmethrin, Carbaryl, Organochlorine compounds or Diatomaceous earth.

If a Grower indicates that the load has been treated with a chemical either shortly before harvesting or prior to delivery then the classifier should contact the Quality Services department to determine whether the chemical and the treatment rate are acceptable for receipt at your site.

Where the receipt agent believes that the visual appearance and/or odour of the grain suggests that it has been treated with a non approved chemical, the grain is not to be received until a representative sample has been tested by an approved independent laboratory and the presence and absence of non approved chemicals determined.

### 6.3 Seed Contaminants

Seed contaminants are defined as seeds of any plant that are not *Triticum aestivum* (in *Triticum aestivum* deliveries) not *Triticum tauchii* (in *Triticum tauchii*) or not *Triticum durum* (in *Triticum durum* deliveries). Seed contaminants are comprised of two groups, small foreign seeds and all other types under Types 1 – 8. Note bread wheat contamination of durum does not fall into this definition of seed contaminants.

Tolerances for Seed Contaminants apply to whole seeds or their equivalent in pieces per half litre sample (above or below the screen) of the following species. Any seed pods detected must be opened and the seed counted for inclusion in the tolerances specified.

All other seed contaminants have been defined and grouped into Types. The tolerances are maximums and refer to the total of all seeds named in each type, except for Type 1 in which the maximum applies on an individual seed basis.

For a complete listing of the tolerances for all weed seeds and their scientific names refer to Section 4

<b>Tolerance (maximum individual seeds per half litre)</b>
<b>TYPE 1</b>
Colocynth, Double Gees/Spiny Emex/Three Corner Jacks, Jute, Long Head Poppy, Mexican Poppy, Opium poppy, Field Poppy, Horned Poppy, Wild Poppy, Parthenium weed, New Zealand Spinach

**Tolerances (Maximum Per Half Litre) below Refer To The Total Of All Seeds Named In Each Type**

<b>TYPE 2</b>
Broomrape, Castor Oil Plant, Coriander, Crow Garlic/Wild Garlic, Darling Pea, Ragweed, Rattlepods, Starburr, St. John's Wort
<b>TYPE 3A</b>
Bathurst Burr, Bulls head/Caltrop/Cats head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple
<b>TYPE 3B</b>
Vetch (Wild Tare) Vetch (Commercial)
<b>TYPE 3C</b>
Heliotrope (Blue) Heliotrope (Common)
<b>TYPE 4</b>
Field Bindweed, Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (King Island)*, Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle
<b>Type 5</b>
Knapweed (Creeping/Russian), Sesbania Pea, Paterson's curse/Salvation Jane
<b>Type 6</b>
Colombus Grass, Johnson Grass, Saffron Thistle
<b>Type 7</b>
Chickpeas, Corn/Maize, Cowpea, Faba Beans, Lentils, Lupins, Field Peas, Safflower, Soybean, Sunflower
<b>Type 8</b>
Barley (2 row), Barley (6 row), Bindweed (Australian & Black), Durum*, Red/Spring Feed Wheats #, Oats (Black or Wild), Oats (Sand), Oats (Common), Rice, Cereal Rye, Sorghum (grain), Triticale, Turnip Weed (Ball), <i>Bifora Testiculata</i> (Monkey Face Or Carrot Weed), Other Weed Seeds Not Specified In Types 1-7 or else where in small foreign seeds or unmillable material above the screen
<b>*No Limit For Durum Wheat In FEED</b>

#### 6.4 Ergots

Ergots are purplish-black fungal bodies, which contaminate cereal and ryegrass kernels when they are infected by the fungus *Claviceps purpurea*. Wheat ergot is determined by a count per ½ litre. Ryegrass ergot is determined by aligning all pieces end on end and determining total length.

Includes:

- a) Ryegrass Ergot – *Claviceps purpurea* infection of ryegrass kernels. A grain contaminant with the tolerance in maximum length (in centimetres) that the pieces are not to exceed when aligned end on end.
- b) Wheat Ergot- *Claviceps purpurea* infection of wheat kernels. A grain contamination with the tolerance in number of pieces per half litre.

#### 6.5 Objectionable Material (Entire Load)

Includes objectionable foreign matter that may or may not be otherwise stated, which has the ability to degrade the hygiene of wheat or become a food safety issue of concern or has a commercially unacceptable odour. This includes but is not limited to the following

- (a) Sticks. A stick is defined as ligneous material greater than 1 cm in length and 0.5cm in diameter.
- (b) Stones. A stone or gravel is defined as being greater than 2 mm in diameter.
- (c) Odour. A commercially unacceptable odour is defined as a sour or musty odour imparted on the wheat that is nor considered natural, which may or may not be physically detectable through the presence of foreign material.

Tainting Agents Contaminants: arises from contaminants imparting a smell or taint to wheat, including but not limited to, plant parts and seeds of *Eucalyptus spp.* Tainting agents may be detected by various means such as odour, touch or imparting a sheen to the grain.

- (d) Other. Foreign material such as animal excreta, glass, concrete or metal,

Samplers should ensure that objectionable material is not present on the surface of loads tendered for delivery.

Great care must be taken by the classifier and the grid attendant to ensure that wheat containing sticks and stones and/or excess dirt is not accepted into the silo system.

#### 6.6 Other Non-Objectionable Material

Refers to other material not otherwise specified as having a tolerance in these standards that has the ability to degrade the quality of wheat and is at a commercially unacceptable level. It includes, but is not limited to the following:

- (a) Fine material: this material is less than 1/16mm in diameter, such as dirt, silt, dust and minerals.
- (b) Snail shells and stored grain insects. Include pieces of snail shell (less than Half the entire shell) and pieces of stored grain insects, but not including field insects.
- (c) Other Includes pieces of sticks and other non-Vegetative material.

#### 6.7 Earth and Sand

Earth is defined as a clod of dirt, being less than 5 mm in diameter.

A grain of Sand is defined as being between 1/16th to 2 mm in diameter, with smaller material classified as silt under the heading "Other Non-Objectionable Material".

#### 6.8 Live Grain Insects

Insect contaminants of grain that cause damage to stored wheat. Standards exist for the following live and dead stored grain insects.

For a guide to Insect identification consult the "Insects of Stored Grain" pocket book or wall chart available in all sampling offices. If you are unsure of the identification of any insect detected in the sample then the load should be declined until it can be identified. Contact your Business centre or Quality Services department for assistance.

COMMON NAME	SCIENTIFIC NAME
Angoumois Grain Moth	<i>Sitotroga cerealella</i>
Confused Flour Beetle	<i>Tribolium confusum</i>
Flat Grain Beetle	<i>Cryptolestes spp</i>
Granary Weevil	<i>Sitophilus granarius</i>
Indian Meal Moth	<i>Plodia interpunctella</i>
Khapra beetle	<i>Trogoderma granarium</i>
Lesser Grain Borer	<i>Rhyzopertha dominica</i>
Maize Weevil	<i>Sitophilus zeamais</i>
Psocids/Book Lice	<i>Psocoptera spp</i>
Rice Weevil	<i>Sitophilus oryzae</i>
Rust-Red Flour Beetle	<i>Tribolium castaneum</i>
Saw Toothed Grain Beetle	<i>Oryzaephilus surinamensis</i>
Tropical Warehouse Moth	<i>Ephestia cautella</i>
Warehouse Beetle	<i>Trogoderma variable</i>

### 6.8.1 Pea-Weevil

#### THERE IS A NIL LIMIT FOR ALL PEA WEEVIL IN ALL GRADES.

Live Pea Weevil refers to live adult insects of the species *Bruchus pisorum*. Dead Pea Weevil refers to dead adult insects of the species *Bruchus pisorum*.

When peas are detected in a load after sampling, it will be necessary to confirm that they are free of live pea weevil; this means that the peas will need to be broken open. If peas are not found in the probed sample but are obvious on the surface of the load, several peas are to be collected at random in a safe manner and checked for infestation.

This is to be carried out using the "pea crusher" supplied. Up to 10 peas are placed into the cylinder and the piston rammed home to break open the peas. The peas are then inspected for pea weevil infestation. If no live pea weevils are found, the load can be classified.

**Note: Should live infestations be evident, the load cannot be accepted. The grower must have the load fumigated before re-tendering, according to fumigation instructions on the label of the product to be used for fumigating the peas.**

### 6.9 Earcockle

Contamination by darkened seed like nematode galls. These galls displace kernels in diseased heads and are caused by infection from the nematode *Anguina tritici*.

Earcockle affected grains are determined on grain remaining above the screen following the sieving process.

### 6.10 Field Insects

Insect contaminants of grain that do not cause damage to stored wheat. Tolerances are for dead or live insects and refer to whole bodies or body portions for all field insects except Grasshoppers. For

Grasshoppers, 6 legs, 3 body parts or 2 wings, or part thereof, constitutes one entire insect respectively. More than one of the same body parts constitutes greater than one insect.

COMMON NAME	SCIENTIFIC NAME
Grasshopper	<i>Various</i>
Hairy fungus beetle	<i>Typhaea stercorea</i>
Ladybirds	<i>Various</i>
Minute mould beetles	<i>Corticaria species</i>
Pea Weevil*	<i>Bruchus pisorum</i>
Sitona Weevil*	<i>Sitona species</i>
Desiantha Weevil	<i>Desiantha diversipes</i>
Woodbugs	<i>Various</i>
All other field insects	
* Individual tolerances apply	

### 6.11 Snails

Snails refer to whole or substantially whole (more than half) snail shells (or their equivalent – i.e. Crushed snails due to high drum speed or harvester), irrespective of size, of the following species – common white snail (*Ceruella virgata*), White Italian snail (*Theba pisana*), Pointed Snail (*Cochlicella acuta*), Small Pointed Snail (*Cochlicella barbara*) and any other snail species.

Standards refer to live and dead snail species. If pieces of snail shell are less than half the size of an entire shell then they are to be classified as "Other Non-Objectionable Material".

Snails shall be determined from material remaining above or material below the screen following the sieving process.

### 6.12 Loose Smut

Loose Smut is the result of the fungus *Ustilago tritici* developing in wheat heads during the growing phase. Tolerances for this contaminant refer to the number of blackened pieces of the wheatear per 1/2 litre.

## 4.3 Varietal Control Scheme

The quality of a load of wheat is largely determined by its variety and where it is grown. Some areas of the State are more suited to 'Soft' wheat production while 'Hard' wheats produce better quality when grown in other areas. The varietal control scheme was instigated by the AWB to discourage growers from sowing varieties in areas where the AWB considered they were inappropriate. AusBulk Ltd achieves this varietal control scheme using segregations.

### Variety Codes

A list of the most common wheat varieties received in SA along with their variety code and discounts (if applicable) for each sowing zone is provided on the 'Wheat Variety Coding and Discounts' wall chart supplied to each classification office.

If a variety being delivered is not present on the chart consult the expansive list in Section 4. If this is not included on this list then contact Quality Services Department for assistance.

#### 4.3.1 Varietal Codes, Highest Achievable Grades and Discounts for SA, Vic and NSW

- a) Durum is downgraded directly to FEED if it does not meet Durum Standards
- b) Prefix Code with "V" for Victorian varieties eg. A9 becomes VA9
- c) Prefix Code with "SN" for New South Wales varieties (denotes "Southern New" South Wales)

#### 4.3.2 Nominated Varieties

When each load of wheat is delivered the driver must nominate the variety of the wheat in the load. Where the driver indicates that the load is a mixture of varieties then the load is to be classified to the lowest variety. For example, if a load was to contain a mixture of Halberd (ASW1) and Machete (H1) then the entire load must be classified as ASW1.

The driver upon delivery nominates the variety of the load and although some varieties have distinguishing features, (i.e. Halberd has brown chaff rather than white) it is very difficult for the classifier to dispute the nomination. Therefore all deliveries should be accepted and classified as the variety nominated by the driver. If you suspect that the correct variety has not been nominated then you should question the driver if they are sure and then collect a sample to be submitted for varietal identification. Inform the driver that the AWB Ltd will check the variety and that penalties exist for false declarations.

Unfortunately the laboratory test to check varieties is long and complicated and it may not be possible for you to receive the results in time to act on future loads from that particular grower. However if you have a situation of particular concern then you should contact Quality Services Department for assistance. The AWB will take whatever action they consider to be appropriate directly with the grower concerned.

VARIETY	CODE	SA	VIC.	SNSW
Ajana	A9	AGP	AGP	AGP
Amery	A4	ASW	ASW	ASW
Angas	A3	APW	ASW	AGP
Anlace	A7	SOFT/AGP	ASF/AGP	ASF/AGP
Annuello	A10	APW	AH	APW
Arnhem	A5	APW	APW	APW
Aroona	A1	APW	AGP	AGP
Arrino	A6	AGP	AGP	AGP
Arrivato	A8	DR/FEED	DR/FEED	DR/FEED
Avocet	A2	AGP	AGP	AGP
Babbler	B24	APW	APW	PH
Baldmin	B11	AGP	AGP	AGP
Banks	B2	AH	AH	PH
Baroota Wonder	B18	AGP	AGP	AGP
Barunga	B7	AH	AH	AGP
Bass	B17	AGP	AGP	AGP
Batavia	B9	APW	AH	PH
Baxter	B21	APW	APW	PH
Bayonet	B4	AGP	AGP	AGP
Beacon	B12	AGP	AGP	AGP
Bedkin	B13	AGP	AGP	AGP
Bencubbin	B14	AGP	AGP	AGP
Beulah	B8	APW	APW	APW
Bindawarra	B1	SOFT/ASW/AGP	AGP	AGP
Blade	B5	AH	AH	AGP
Bodallin	B15	AGP	AGP	AGP
Bokal	B6	AGP	AGP	AGP
Bowie	B3	SOFT/AGP	ASF/AGP	ASF/AGP
Bowerbird	B22	APW	APW	AH
Braewood	B23	AH	AH	AH
Brennan	B19	FEED	FEED	FEED
Brookton	B20	APW	ASW	ASW
Buckley	B10	SOFT/AGP	AGP	AGP
Bungulla	B16	AGP	AGP	AGP
Cadoux	C5	AGP	AGP	AGP
Calingiri	C19	AGP	AGP	AGP
Camm	C18	APW	APW	ASW
Canna	C15	AGP	AGP	AGP
Carnamah	C16	APW	APW	APW
Cascades	C3	APW	AGP	AGP
Celebration	C7	AGP	AGP	AGP

VARIETY	CODE	SA	VIC.	SNSW
Chara	C20	AH	AH	PH
Claymore	C8	AGP	AGP	AGP
Clearfield JNZ	C22	AH	AH	AH
Clearfield STL	C23	APW	APW	ASW
Clubhead	C9	AGP	AGP	AGP
Cocamba	C4	APW	AH	AH
Comet	C17	AGP	AGP	AGP
Condor	C2	AH	AH	AH
Cook	C1	AGP	AGP	AGP
Corella	C6	AGP	AGP	AGP
Corrigin	C10	SOFT/AGP	AGP	AGP
Cranbrook	C11	AGP	AGP	AGP
Cunderdin	C12	ASW	ASW	ASW
Cunningham	C13	APW	AH	APH
Currawong	C14	FEED	FEED	FEED
Dagger	D2	APW	AGP	AGP
Darkan	D6	AGP	AGP	AGP
Darter	D4	AGP	AGP	AH
Datatine	D7	SOFT/AGP	AGP	AGP
Declic	D5	FEED	FEED	FEED
Dennis	D16	FEED	FEED	FEED
Devon	D8	AGP	AGP	AGP
Diamondbird	D14	AH	AH	AH
Diaz	D9	AGP	AGP	AGP
Dirk	D1	AGP	AGP	AGP
Dollarbird	D3	AH	AH	AH
Drysdale	D13	APW	APW	AH
Dural	D15	FEED	FEED	FEED
Duramba	D10	FEED	FEED	FEED
Durati	D11	FEED	FEED	FEED
Eagle	E2	AGP	AGP	AGP
EGA Bellaroi	E9	DR/FEED	DR/FEED	DR/FEED
EGABonnie Rock	E10	APW	APW	APW
EGA Hume	E11	APW	APW	AH
EGA Wedgetail	E12	APW	APW	PH
Egret	E1	AGP	AGP	AGP
Emblem	E3	AGP	AGP	AGP
Eradu	E6	AGP	AGP	AGP
Esperio	E7	AGP	AGP	AGP
Eureka	E8	AGP	AGP	AGP
Excalibur	E5	ASW	AGP	AGP
Falcon	F2	AGP	AGP	AGP

VARIETY	CODE	SA	VIC.	SNSW
Felix	F4	AGP	AGP	AGP
Festiguay	F1	AGP	AGP	AGP
Festival	F6	AGP	AGP	AGP
Flinders	F3	AGP	AGP	AGP
Ford	F7	AGP	AGP	AGP
Frame	F5	APW	APW	APW
Gabo	G1	AGP	AGP	AGP
Gala	G2	AGP	AGP	AGP
Gambee	G11	AGP	AGP	AGP
Gamenya	G15	AGP	AGP	AGP
Gamut	G13	AGP	AGP	AGP
Gatcher <sup>1</sup>	G12	AGP	AGP	AGP
Giles	G16	APW	APW	AH
Glaive	G10	AGP	AGP	AGP
Glenwari	G5	AGP	AGP	AGP
Glover	G18	APW	APW	APW
Glucub	G6	AGP	AGP	AGP
Golden king	G7	AGP	AGP	AGP
Goldmark	G4	APW	AH	AH
Gordon	G9	FEED	FEED	FEED
Goroke	G3	APW	APW	APW
Grebe	G8	AGP	AGP	ASF/AGP
Gunderoi	G17	DR/FEED	DR/FEED	DR/FEED
Gutha	G14	AGP	AGP	AGP
H45	H15	APW	APW	AH
Halberd	H1	APW	APW	AGP
Harrier	H13	AGP	AGP	AH
Harrismith	H16	AGP	AGP	AGP
Hartog	H14	AGP	AH	PH
Heron	H2	AGP	AGP	AGP
Hopps	H3	AGP	AGP	AGP
Houtman	H5	AGP	AGP	APW
Huguenot	H7	FEED	FEED	FEED
Hybrid Apollo	H8	AGP	AGP	PH
Hybrid Gemini	H9	AGP	AGP	APW
Hybrid Mercury	H10	AGP	AGP	PH
Hybrid Meteor	H11	AGP	AGP	PH
Hybrid Pulsar	H12	AGP	AGP	PH
Hybrid Titan	H4	AGP	AGP	AGP
Hyden	H6	AGP	AGP	AGP
Insignia	I1	AGP	AGP	AGP
Insignia 49	I3	AGP	AGP	AGP

VARIETY	CODE	SA	VIC.	SNSW
Isis	I2	AGP	AGP	AGP
Jabiru	J1	AGP	AGP	AGP
Jacup	J2	AGP	AGP	AGP
Janz	J3	AH	AH	PH
Kalannie	K12	APW	APW	APW
Kalkee	K16	AGP	AGP	AGP
Kamilaroi	K8	DR/FEED	DR/FEED	DR/FEED
Karlgarin	K20	ASW	ASW	ASW
Katunga	K9	AGP	AGP	AGP
Katyil	K17	AGP	AGP	AGP
Kelalac	K2	AGP	APW	AGP
Kennedy	K18	FEED*	FEED*	FEED
Kewell	K3	AGP	AGP	AGP
Kiata	K7	AGP	AGP	AGP
King	K5	AGP	AGP	AGP
Kings early	K4	AGP	AGP	AGP
Kings white	K13	AGP	AGP	AGP
Kite	K1	AH	APW	AH
Koda	K14	AGP	AGP	AGP
Kondut	K15	AGP	AGP	AGP
Krichauff	K11	ASW	ASW	ASW
Kronos	K10	FEED	FEED	FEED
Kukri	K19	AH	APW	APW
Kulin	K6	AGP	AGP	AGP
Lance	L1	AGP	AGP	AGP
Lang	L7	APW	APW	PH
Lark	L3	AGP	AGP	AH
Lawson	L4	FEED	FEED	FEED
Leichhardt	L5	APW	APW	AH
Lillimur	L6	AGP	AGP	AGP
Lorikeet	L8	ASW	ASWN	ASWN/ ASW
Lowan	L2	AGP	AGP	AGP
Machete	M7	AH	AH	AGP
Mackellar	M23	FEED	FEED	FEED
Madden	M1	AGP	AGP	AGP
Marombi	M22	FEED	FEED	FEED
Matong	M5	AGP	AGP	AGP
Mawson	M14	FEED	FEED	FEED
Meering	M8	AH	AH	AH
Mendos	M15	AGP	AGP	AGP
Mengavi	M16	AGP	AGP	AGP

VARIETY	CODE	SA	VIC.	SNSW
Mersey	M2	AGP	AGP	AGP
Miling	M17	AGP	AGP	AGP
Millewa	M4	AGP	AGP	AGP
Minto	M3	AGP	AGP	AGP
Mira	M19	ASW	APW	ASW
Miskle	M11	AGP	AGP	PH
Mitre	M20	APW	AH	APW
Mokoan	M18	AGP	AGP	AGP
Molineux	M10	AH	APW	AGP
Moray	M12	AGP	APW	AGP
More	M13	FEED	FEED	FEED
Muchmore	M6	FEED	FEED	FEED
Mulgara	M21	APW	APW	AH
Multiline	M9	AGP	AGP	AGP
Noongar	N1	AGP	AGP	AGP
Nyabing	N2	AGP	AGP	AGP
Olympic	O2	AGP	AGP	AGP
Osprey	O3	AGP	AGP	AH
Ouyen	O4	AH	AH	AH
Owlet	O5	AGP	AGP	AGP
Oxley	O1	APW	APW	AGP
Paradalote	P9	ASW	ASW	APW
Paterson	P4	FEED	FEED	FEED
Pelsart	P2	AGP	AGP	APH
Perenjori	P5	ASW	ASW	ASW
Perouse	P3	AGP	AGP	AGP
Petrel	P6	ASW	ASW	ASW
Petrie	P10	APW	APW	AH
Pinehead	P7	AGP	AGP	AGP
Pinnacle	P1	AGP	AGP	AGP
Pugsley	P11	APW	ASW	ASW
Pusa flora	P8	AGP	AGP	AGP
QAL 2000	Q2	AGP	AGP	ASF/AGP
Quarrion	Q1	AGP	AGP	AGP
Raven	R1	AGP	AGP	AGP
Reeves	R4	AGP	AGP	AGP
Robin	R5	AGP	AGP	AGP
Rosella	R2	ASW	ASWN/ ASW	ASWN/ ASW
Rowan	R3	AGP	AGP	AGP
Rubic	R7	FEED	FEED	FEED
Rudd	R6	FEED	FEED	FEED

VARIETY	CODE	SA	VIC.	SNSW
Sabre	S1	AGP	AGP	AGP
Schomburgk	S12	AH	AGP	AGP
Schomburgk Bt	S16	AH	AGP	AGP
Scimitar	S4	AGP	AGP	AGP
Scottie	S5	AGP	AGP	AGP
Seafoam	S6	AGP	AGP	AGP
Seewari	S28	AGP	AGP	AGP
Seri 82	S38	FEED	FEED	FEED
Sherpa	S29	AGP	AGP	AGP
Shortim	S2	AGP	AGP	AGP
Shrike	S21	AGP	AGP	AGP
Silverstar	S25	AH	AH	AH
Skua	S11	AGP	AGP	AGP
Snipe	S35	AGP	AGP	ASF/AGP
Songlen	S3	AGP	AGP	AGP
Spear	S7	APW	APW	AGP
Spica	S30	AGP	AGP	AGP
Stiletto	S17	APW	APW	ASW
Stretton	S18	ASW	ASW	ASW
Strzelecki	S39	APW	APW	AH
Stylet	S37	APW	ASW	ASW
Summit	S32	AGP	AGP	AGP
Sunbird	S14	AGP	AGP	ASW
Sunbri	S24	AGP	AH	APH
Sunbrook	S26	APW	AH	AH
Sunco	S13	APW	AH	APH
Sundor	S9	AGP	AGP	AGP
Suneca	S34	AGP	AGP	PH
Sunelg	S10	AH	APW	AH
Sunfield	S15	APW	AGP	AGP
Sunkota	S33	AGP	AGP	PH
Sunland	S31	AGP	AGP	PH
Sunlin	S27	APW	APW	PH
Sunmist	S22	AGP	AGP	PH
Sunsoft 98	S36	AGP	AGP	ASWN/ASW
Sunstar	S8	AGP	AGP	PH
Sunstate	S23	AH	AH	PH
Sunvale	S19	AH	AH	PH
Swift	S20	APW	APW	AH
Tailorbird	T11	APW	AH	AH
Takari	T5	AH	AGP	AGP
Tamaroi	T15	DR/FEED	DR/FEED	DR/FEED

VARIETY	CODE	SA	VIC.	SNSW
Tammin	T16	FEED	FEED	FEED
Tarsa	T12	AGP	AGP	AGP
Tasman	T13	AGP	AGP	AGP
Tatiara	T9	SOFT/AGP	ASF/AGP	ASF/AGP
Teal	T6	AGP	AGP	AGP
Tennant	T17	FEED	FEED	FEED
Tern	T3	AGP	AGP	ASW
Terra	T4	AGP	AGP	AGP
Thornbill	T18	AGP	AGP	ASF/AGP
Timgalen	T8	AGP	AGP	AGP
Timson	T2	AGP	AGP	AGP
Tincurrin	T1	SOFT/AGP	ASF/AGP	AGP
Torres	T7	AGP	AGP	AGP
Trident	T10	ASW	ASW	ASW
Triller <sup>2</sup>	T14	FEED	FEED	FEED
Vasco	V1	AGP	AGP	AGP
Vectis	V3	SOFT/AGP	ASF/AGP	ASF/AGP
Vulcan	V2	ASW	APW	AH
Wagin	W5	AGP	AGP	AGP
Waratah	W11	AGP	AGP	AGP
Warbler	W8	FEED	FEED	FEED
Warigal	W1	AH	AGP	AGP
Warimba	W2	AGP	AGP	AGP
Westonia	W16	APW	ASW	ASW
Whistler	W15	AGP	ASW	ASW
Wialki	W4	AGP	AGP	AGP
Wilgoyne	W10	AGP	AGP	AGP
Windebri	W12	AGP	AGP	AGP
Winglen	W13	AGP	AGP	AGP
Wollaroi	W9	DR/FEED	DR/FEED	DR/FEED
Wongoondy	W6	AGP	AGP	AGP
Worrakatta	W14	ASW	ASW	ASW
Wren	W3	AGP	AGP	AGP
Wyalkatchem	W18	APW	ASW	ASW
Wylah	W17	APW	APW	AH
Wyuna	W7	SOFT/AGP	ASF/AGP	ASF/AGP
Yallaroi	Y2	DR/FEED	DR/FEED	DR/FEED
Yanac	Y3	APW	APW	APW
Yarralinka	Y1	ASW	AGP	AGP
Yitpi	Y4	AH	AH	APW
Zenith	Z1	AGP	AGP	AGP

## 4.4 Tolerances For Seed Contaminants

The tolerances listed below are maximums and refer to the total of all seeds named in each group. These tolerances should be read in conjunction with the receival standards schedule.

\* = Unmillable Material

S = Small Foreign Seeds

U = Unlimited

Common Name	Botanical Name	Tolerance Seeds per ½ litre			
		TYPE	ASW1	AGP1	FED1
Amsinckia	<i>Amsinckia spp</i>	S	S	S	S
Australian Bindweed	<i>Convolvulus erubescens</i>	8	50	150	400
Australian Carrot	<i>Daucus glochidiatus</i>	8	50	150	400
Australian Phalaris	<i>Phalaris aquatica</i>	S	S	S	S
Ball Clover	<i>Trifolium glomeratum</i>	S	S	S	S
Ball Mustard	<i>Neslia paniculata</i>	S	S	S	S
Barley (6 Row)	<i>Hordeum vulgare</i>	8	50	150	400
Barley (2 Row)	<i>Hordeum distichon</i>	8	50	150	400
Barley Grass	<i>Hordeum leporinum</i>	8	50	150	400
Barnyard Grass	<i>Echinochloa crus-galli</i>	8	50	150	400
Bathurst Burr	<i>Xanthium spinosum</i>	3A	2	2	2
Beans (Faba)	<i>Vicia faba</i>	7	1	10	100
Bedstraw (Threehorn)	<i>Galium tricornutum</i>	8	50	150	400
Bifora (Monkey Face Or Carrot Weed)	<i>Bifora testiculata</i>	8	50	150	400
Billy Buttons	<i>Calocephalus platyphalus</i>	8	50	150	400
Bindy-Eye	<i>Calotis hispidula</i>	8	50	150	400
Bindweed (Australian)	<i>Convolvulus erubescens</i>	8	50	150	400
Bindweed (Black)	<i>Polygonum convolvulus</i>	8	50	150	400
Bindweed (Field)	<i>Convolvulus arvensis</i>	4	20	20	20
Black Bindweed	<i>Polygonum convolvulus</i>	8	50	150	400
Black Oats	<i>Avena fatua</i>	8	50	150	400
Bladder Soap Wort	<i>Vaccaria hispanica</i>	S	S	S	S
Brome (Great)	<i>Bromus diandrus</i>	8	50	150	400
Brome (Soft)	<i>Bromus mollis</i>	8	50	150	400
Brome (Sterile)	<i>Bromus sterilis</i>	8	50	150	400
Broomrape	<i>Orobanche ramosa</i>	2	NIL	NIL	NIL
Buchan Weed	<i>Hirschfeldia incana</i>	8	50	150	400
Bulls Head	<i>Tribulus terrestris</i>	3A	2	2	2
Burr Grass (Spiny)	<i>Cenchrus tribuloides</i>	8	50	150	400
Burrweed (Yellow)	<i>Amsinckia spp</i>	S	S	S	S
Caltrop	<i>Tribulus terrestris</i>	3A	2	2	2
Canary Grass (Lesser)	<i>Phalaris minor</i>	S	S	S	S
Canary Grass (Wild)	<i>Phalaris canariensis</i>	S	S	S	S
Canola	<i>Brassica rapa</i>	S	S	S	S
Cape Tulip	<i>Homeria spp</i>	3A	2	2	2
Carrot (Australian)	<i>Daucus glochidiatus</i>	8	50	150	400
Castor Oil Plant	<i>Ricinus communis</i>	2	NIL	NIL	NIL

Common Name	Botanical Name	Tolerance Seeds per ½ litre			
		TYPE	ASW1	AGP1	FED1
Cats Head	<i>Tribulus terrestris</i>	3A	2	2	2
Celery (Slender)	<i>Apium leptophyllum</i>	S	S	S	S
Cereal Rye	<i>Secale cereale</i>	8	50	150	400
Charlock	<i>Sinapis arvensis</i>	S	S	S	S
Chickpeas	<i>Cicer arietinum</i>	7	1	10	100
Clover (Ball)	<i>Trifolium glomeratum</i>	S	S	S	S
Clover (Pods)	<i>Trifolium spp</i>	*	*	*	*
Clover Broomrape	<i>Orobanche minor</i>	S	S	S	S
Cockspur (Maltese)	<i>Centaurea melitensis</i>	S	S	S	S
Colocynth	<i>Citrullus colocynthis</i>	1	8	8	8
Colombus Grass	<i>Sorghum alnum</i>	6	10	50	50
Coriander	<i>Coriandrum sativum</i>	2	NIL	NIL	NIL
Corn	<i>Zea mays</i>	7	1	10	100
Corn Gromwell	<i>Buglossoides arvensis</i>	8	50	150	400
Cottonseed	<i>Gossypium spp</i>	3A	2	2	2
Cowpea	<i>Vigna unguiculata</i>	7	1	10	100
Creeping Knapweed	<i>Acroptilon repens</i>	5	40	40	40
Crow Garlic	<i>Allium vineale</i>	2	NIL	NIL	NIL
Cutleaf Mignonette	<i>Reseda lutea</i>	4	20	20	20
Darling Pea	<i>Swainsona spp</i>	2	NIL	NIL	NIL
Darnel	<i>Lolium temulentum</i>	4	20	20	20
Dock	<i>Rumex spp</i>	S	S	S	S
Dodder	<i>Cuscuta spp</i>	3A	2	2	2
Double Gees	<i>Emex australis</i>	1	8	8	8
Drake	<i>Lolium temulentum</i>	4	20	20	20
Durum^	<i>Triticum durum</i>	8	50	150	U
Evening primrose	<i>Oenothera stricta</i>				
Faba Beans	<i>Vicia faba</i>	7	1	10	100
Fat Hen	<i>Chenopodium album</i>	S	S	S	S
Fescue	<i>Festuca spp</i>	S	S	S	S
Field Peas	<i>Pisum sativum</i>	7	1	10	100
Galvanised Burr	<i>Sclerolaena birchii</i>	8	50	150	400
Garlic (Crow) Garlic (Wild)	<i>Allium vineale</i>	2	NIL	NIL	NIL
Grain Sorghum	<i>Sorghum bicolor</i>	8	50	150	400
Great Brome	<i>Bromus diandrus</i>	8	50	150	400
Gromwell (Corn)	<i>Bugglosoides arvensis</i>	8	50	150	400
Hares Ear	<i>Conringia orientalis</i>	S	S	S	S
Hedge Mustard	<i>Sisymbrium officinale</i>	S	S	S	S
Heliotrope (Blue)	<i>Heliotropium amplexicaule</i>	3C	8	8	8
Heliotrope (Common)	<i>Heliotropium europaeum</i>	3C	8	8	8
Hexham Scent (Melilotus)*	<i>Melilotus indicus</i>	4	20	20	20
Hoary Cress	<i>Cardaria draba</i>	4	20	20	20
Horehound	<i>Marrubium vulgare</i>	S	S	S	S
Horned Poppy	<i>Glaucium flavum</i>	1	8	8	8

Common Name	Botanical Name	Tolerance Seeds per ½ litre			
		TYPE	ASW1	AGP1	FED1
Indian Weed	<i>Sigesbeckia orientalis</i>	8	50	150	400
Johnson Grass	<i>Sorghum halepense</i>	6	10	50	50
Jute	<i>Corchorus olitorius</i>	1	8	8	8
Khaki Weed	<i>Alternanthera pungens</i>	8	50	150	400
Knapweed (Creeping & Russian)	<i>Acroptilon repens</i>	5	40	40	40
Knotweed	<i>Polygonum aviculare</i>	S	S	S	S
Lentils	<i>Lens culinaris</i>	7	1	10	100
Lesser Canary Grass	<i>Phalaris minor</i>	S	S	S	S
Lettuce	<i>Lactuca spp</i>	S	S	S	S
Linseed	<i>Linum usitatissimum</i>	8	50	150	400
Long Headed Poppy	<i>Papaver dubium</i>	1	8	8	8
Lucerne (Pods)	<i>Medicago sativa</i>	*	*	*	*
Lucerne (Seed)	<i>Medicago sativa</i>	S	S	S	S
Lupin	<i>Lupinus spp</i>	7	1	10	100
Maize	<i>Zea mays</i>	7	1	10	100
Mallow (Marsh)	<i>Malva spp</i>	8	50	150	400
Maltese Cockspur	<i>Centaurea melitensis</i>	S	S	S	S
Medics (Pods)	<i>Medicago spp</i>	*	*	*	*
Medics (Seeds)	<i>Medicago spp</i>	S	S	S	S
Melilot (King Island)*	<i>Melilotus indicus</i>	4	20	20	20
Mexican Poppy	<i>Argemone mexicana</i>	1	8	8	8
Mignonette (Cutleaf)	<i>Reseda lutea</i>	4	20	20	20
Milk Thistle (Pods)	<i>Sonchus oleraceus</i>	*	*	*	*
Milk Thistle (Seeds)	<i>Sonchus oleraceus</i>	S	S	S	S
Millet (Japanese)	<i>Echinochloa utilis</i>	8	50	150	400
Mintweed	<i>Salvia reflexa</i>	4	20	20	20
Muskweed	<i>Myagrurn perfoliatum</i>	8	50	150	400
Mustard	<i>Sisymbrium spp</i>	S	S	S	S
Mustard (Ball)	<i>Sisymbrium spp</i>	S	S	S	S
Mustard (Indian Hedge)	<i>Sisymbrium orientale</i>	S	S	S	S
New Zealand Spinach	<i>Tetragonia tetragonoides</i>	1	8	8	8
Nightshades	<i>Solanum spp</i>	4	20	20	20
Noogoora Burr	<i>Xanthium pungens</i>	3A	2	2	2
Oats (Black)	<i>Avena fatua</i>	8	50	150	400
Oats (Common)	<i>Avena sativa</i>	8	50	150	400
Oats (Sand)	<i>Avena strigosa</i>	8	50	150	400
Oats (Wild)	<i>Avena fatua</i>	8	50	150	400
Onion Weed	<i>Asphodelus fistulosus</i>	8	50	150	400
Opium Poppy	<i>Papaver somniferum</i>	1	8	8	8
Paddy Melon	<i>Cucumis myocarpus</i>	4	20	20	20
Paradoxa Grass (Glumed)	<i>Phalaris paradoxa</i>	8	50	150	400
Paradoxa Grass (Seed)	<i>Phalaris paradoxa</i>	S	S	S	S
Parthenium Weed	<i>Parthenium hysterophorus</i>	1	8	8	8
Paterson's Curse	<i>Echium plantagineum</i>	5	40	40	40

Common Name	Botanical Name	Tolerance Seeds per ½ litre			
		TYPE	ASW1	AGP1	FED1
Peas (Field)	<i>Pisum sativum</i>	7	1	10	100
Peppercress	<i>Lepidium spp</i>	S	S	S	S
Phalaris (Australian)	<i>Phalaris aquatica</i>	S	S	S	S
Poached Egg Daisy	<i>Calocephalus platycephalus</i>	8	50	150	400
Poppy (Field)	<i>Papaver rhoeas</i>	1	8	8	8
Poppy (Horned)	<i>Glaucium flavum</i>	1	8	8	8
Poppy (Mexican)	<i>Argemone mexicana</i>	1	8	8	8
Poverty Weed (Yellow)	<i>Calocephalus sonderi</i>	8	50	150	400
Radish (Wild) Seed	<i>Raphanus raphanistrum</i>	S	S	S	S
Radish (Wild) Pod	<i>Raphanus raphanistrum</i>	*	*	*	*
Ragweed	<i>Ambrosia spp</i>	2	NIL	NIL	NIL
Rapeseed	<i>Brassica rapa</i>	S	S	S	S
Rattlepods	<i>Crotalaria spp</i>	2	NIL	NIL	NIL
Rice	<i>Oryza sativa</i>	8	50	150	400
Russian Knapweed	<i>Acroptilon repens</i>	5	40	40	40
Rye (Cereal)	<i>Secale cereale</i>	8	50	150	400
Ryegrass	<i>Lolium spp</i>	S	S	S	S
Safflower	<i>Carthamus tinctorius</i>	7	1	10	100
Saffron Thistle	<i>Carthamus lanatus</i>	6	10	50	50
Sage (Wild)	<i>Salvia verbenaca</i>	S	S	S	S
Saltbush	<i>Atriplex spp</i>	S	S	S	S
Salvation Jane	<i>Echium plantagineum</i>	5	40	40	40
Sand Oats	<i>Avena strigosa</i>	8	50	150	400
Sesbania Pea	<i>Sesbania cannabina</i>	5	40	40	40
Sheepweed	<i>Buglossoides arvensis</i>	8	50	150	400
Skeleton Weed	<i>Chondrilla juncea</i>	4	20	20	20
Slender Celery	<i>Apium leptophyllum</i>	S	S	S	S
Small Burrgrass	<i>Tragus australianus</i>	8	50	150	400
Sorghum (Grain)	<i>Sorghum bicolor</i>	8	50	150	400
Sorrel	<i>Rumex acetosella</i>	S	S	S	S
Sowthistle	<i>Sonchus spp</i>	S	S	S	S
Soybean	<i>Glycine max</i>	7	1	10	100
Spear Grass	<i>Bromus diandrus</i>	8	50	150	400
Spear Thistle	<i>Cirsium vulgare</i>	8	50	150	400
Spiny Burr Grass	<i>Cenchrus tribuloides</i>	8	50	150	400
Spiny Emex	<i>Emex australis</i>	1	8	8	8
Starburr	<i>Acanthospermum hispidum</i>	2	NIL	NIL	NIL
St. Johns Wort	<i>Hypericum perforatum</i>	2	NIL	NIL	NIL
Sunflower	<i>Helianthus annuus</i>	7	1	10	100
Thistle Milk (Pods)	<i>Sonchus oleraceus</i>	*	*	*	*
Thistle Milk (Seeds)	<i>Sonchus oleraceus</i>	S	S	S	S
Thistle (Saffron)	<i>Carthamus lanatus</i>	6	10	50	50
Thistle (Spear)	<i>Cirsium vulgare</i>	8	50	150	400
Thistle (Variegated)	<i>Silybum marianum</i>	4	20	20	20

Common Name	Botanical Name	Tolerance Seeds per ½ litre			
		TYPE	ASW1	AGP1	FED1
Tick Grass	<i>Tragus australianus</i>	8	50	150	400
Thornapple	<i>Datura spp</i>	3A	2	2	2
Three Cornered Jack	<i>Emex australis</i>	1	8	8	8
Threehorned Bedstraw	<i>Galium tricornutum</i>	8	50	150	400
Triticale	<i>Triticosecale spp</i>	8	50	150	400
Turnip (Mediterranean)	<i>Brassica tournefortii</i>	S	S	S	S
Turnip (Wild)	<i>Brassica rapa</i>	S	S	S	S
Turnip Weed (Ball)	<i>Rapistrum rugosum</i>	8	50	150	400
Urochloa Grass	<i>Urochloa panicoides</i>	S	S	S	S
Variegated Thistle	<i>Silybum marianum</i>	4	20	20	20
Verbena	<i>Verbena spp</i>	S	S	S	S
Vetch (Commercial)	<i>Vicia spp</i>	3B	4	4	4
Vetch (Wild Tare)	<i>Vicia sativa</i>	3B	4	4	4
Wards Weed	<i>Carrichtera annua</i>	8	50	150	400
Wheatgrass	<i>Agropyron spp</i>	8	50	150	400
Wild Canary Grass	<i>Phalaris canariensis</i>	S	S	S	S
Wild Garlic	<i>Allium vineale</i>	2	NIL	NIL	NIL
Wild Oats	<i>Avena fatua</i>	8	50	150	400
Wild Poppy	<i>Papaver hybridum</i>	1	8	8	8
Wild Radish (Seed)	<i>Raphanus raphanistrum</i>	S	S	S	S
Wild Radish (Pod)	<i>Raphanus raphanistrum</i>	*	*	*	*
Wild Sage	<i>Salvia verbenace</i>	S	S	S	S
Wild Turnip	<i>Brassica rapa</i>	S	S	S	S
Wireweed	<i>Polygonum aviculare</i>	S	S	S	S
Yellow Burrweed	<i>Amsinckia spp</i>	S	S	S	S
Yellow Poverty Weed	<i>Calocephalus sonderi</i>	8	50	150	400

\*Hexham Scent (*Melilotus indicus*) may only be received if there is no discernable tainting odour imparted to the wheat

^Durum (*Triticum durum*) contamination of bread wheat (*Triticum aestivum*).

## **4.5 2003/2004 Wheat Receival Chart**

Ensure that the current Wheat Recival Charts are added to this section.

### **4.5.1 AusBulk Ltd Charts**

Wheat Milling grades – Wheat Receival Chart SA Vn 981335

Durum grades – Durum Summary chart Vn 011315

Soft Grades – Soft Wheat Summary Chart Vn 011319

### **4.5.2 ABA Ltd Charts**

ABA Wheat Receival Chart Vn 011642