Section 6
Triticale Receival Standards and Classification Procedures

6.1 Triticale Classification Procedures

The following procedure is to be used for the receival of Triticale.

1. Sample the load presented for delivery according to the Receival Sampling procedure to produce a representative Grower Load Composite (GLC) sample.

   From the GLC sample draw a subsample to be tested for moisture content. Triticale moistures are determined using the Kett moisture meter using the Wheat calibration.

   If the moisture content exceeds 13.5% the load must be rejected and issued a Temporary Decline Notice.

   If the moisture exceeds 12.5% but not 13.5% then retest 2 further samples and average the three results using the Kett's averaging function.

   Should the average moisture content be above 12.5% the load must be rejected and issued a Temporary Decline Notice.

   If the average moisture content is below 12.5% the classification can continue.

2. Draw a subsample from the GLC sample and measure the Test Weight using the 1/2 litre Electronic Scale method.

3. Screen the 1/2 litre sample used to determine the Test weight with the 2.00mm Wheat screen on the Agtator. Weigh the material collected below the screen using the scales to determine the % Of Screenings according to the ½ litre and Agtator procedure in section 2 and record the results.

4. Check the top of the screen for any light weight material such as chaff, straw, Wild Radish pods. Separate this material if it appears that it will exceed the allowed tolerance and determine the % Of Unmillable Material using the plastic 5% measure.

5. Check the sample for any signs of objectionable contaminants subject to Nil tolerance. If any material subject to a Nil tolerance is found in the load than you must issue a Notice of Load of Grain Temporarily Declined.

6. Check the sample for Nominated Foreign Seeds to ensure that the number per 1/2 Litre is within the tolerances allowed. Refer to the table below for weed seed contaminant levels for both TRIT and TRIF.

TOLERANCE (Maximum per half litre)	**TRIT**	**TRIF**
TYPE 1 Tolerances Refer To The Maximum Allowed For Each Individual Seed Listed		
Colocynth, Three Corner Jacks/Spiny Emex/Double Gee, Jute, Long Head Poppy, Mexican Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach	8	8

For Types 2 - 8, Tolerances Refer To The Total Of All Seeds Named In Each Type

Type 2	**TRIT**	**TRIF**
Castor Oil Plant, Coriander, Crow or Wild Garlic, Darling Pea, Opium Poppy, Ragweed, Rattlepods, Common Broomrape, Starburr, St. John's Wort, Parthenium Weed	Nil	Nil
Type 3a		
Bathhurst & Noogoora Burr, Bulls Head or Caltrop or Cats Head, Cape Tulip, Cottonseed, Dodder, Thornapple, Bellvine	2	2
Type 3b		
Vetch (Wild Tare) Vetch (Commercial)	4	4
Type 3c		
Heliotrope (Blue) Heliotrope (Common)	8	8

Type 4		
Field Bindweed, Cutleaf Mignonette, Drake Seed, Hexham Scent (Melilotus), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	20	20
Hexham scent (melilotus) can only be received if there is no discernible tainting odour imparted to the triticale		
Type 5		
Creeping Knapweed (Or Russian Knapeweed), Salvation Jane (Paterson's Curse), Sesbania Pea	40	40
Type 6		
Saffron Thistle, Johnson Grass, Colombus Grass	50	50
Type 7		
Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Field Peas, Safflower, Soybean, Sunflower	10	100
Type 8		
Barley, Bindweed (Black & Australian), Wheat, Durum Wheat, Black Oats, Sand oats, Wild Oats, Common Oats, Rice, Cereal Rye, Triticale, Turnip Weed, Forage Sorghum and Other Weed Seeds Not Specified In Types 1-7 or Small foreign seeds	150	400
Small Foreign Seeds % by weight	1.2	NA

7. Examine the ½ litre sample for a period of 30-60 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 use the Wheat Inspection Tray place a handful of triticale on 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.

   Cover with the white tray and invert the whole assembly so that the 300 grains fall into the white tray. Up to 5 minutes can be spent inspecting the 300 grains and the "Maggi" Lamp used as an aid if necessary.

   The percentage of defective grains is calculated by counting the number found in the tray and dividing by 3. Round the number to the nearest whole percentage.

8. 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 Receivals 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 the classifier from the responsibility of classifying the load.

   All tests performed and the 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 Triticale Classification Chart.

*refers to Mandatory Tests

TEST	CODE	TEST	CODE
Commodity – Triticale	TR	Weed Seed Contaminants Type 1	S1
Moisture	MO*	Weed Seed Contaminants Type 2	S2
Test Weight	TW*	Weed Seed Contaminants Type 3a	3A
Screenings	SC*	Weed Seed Contaminants Type 3b	3B
Variety	VR*	Weed Seed Contaminants Type 3c	3C
Unmillable Material	SA	Weed Seed Contaminants Type 4	S4
Black Point	BP	Weed Seed Contaminants Type 5	S5
Pink Stained Grain	PF	Weed Seed Contaminants Type 6	S6
Dry Green And Sappy Grain	GS	Weed Seed Contaminants Type 7	S7
Sprouted Grain	SP	Weed Seed Contaminants Type 8	S8
Snails – Round	SNR		
Snails – Conical	SNC		
Triticale Ergot	TE		

5. While there is no varietal requirements for Triticale grades, the variety needs to be listed on the weight ticket. Ask the driver for the variety of the triticale and the paddock name (optional). The grower can be reassured the variety makes no difference to grading of the load. Codes to be used are as follows.

Variety	Code
Abacus	ATR
Credit	DTR
Currency	CTR
Everest	MTR
Maiden	NTR
Muir	RTR
Tahara	TTR
Tickit	ITR
Treat	ETR
Venus	VTR
Unknown	XTR

6. Draw the appropriate amount of sample from the GLC sample to add to the Cell Composite or Bin Grade Composite samples and collect any other samples requested by AusBulk Ltd Head Office.

6.2 Triticale (No.1) Receival Standards (TRIT)

Application

The following standard applies to the receival of Triticale (No.1).

Standard

1. Physical Characteristics

1.1 The seed shall be free from visible evidence of live grain and stored product pests (including live adult Pea Weevil / Larvae), animal excreta, rodents or rodent carcasses.

1.2 The triticale shall also be free from noxious weed seeds, sticks, stones, sand, earth, mineral matter and any chemical not registered for use on stored triticale, or in excess of legal tolerances.

1.3 There shall be a **NIL** tolerance on pickling compounds/seed dressings, or any fungicide added to the triticale as a seed dressing, any tainting agents and/or other contaminants imparting an odour not normally associated with triticale including caked, bin burnt, and/or mouldy triticale, which are a result of product storage.

2. Description

Triticale is a cereal developed from crosses between wheat and rye. In a normal season, Triticale is nearly 50% longer than a wheat grain. Triticale grains are dull in colour, most grains have some degree of wrinkling of the husk, and the germ end is pointed similar to rye. Triticale grains must be sound, bright, mature seeds of the current season.

3. Moisture Content

The maximum moisture content for the receival of triticale is **12.5%** - Wheat scale, KETT Moisture Meter.

4. Test Weight

The minimum test weight for the receival of triticale is **65 kg/hl**.

5. Purity

5.1 Unmillable Material

Remaining ABOVE the screen includes wild radish pods, milk thistle pods, white heads, chaff, and backbone. Maximum Tolerance is **5% by volume.**

5.2 Screenings

Includes unmillable material, small foreign seeds and distorted, pinched, and cracked grain which passes BELOW the screen. Maximum Tolerance is **10% by weight.**

5.3 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.

The tolerances listed below 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 6.1.6 or to Section 4.7 in the wheat standards. TRIT's weed seed count equates to that of Wheat AGP1.

6. Defective Grain

From a 300 grain sample.

6.1 Sprouted grain

Sprouted grains are those in which the covering of the germ is split. It includes any further advanced stage of growth of the germ. 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.

Maximum tolerance 2% by count. (count of 6 sprouted seeds per 300 grains)

6.2 Stained grain

Stained grains are those that have been exposed to wet weather during the growing and maturation phases or have become infected by field fungi. 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, blacktip, pink fungal stained grains and grains discoloured by field fungi, but does not include grains infected with storage fungi.

Stained Grains maximum tolerance of 15% by count (45 Stained Grains per 300 grains) **of which pink grain maximum tolerance of 5% by count** (15 pink grains per 300 grains)

6.3 Dry Green Sappy and Frost Distorted Grains

Dry, green, sappy or frost distorted grains are those which have been harvested at an immature stage of development, have been affected by frost during the maturation phase, distorted by drying operations or during plant growth due to the use of herbicides.

The Definition Does Not Included Grain Which Has Been Pinched As A Result Of Dry Conditions Or Disease During Ripening

Dry, Green, Sappy and Frost distorted grains maximum tolerance of 2% by count (6 Dry Green Sappy and Frost Distorted Grains per 300 grains)

6.4 Insect Damaged Grain

Insect damaged grains include those that have been eaten in part by stored grain insects, and any field pest of wheat, including Heliothis spp.

Insect Damaged Grain maximum tolerance of 2% by count (6 insect damaged grains per 300 grains)

7. Ryegrass Ergot and Smut

There is a **NIL** tolerance for ryegrass ergot and smut in triticale.

8. Triticale Ergot

Ergots are purplish-black fungal bodies which contaminate cereal kernels when they are infected by the fungus Claviceps purpurea. This is a tolerance of **1 piece per ½ litre**.

9. Dead Grain Insects

Maximum tolerance of 5 dead insects of stored grain by count per ½ litre, includes Pea Weevil.

10. Field Insects

Maximum tolerance of 3 Field Insects by count per ½ litre.
Maximum tolerance of 10 Sitona Weevil by count per ½ litre.

11. Snails

Snails refer to whole bodies or substantially whole (more than half) Snail shells irrespective of size of the White Snail (Cernuella virgata), White Italian Snail (Theba pisana), Pointed Snail (Cochlicella acuta) and Small Pointed Snail (Cochlicella barara).

Maximum tolerance of **1 snail per ½ litre (live or dead).**

6.3 Triticale (Feed) Receival Standards (TRIF)

Application

The following standard applies to the receival of Triticale Feed.

Standard

1. Physical Characteristics

1.1 The seed shall be free from visible evidence of live grain and stored product pests (including live adult Pea Weevil / Larvae), animal excreta, rodents or rodent carcasses.

1.2 The triticale shall also be free from noxious weed seeds, sticks, stones, sand, earth, mineral matter and any chemical not registered for use on stored triticale, or in excess of legal tolerances.

1.3 There shall be a **NIL** tolerance on pickling compounds/seed dressings, or any fungicide added to the triticale as a seed dressing, any tainting agents and/or other contaminants imparting an odour not normally associated with triticale including caked, bin burnt, and/or mouldy triticale, which are a result of product storage.

2. Description

Triticale is a cereal developed from crosses between wheat and rye. In a normal season, Triticale is nearly 50% longer than a wheat grain. Triticale grains are dull in colour, most grains have some degree of wrinkling of the husk, and the germ end is pointed similar to rye. Triticale grains must be sound, bright, mature seeds of the current season.

3. Moisture Content

The maximum moisture content for the receival of triticale is **12.5%** - Wheat scale, KETT Moisture Meter.

4. Test Weight

The minimum test weight for the receival of triticale is **60 kg/hl.**

5. Purity

5.1 Unmillable Material

Remaining ABOVE the screen includes wild radish pods, milk thistle pods, white heads, chaff, and backbone. Maximum Tolerance is **10% by volume**.

5.2 Screenings

Include unmillable material, small foreign seeds and distorted, pinched, and cracked grain which passes BELOW the screen. Maximum Tolerance is **15% by weight**.

5.3 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.

The tolerances listed below 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 6.1.6 or to Section 4.7 in the wheat standards. TRIF's weed seed count equates to that of FED1.

6. Defective Grain

From a 300 grain sample.

6.1 Sprouted grain

There is no limit for sprouted grains in TRIF.

6.2 Stained grain

Stained grains are those that have been exposed to wet weather during the growing and maturation phases or have become infected by field fungi. 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, blacktip, pink fungal stained grains and grains discoloured by field fungi, but does not include grains infected with storage fungi.

Stained Grains maximum tolerance of 50% by count (100 Stained Grains per 300 grains) **of which pink grain maximum tolerance of 5% by count** (15 pink grains per 300 grains)

6.3 Dry Green Sappy and Frost Distorted Grains

There is no limit for Dry Green Sappy and Frost Distorted Grains in TRIF

6.4 Insect Damaged Grain

Insect damaged grains include those that have been eaten in part by stored grain insects, and any field pest of wheat, including Heliothis spp.

Insect Damaged Grain maximum tolerance of 4% by count (12 insect damaged grains per 300 grains).

7. Ryegrass Ergot and Smut

There is a **NIL** tolerance for ryegrass ergot and smut in triticale.

8. Triticale Ergot

Ergots are purplish-black fungal bodies which contaminate cereal kernels when they are infected by the fungus Claviceps purpurea. This is a tolerance of **1 piece per ½ litre**.

9. Dead Grain Insects

Maximum tolerance of 5 dead insects of stored grain by count per ½ litre, includes Pea Weevil.

10. Field Insects

Maximum tolerance of 3 Field Insects by count per ½ litre.

Maximum tolerance of 10 Sitona Weevil by count per ½ litre.

11. Snails

Snails refer to whole bodies or substantially whole (more than half) Snail shells irrespective of size of the White Snail (*Cernuella virgata*), White Italian Snail (*Theba pisana*), Pointed Snail (*Cochlicella acuta*) and Small Pointed Snail (*Cochlicella barar*a).

Maximum tolerance of **5 snails per ½ litre (live or dead).**