

Member Update

Title: **GTA Standards Review – Call for Submissions**

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Distribution: GTA Members – primary contact list. Please circulate to all appropriate internal parties.

Proposed GTA Standards 2015/16 Season

1. Background

During deliberations on the development of Grain Standards (Standards) for the 2014/15 season, feedback was received by GTA from industry on the proposed changes for 2014/15 and potential changes for the following 2015/16 season.

The GTA Standards Committee (Committee) has recently met to discuss prior industry feedback and potential Standards for 2015/16. This document lists the following:

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In this document Cereals refers to wheat, barley, sorghum, maize, oats, cereal rye and triticale.

2. Industry Feedback

The Committee is seeking industry comment on the issues outlined in this document and on any other Standards related issue.

Submissions should be received by **COB Monday 23rd March 2015**.

Please lodge your submissions by sending to submissions@graintrade.org.au and title your email – Standards Review 2015/16.

A proforma for lodging submissions is located on the GTA website at <http://www.graintrade.org.au/committees>

Unless marked “confidential” and appropriate supporting reasons are provided, all submissions will be placed on the GTA website for industry review.

3. Agreed Changes for Adoption in the 2015/16 Season

3.1 Agreed Change: Minor Word Changes – Various Commodities

Minor changes to wording in Standards will occur to increase clarity and reflect the timing of application of the Standards:

- Reference to the document “Australian Grains Industry Post Harvest Chemical Usage Recommendations and Outturn Tolerances” will be altered to refer to the most recent version released and available on the GTA website at http://www.graintrade.org.au/storage_and_handling

3.2 Agreed Change: Visual Recognition Standards Guide – Various Commodities

In 2014/15 GTA produced a revised version of the Visual Recognition Standards Guide (VRSG). During 2015 the Committee will continue to review the VRSG for those commodities to ensure it remains applicable.

3.2.1 At present the following changes are proposed:

Commodity	Change Proposed
Barley	Broken – reduce scale of grain.
Wheat	Pink stained - new photo to be added of staining along grain.
	Frost Damaged – add photo of a pinched and a normal grain for comparison.
	Frost Damaged/Takeall Affected – committee agreed to combine the category. Place both parameters on the one line and unite them in the one category.
	Heat Damaged/Bin Burnt – add photo of good grain for comparison.
	White Grain Disorder/Head Scab/Flaky Grain – replace third grain with more suitable one.
Sorghum	Sprouted – revise photo based on change to definition as proposed by Stds committee.
	Mould – photo is at odds with definition. Re- word to reflect extent of mould required.
	Musty, Mouldy, Rotted – Rotted no longer in standards, thus remove. Reference to Mouldy needs review versus Storage Mould.
Oats	Damaged Grain – reduce scale of grain.
	Weather Stained Grains and Groats – need ventral view also.
Canola	Weather Damaged – Replace photo to produce a more coffee coloured crushed grain.
Desi Chickpeas	Frost – add photo of good grain for comparison.
	Hail Damaged – add photo of good grain for comparison.
	Ascochyta – add photo of whitish/grey grains.

Commodity	Change Proposed
Maize	Heat Damaged/Bin Burnt – add photo of good grain for comparison.
	Broken – reduce scale of grain.
Red Lentils	Frost – add photo of good grain for comparison.
	Heat Damaged/Bin Burnt – add photo of good grain for comparison.
Field Peas	Heat Damaged/Bin Burnt – add photo of good grain for comparison.
	Poor Colour Kernel – add photos of poor colour kernel.
Faba Beans	Heat Damaged/Bin Burnt – add photo of good grain for comparison.
	Frost – add photo of good grain for comparison.
	Poor Colour – to delete the last sentence referencing poor colour kernel.
	PSBMV – re-order grains so that 3 sound grains are before the 3 defective grains.

3.2.2 CBH (WA) has advised their desire to move towards adoption of the GTA VRSG for 2015/16. For some commodities there are some differences in quality parameters in Standards developed by the Grain Industry Association of Western Australia (GIWA) versus GTA Standards. Should the proposal proceed, the Committee will liaise with GIWA/CBH to determine a suitable means to clearly identify the differences in the GTA VRSG produced for 2015/16.

3.2.3 Industry is invited to nominate other commodities and particular grain defect types that the Committee should consider for inclusion in the 2015/16 VRSG due for release in August 2015.

3.3 *Agreed Change: Weed Seed Categories and Tolerances – All Cereals*

Refer Section 8 of this document for details of all changes to be adopted in the 2015/16 Standards for cereals. Industry comment is sought on the Committee recommendation to the GTA Board for adoption of all changes in the 2015/16 Standards.

Other commodity sectors are encouraged to review these changes and consider adoption along a similar timeframe where possible.

3.4 *Agreed Change: Combining Tolerances for Frost and Takeall – Wheat*

As advised to industry in 2014, given the practical difficulty of differentiating these two parameters in a sample of grain, it was agreed that the categories should be combined.

For each grade, the 2014/15 Frost tolerance will apply, given that it is not expected that a sample of grain would contain significant levels of both Frost and Take-all affected grains.

3.5 *Agreed Change: Varietal Master List – Wheat, Barley, Oats*

As in previous seasons the Varietal Master List for the above commodities will be reviewed following receipt of the changes from the industry sectors responsible for maintenance of those lists. All Standards will be revised based on those changes and advised to industry when the 2015/16 season Standards are released.

4. **Potential Changes for 2015/16 where further Industry Advice is required**

4.1 *Proposed Change: New Sorghum Standards*

For details of the proposed changes, please refer to Section 7. Industry comment is sought on the Committee proposal for adoption of all changes in the 2015/16 Standards.

4.2 *Proposed Review: Oat Grade Standards*

The Committee was advised that some sectors of the oat industry routinely implement variations to the current GTA Oat Milling grade Standards when trading oats. The Committee agreed to form a working group to review both the milling and feed grade oat Standards.

Should major changes be recommended, it is not expected that any revisions would be adopted for the 2015/16 season.

Industry is encouraged to nominate for membership of the working group to assist the Committee in its deliberations. Alternatively industry comments on the applicability of the current Standards or proposed changes are welcome.

5. **Previously Advised Changes that will not proceed**

5.1 *Rejected Change: Contaminants in VRSG – All Commodities*

The Committee decided not to include photos of a range of contaminants that are present in grain in future editions of the VRSG. The decision was made to concentrate resources on developing the images of defects for a range of commodities. In addition, the Committee is aware that some in industry produce their own images of contaminants for internal training purposes.

6. **Issues for further Industry & Committee Consideration**

6.1 *Review of Foreign Material, Nil Tolerance & Sticks Category – All Commodities*

As outlined to industry in 2014 the Committee is currently reviewing a range of issues related to this subject including:

- Foreign Material – seeking
 - A common definition across all commodities;
 - A review of the applicability of all tolerances that apply; and
 - Inclusion of a tolerance for those parameters where one currently does not apply
- Nil Tolerance – to determine if a low level tolerance is warranted in Standards for any parameter where a nil tolerance currently exists.
- Sticks – to review the current definition and tolerance for acceptability and consistency across commodities.
- Sample size for assessment of defects and contaminants – to determine if the accuracy and speed of assessment may be increased through a reduced sample size.

The Committee is developing a trial protocol to address the above issues, many of which should be able to be included in the same trial.

Upon development of a proposed trial protocol, industry participation will be sought. In the interim, industry is free to propose any changes to these quality parameters as outlined above.

6.2 *Falling Number/Germination – Malt Barley*

Industry was previously advised the Committee was reviewing the relationship in the Malt barley Standards between Falling Number, Rapid Visco Analyser, Shot, Sprouted and Germination (Capacity and Energy).

Based on the data analysed:

- No change is proposed to the Falling Number limits in the 2015/16 or future Standards.
- Industry is encouraged to monitor received grain for FN (or RVA) and germination to ensure grain on outturn can meet relevant market requirements.
- Further consideration is required of the Rapid Visco Analyser (RVA) limits. Industry is encouraged to supply the Committee with information related to the RVA, including:
 - Industry use of and reliance on the RVA when applying GTA Standards;
 - The applicability of the RVA limits in the Standards; and
 - Data to assist comparison of RVA data with FN data.
- The Committee recommended that GIWA be encouraged to review the Malt Standards in Western Australia. On behalf of the Committee GTA has written to GIWA requesting that they consider:
 - The potential impact on Malt barley quality of not assessing Shot and FN on Malt barley upon receipt; and
 - The potential for inclusion of a tolerance for Shot and FN in Malt barley Standards.

6.3 Reference Screen Specifications

As advised to industry in 2014, the committee is currently compiling information gathered from industry on screens used for the assessment of various commodities where reference specifications do not currently exist in Standards.

Once all relevant information has been received and reviewed, the Committee intends to develop reference screen specifications and list these in future Standards.

Industry will be invited to provide comment on the appropriateness of those proposals before introduction into the Standards.

7. Revised Sorghum Standards for 2015/16

A major review of the sorghum Standards has occurred in the last 12 months. The previous sorghum Standards had been in place for several years without significant review. The outcome of the current review has resulted in sorghum standards that are contemporary and reflective of market requirements – being both for human consumption and stockfeed uses.

The new grades are also considered to be a balance between:

- What the domestic and export markets require;
- What growers can economically produce; and
- What the supply chain can segregate.

Industry comment is sought on:

- The applicability of the new standards; and
- The proposal to introduce these new grades for the 2015/16 season, as at 1 August 2015.

The following pages list the proposed sorghum standards to apply. The major changes to the standards are as follows:

7.1 Grades

- The previous four grades have been reduced to two grades, being No.1 and No.2.
- These two grades reflect the various uses for human consumption and stockfeed sorghum on both the domestic and export market.
- The No.1 grade is a higher quality grade than No.2.
- As with other commodities, should inclement weather or harvest conditions severely impact on the crop, industry would be expected to develop regional grades based on the quality parameters present and market conditions.
- Industry comment is sought on the ability of these two grades to meet the domestic and export market requirements for sorghum.
- A copy of the proposed two new grades is included in the following pages.

7.2 Total Admixture, Foreign Material, Screenings & Trash

- As notified to industry in 2014, the quality parameter of Total Admixture has been deleted in both grades, given that the sub-categories within this parameter are assessed individually.

7.2.1 Trash

- The category of Trash has been deleted.
- Trash is now included in the definition of Foreign Material.
- The level of Trash has been relatively low in recent years.
- Trash can be readily controlled through the harvesting process.

7.2.2 Foreign Material

- The definition has been altered to “all material not already categorised specifically in other definitions within the Standard”. This includes Trash as listed in previous Standards.
- In the No.1 grade Foreign Material has been limited to 2% to reflect market requirements.
- 4% has been set as the tolerance for the No.2 grade to allow for higher levels of non-sorghum material.
- Analysis of deliveries and consignments in recent years indicates relatively low levels of Foreign Material have been able to be supplied without significant impacts on the harvesting or storage operations.

7.2.3 Screenings

- Has been reduced to 10% in the No.1 grade.
- The screenings limit in the No.2 grade is 20% to cater for unseasonal conditions that may produce small grain.
- Based on analysis of deliveries and consignments in recent years these limits are expected to be readily met in most seasons.
- The screenings levels have been set based on using the existing 2.00mm slotted screen, which is different than the screen used to assess grain against the United States Department of Agriculture (USDA) standard.
- Industry comment is sought on the potential to use the USDA screen versus the 2.00mm screen and if so, tolerances that may be applicable.

7.3 Total Defective

- The tolerance for the No.1 grade has been set at 5%, a limit that reflects market requirements and is aligned to the No.2 USDA grade.
- The tolerance for the No.2 grade has been set at 25% to cater for seasonal and harvest impacts on grain quality parameters within this category.
- As the new tolerance for the No.1 grade is a relatively significant tightening from the prior tolerance in the No.1 grade, it has been agreed to remove Sprouted from the count for Total Defective.

7.3.1 Stained

- The classification of samples containing high levels of Staining has been problematic in recent seasons, given the difficulty of assessing Staining as per the definition in the standards.
- Changes to the interpretation of Stained were made in 2014/15, which assisted in the accuracy of assessment of this parameter in samples. .
- During those discussions industry highlighted that Staining by itself was of relatively low consequence in sorghum. However associated issues of Field Fungi were more problematic in samples.
- Based on the relatively low impact of Staining in samples and associated end-use of sorghum, it has been agreed to delete all references to Staining. Therefore unlimited Staining may be present on sorghum in the proposed No.1 and No.2 grades.
- Comment on the impact of this proposed change on the marketing and end-use of sorghum is sought from industry.

7.3.2 Sprouted

- Sprouted has been removed from Total Defective and a separate tolerance now exists.
- The previous tolerance of 5% for the No.1 grade has been reduced to 3% to reflect market requirements and the impact of Sprouted grain on the end-use of sorghum.
- The definition has been altered to only include those grains where the shoot is visible. The previous reference to a “split in the germ” has been deleted. This is now a similar definition to that applied by the USDA.

7.3.3 Field Fungi

- Field Fungi potentially has a significant impact on the human consumption and stockfeed industries when using sorghum.
- The previous tolerance of 5% for the No.1 grade was considered too high and has been reduced to 3% to reflect market requirements and the impact of Field Fungi grain on the end-use of sorghum.

7.3.4 Sappy, Frost Damaged, Insect Damaged

- These quality parameters are rarely detected in sorghum.
- Given their relatively low impact on the end-use of sorghum the separate tolerance has been removed and these parameters now fall within the Total Defective category.

7.3.5 Heat Damaged & Bin Burnt

- Heat Damaged and Bin Burnt grain is generally only seen on outturn from sorghum stored for a period of time.
- This defect can impact on the palatability of sorghum when used as stockfeed.
- The previous method of assessment was % by count. This was difficult to implement.
- The new tolerance applies to % by weight in a half litre sample.
- The tolerance for the No.1 grade has been reduced to 0.5% to assist implementation and assessment and is aligned with the USDA standard.
- The limit for No.2 grade is 1.0%, to allow for higher levels.

7.3.6 Storage Mould

- Storage Mould has been included in the Total Defective category to assist the interpretation of Total Defective.
- A higher level has been set in the No.2 grade at 0.1% to differentiate this grade from the lower tolerance in the No.1 grade of 0.05%.

7.3.7 Musty, Mouldy & Rotted

- Given that a separate tolerance applies to Storage Mould, the reference to Mouldy has been deleted.
- As advised last year, the reference to Musty and Rotted has been deleted.
- Any odour detected that is not the normal odour associated with sorghum, is included under “Objectionable Material as Odour”.

7.4 Foreign Seed Contaminants

- All tolerances for Foreign Seed Contaminants have been altered as recommended in the Weed Seed Review – refer Section 8.
- The tolerances to apply to the two new grades are as per those previously recommended in 2014/15 for the No.1 and No.3 grades.
- Note that while they occur relatively infrequently in sorghum, the category of Small Foreign Seeds remains. For the No.1 grade, the tolerance has been set at 1%. For the No.2 grade, SFS is combined with weed seeds in Category E, F and G.

7.5 Ergot

- The definition and tolerance now applies to all ergot in the sample, no matter the type of ergot.
- This combined category should assist industry implementation of the standard.
- The tolerance for both grades is as per that applied under the Codex standards, being 0.05% by weight.
- Industry comment is sought on the applicability of the new category and tolerance and the impact on feeding sorghum to various animal species when containing ergot.

7.6 Sand & Soil

- The previous separate categories of Earth and Sand have been combined into Sand/Soil with a tolerance of 0.06% by weight applying for both grades.
- This category is now consistent with that applying for all oilseed commodities.
- The change should assist the assessment of this parameter. The old method of physically counting pieces of Earth, measuring the diameter of those pieces and counting grains of Sand was not considered very practical.
- These parameters are rarely detected in sorghum.
- Industry comment is sought on the practicality of applying this tolerance.

Commodity: Effective:		SORGHUM No.1 1 August 2015	Standard Reference No. Season:	CSG-1 DRAFT 2015/16
PARAMETER		SPECIFICATION	COMMENT / VARIATION	
Description		n/a	Grain Sorghum of Red, White or Yellow varieties only	
Moisture Max (%)		13.5		
Test Weight Min (kg/hl)		71.0		
Foreign Material Max (% by wt)		2.0	Other than already specified	
Screenings Max (% by wt)		10.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
DEFECTIVE GRAINS Max (% by count, 300 grain sample, unless otherwise stated)				
Total Defective	Of which	5.0	Includes Field Fungi, Sappy, Frost Damaged, Insect Damaged, Heat Damaged/Bin Burnt and Storage Mould	
	Field Fungi	3.0		
	Heat Damaged/Bin Burnt (% by wt per half litre)	0.5		
	Storage Mould (% by wt per half litre)	0.05		
Sprouted		3.0	Not included in Total Defective	
FOREIGN SEED CONTAMINANTS Max				
Count of individual seeds per half litre				
Category A		Nil	Castor Oil Plant, Coriander, Crow Garlic / Wild Garlic, Darling Pea, Opium Poppy, Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Category B		5	Bathurst Burr, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Double Gees/Spiny Emex/Three Cornered Jack, Heliotrope (Blue), Heliotrope (Common), Noogoora Burr, Parthenium weed, Thornapple, Vetch (Commercial), Vetch (Tare)	
Category C		10	Jute, Knapweed (Creeping/Russian), Mexican Poppy, Saffron Thistle	
Category D		30	Bindweed (Field), Black/Wild Oats, Darnel (Drake Seed), Hexham Scent/Melilot, Mintweed, Nightshades, Paddy Melon, Patterson's Curse/ Salvation Jane	
Category E		20	Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Safflower, Soybean, Sunflower and any other seeds greater than 5mm	
Count of all seeds in total per half litre				
Category F		50	Colombus Grass, Johnson Grass	
Category G		400	Includes all other weed seeds not listed elsewhere in the Standards	
Max % by weight				
Small Foreign Seeds		1.0	All Foreign Seeds not specified in category A-G that fall below the 2.0mm screen during the Screenings process	
OTHER CONTAMINANTS Max (count per half litre, unless otherwise stated)				
Cereal Smut (entire load)		Nil	Ball and Gall Smut or any other smut species	
Ergot (% by weight)		0.05	Includes all types of ergot	
Stored Grain insects & Pea Weevils – Live (entire load)		Nil	All life stages	
Insects – Large		3	Dead or alive	
Insects – Small		10	Dead or alive	
Sand/Soil (% by weight)		0.06		
Stones (g per 2.5 L)		4.0	Maximum total weight of all Stones retained above the 2.0mm screen per 2.5L	
Objectionable Material (entire load)		Nil	Sticks, glass, concrete, pickled grain, artificial colouring or any other commercially unacceptable contaminant	
Odour (entire load)		Nil	Grain which has any commercially foreign odour due to tainting agents or improper storage causing mould, souring or musty odours	
Maximum Temperature (°c)		35	Grain temperature ex grain dryer	
Chemicals Not Approved for Sorghum (entire load)		Nil	Residues of any chemical compound not approved for grain sorghum, used in contravention of the labelled instructions or chemicals in excess of the MRL	

Commodity: Effective:		SORGHUM No.2 1 August 2015	Standard Reference No. Season:	CSG-2 DRAFT 2015/16
PARAMETER		SPECIFICATION	COMMENT / VARIATION	
Description		n/a	Grain Sorghum of Red, White or Yellow varieties only	
Moisture Max (%)		13.5		
Test Weight Min (kg/hl)		62.0		
Foreign Material Max (% by wt)		4.0	Other than already specified	
Screenings Max (% by wt)		20.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
DEFECTIVE GRAINS Max (% by count, 300 grain sample, unless otherwise stated)				
Total Defective	Of which	25.0	Includes Field Fungi, Sappy, Frost Damaged, Insect Damaged, Heat Damaged/Bin Burnt and Storage Mould	
	Field Fungi	10.0		
	Heat Damaged/Bin Burnt (% by wt per half litre)	1.0		
	Storage Mould (% by wt per half litre)	0.1		
Sprouted		10.0	Not included in Total Defective	
FOREIGN SEED CONTAMINANTS Max				
Count of individual seeds per half litre				
Category A		Nil	Castor Oil Plant, Coriander, Crow Garlic / Wild Garlic, Darling Pea, Opium Poppy, Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Category B		5	Bathurst Burr, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Double Gees/Spiny Emex/Three Cornered Jack, Heliotrope (Blue), Heliotrope (Common), Noogoora Burr, Parthenium weed, Thornapple, Vetch (Commercial), Vetch (Tare)	
Category C		10	Jute, Knapweed (Creeping/Russian), Mexican Poppy	
Category D		30	Bindweed (Field), Black/Wild Oats, Darnel (Drake Seed), Hexham Scent/Melilot, Mintweed, Nightshades, Paddy Melon, Patterson's Curse/ Salvation Jane	
Max % by weight				
Category E		4.0	Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Safflower, Soybean, Sunflower and any other seeds greater than 5mm	
Category F			Colombus Grass, Johnson Grass	
Category G			Includes all other weed seeds not listed elsewhere in the Standards. Includes Saffron Thistle.	
Small Foreign Seeds			All foreign seeds not specified in Category A-G that fall below the 2.0mm screen during the Screenings process	
OTHER CONTAMINANTS Max (count per half litre, unless otherwise stated)				
Cereal Smut (entire load)		Nil	Ball and Gall Smut or any other smut species	
Ergot (% by weight)		0.3	Includes all types of ergot	
Stored Grain insects & Pea Weevils – Live (entire load)		Nil	All life stages	
Insects – Large		3	Dead or alive	
Insects – Small		10	Dead or alive	
Sand/Soil (% by weight)		0.06		
Stones (g per 2.5 L)		4.0	Maximum total weight of all Stones retained above the 2.0mm screen per 2.5L	
Objectionable Material (entire load)		Nil	Sticks, glass, concrete, pickled grain, artificial colouring or any other commercially unacceptable contaminant	
Odour (entire load)		Nil	Grain which has any commercially foreign odour due to tainting agents or improper storage causing mould, souring or musty odours	
Maximum Temperature (°c)		35	Grain temperature ex grain dryer	
Chemicals Not Approved for Sorghum (entire load)		Nil	Residues of any chemical compound not approved for grain sorghum, used in contravention of the labelled instructions or chemicals in excess of the MRL	

8. Revised Weed Seed tolerances to apply for 2015/16

8.1 Purpose

The purpose of this paper is to provide industry with details of the revised weed seed tolerances that will apply to all cereal Trading Standards (Standards) as of the 2015/16 season.

8.2 Industry Consultation

Industry was advised during the development of the 2010/11 Standards that the Grain Trade Australia (GTA) Standards Committee (Committee) were reviewing the weed seed categories and tolerances with a view to their simplification.

During the development of Standards in each subsequent year, GTA called for:

- Industry submissions on the proposed revised weed seed tolerances;
- Industry involvement in trials to consider the revised weed seed categories and tolerances; and
- Any other information from industry of relevance to the weed seed review.

A range of industry views were received during the period from 2010 to 2014. Industry submissions on the initial paper and in subsequent years generally agreed with the review and sought input into the changes following further development of the changes by the Committee. However a number of changes were sought, including clarification of a range of issues associated with the changes.

A number of trials have been conducted since the review commenced to verify the proposed changes. Following a trial in 2012/13, a further review of the proposed revised tolerances was conducted. That review developed a revised proposal that was trialled over the 2013/14 harvest.

During the development of the 2014/15 Standards by the Committee minor amendments were made to the prior proposal as developed and provided to industry. GTA advised industry of those amendments in Member Update No. 9 of 14.

As noted in that Member Update, the weed seed tolerances and categories as outlined in this paper have been approved by the Committee for adoption in 2015/16 season cereal Standards.

During development of the 2015/16 season Standards, industry is encouraged to provide any further feedback on this proposal prior to consideration and adoption by the GTA Board.

8.3 Principles for the Weed Seed Review

Previous industry discussion papers on this weed seed review have provided details of the reasons for the review. In summary the revisions to the tolerances and categories:

- Has resulted in a reduction in the number of weed seed categories in each Standard.
- Has achieved greater consistency across commodities and in all locations within Australia in the categories and tolerances for weed seeds.
- Is expected to make the classification process simpler and less prone to errors.
- Will be conducted using existing methods and procedures applied when assessing grain against Standards.
- Has been undertaken taking into consideration applicable weed seed legislation applying in States and Territories.
- Have been revised to include specific tolerances for those that have a direct market impact.
- No longer apply to many weed seeds that impact on the growing crop, given that signals to manage these weed seeds are not relevant in Standards.
- Are set at levels that are able to be readily complied with by the production sector, are able to be managed in the supply chain and reflect market requirements.
- Are readily identified visually, with minimal additional training other than already occurs.
- Are at levels as close as practically possible to existing tolerances.

Weed seeds have been categorised based on the following:

Quarantine

- Restricted by Quarantine regulations either domestically or by international markets.

Toxicity / Allergen

- May pose a food safety issue when ingested for human and/or animal consumption.

Taint

- May taint the end-product.

Feed Impact

- May reduce feed intake for animals or impact on animal feeding.

Unightly

- Affects the visual appearance of the grain, reducing its marketability.

Agronomic

- May be a competitor of commercial crops if not readily controlled. Generally now included in category F.

8.4 Other Relevant Issues

When conducting this review a number of issues were raised by industry and considered by the Committee. Major points of note are outlined below:

Seed Pods

In considering the future assessment of weed seeds in pods and pieces of pods, the Committee has proposed that:

- Weed seed pods be handled as per the weed seeds they may contain. Therefore pods should be broken open and weed seeds counted.
- Pieces of pods with seeds removed are included in Unmillable Material above the Screen or Foreign Material as per the prior definition.
- The exception is:
 - Peanut pods, which will remain as a NIL tolerance (Category A) due to potential allergenic effects.
 - Wild Radish Pods and Milk Thistle Pods that remain in various categories by commodity such as Unmillable Material above the Screen or Category E. These are not to be broken open.

Seeds

- Seeds greater than 5mm in Diameter if not already listed in the Standards are included in Category E.

Small Foreign Seeds (SFS)

- Currently SFS are in most Standards, generally being 0.6% in the main grades.
- The current method to remove SFS from a sample involves significant time and is a somewhat tedious process.
- However unless levels of these weed seeds are considered excessive, these weeds are rarely removed from a sample and the level in a sample subsequently determined. Thus the tolerances remain applicable.

Unmillable Material above the Screen

- In some Standards, this category or a similar category exists, while in others material defined in this category is included elsewhere.
- The definition for this category varies by commodity, making assessment of each commodity difficult.
- In commodities such as wheat, some weed seeds are also included in this category.
- It is proposed that the requirement to “remove seeds within chaff” remain.
- This test and “seed removal” is generally not done unless levels are approaching the applicable tolerances. Thus the tolerances remain applicable.

Foreign Material

- The Committee has recommended a Foreign Material category is not developed for each commodity given that the time taken to assess Foreign Material in each sample was considered excessive and not warranted given that time.
- Existing Foreign Material categories will remain where currently listed in each standard.
- However industry views on potential changes to this category in future standards is welcome.

Data Collection at Receiving

- The Committee considers that the proposed changes do not significantly impact on the current methods used by industry to collect data on weed seeds in samples during the assessment process.

Branched Broomrape

- Branched broomrape has been deleted in all standards as it cannot be assessed visually.

Heliotrope

- A separate tolerance previously applied to seeds and pods.
- For all commodities the tolerance for pods has been removed and all pods must be broken open and seeds counted.

Category A-E – all commodities

- Previously tolerances applied to individual seeds in Type 1 only, with a tolerance for the total of all seeds in each category for all other Types.
- The new tolerances are to apply to individual seeds across all categories A to E.

8.5 Weed Seeds for the 2015/16 season – Wheat Standards

8.5.1 General Changes – Wheat

- For all weed seeds now in Category A to E, tolerances have changed where applicable from the total of all weed seeds in each Type to individual weed seeds in each Category.
- Category F is to be assessed as a count of all weed seeds in total per half litre and includes all weed seeds not listed elsewhere in the Standards.
- For seed pods, seed pods greater than 5mm in diameter were previously in Type 7a. Pods are now to be broken open and the individual weed seeds counted. The exception is:
 - Peanut pods, which will remain as a NIL tolerance (Category A) due to potential allergenic effects.
 - Wild Radish Pods and Milk Thistle Pods that remain in Unmillable Material above the Screen. These pods are not to be broken open.
- Weed seeds greater than 5mm in diameter, if not already listed in the Standards, are included in Category E.
- For the purposes of weed seed tolerances:
 - The non-milling grade includes AUH2, AGP1, AUW1, HPS1, DR3, SFE2 (SA), SFW1.
 - Fed1 has separate tolerances.
 - All other grades are included as milling.
- Durum and Red/Spring Feed wheats remain as “unlimited in Fed1” whereas tolerances exist for these weed seeds in all other grades.
- Note that the category of Small Foreign Seeds remains.

8.5.2 Specific Weed Seed Changes - Wheat

The following table outlines all changes for each seed where relevant. If a weed seed is not listed below, the tolerance has not been altered from that previously applying.

Weed Seed	Prior Wheat Standard		New Wheat Standard 2015/16	
	Type	Tolerance	Category	Tolerance
Seeds greater than 5mm in diameter, not otherwise listed. Includes all pulse seeds (broad beans, chickpeas, cowpeas, faba beans, field peas, lentils, lupins). Includes other commodities corn (maize), safflower, soybean, sunflower.	Type 7a	Milling grades - Combined 1/0.5L	E	1 individual seed/0.5L
		Non-milling grades - Combined 10/0.5L		10 individual seeds/0.5L
		Fed1 - Combined 100/0.5L		20 individual seeds/0.5L
Bathurst burr	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Bellvine	Type 3a	Combined 2/0.5L	F	Milling grades - Combined 50/0.5L
				Non-Milling grades - Combined 150/0.5L
				Fed 1 - Combined 400/0.5L
Bindweed (Field)	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Branched Broomrape	Type 3a	Combined 2/0.5L	Deleted as cannot be assessed	n/a
Bulls Head/Caltrop/ Cats Head	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Cape Tulip	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Colocynth	Type 1	8 individual seeds/0.5L	F	Milling grades - Combined 50/0.5L
				Non-Milling grades - Combined 150/0.5L
				Fed 1 - Combined 400/0.5L

Weed Seed	Prior Wheat Standard		New Wheat Standard 2015/16	
	Type	Tolerance	Category	Tolerance
Columbus Grass	Type 6	Combined 10/0.5L	B	5 individual seeds/0.5L
Cottonseed	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Cutleaf Mignonette	Type 4	Combined 20/0.5L	F	Milling grades - Combined 50/0.5L Non-Milling grades - Combined 150/0.5L Fed 1 - Combined 400/0.5L
Darnel / Drake Seed	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Dodder	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Double Gees / Spiny Emex / Three Cornered Jack	Type 1	8 individual seeds/0.5L	B	5 individual seeds/0.5L
Heliotrope (Blue)	Type 3c	Combined 8/0.5L	B	5 individual seeds/0.5L
Heliotrope (Common)	Type 3c	Combined 8/0.5L	B	5 individual seeds/0.5L
Hexham Scent/ King Island Melilot	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Hoary Cress	Type 4	Combined 20/0.5L	F	Milling grades - Combined 50/0.5L Non-Milling grades - Combined 150/0.5L Fed 1 - Combined 400/0.5L
Johnson Grass	Type 6	Combined 10/0.5L	B	5 individual seeds/0.5L
Jute	Type 1	8 individual seeds/0.5L	C	10 individual seeds/0.5L
Knapweed (Creeping / Russian)	Type 5	Combined 40/0.5L	C	10 individual seeds/0.5L
Mexican Poppy	Type 1	8 individual seeds/0.5L	C	10 individual seeds/0.5L
Mintweed	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
New Zealand Spinach	Type 1	8 individual seeds/0.5L	F	Milling grades - Combined 50/0.5L Non-Milling grades - Combined 150/0.5L Fed 1 - Combined 400/0.5L
Nightshade	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Noogoora Burr	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Opium Poppy	Type 1	8 individual seeds/0.5L	A	Nil
Paddy Melon	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Parthenium weed	Type 1	8 individual seeds/0.5L	B	5 individual seeds/0.5L
Patterson's Curse / Salvation Jane	Type 5	Combined 40/0.5L	D	30 individual seeds/0.5L
Poppy (Field, Horned, Long Head, Wild)	Type 1	8 individual seeds/0.5L	F	Milling grades - Combined 50/0.5L Non-Milling grades - Combined 150/0.5L Fed 1 - Combined 400/0.5L
Saffron Thistle	Type 6	Milling grades - Combined 10/0.5L Non-Milling grades - Combined 50/0.5L Fed 1 - Combined 50/0.5L	C	10 individual seeds/0.5L
Sesbania pea	Type 5	Combined 40/ 0.5L	F	Milling grades - Combined 50/0.5L Non-Milling grades - Combined 150/0.5L Fed 1 - Combined 400/0.5L
Skeleton Weed	Type 4	Combined 20/0.5L	F	Milling grades - Combined 50/0.5L

Weed Seed	Prior Wheat Standard		New Wheat Standard 2015/16	
	Type	Tolerance	Category	Tolerance
				Non-Milling grades - Combined 150/0.5L
				Fed 1 - Combined 400/0.5L
Thornapple	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Variegated Thistle	Type 4	Combined 20/0.5L	F	Milling grades - Combined 50/0.5L
				Non-Milling grades - Combined 150/0.5L
				Fed 1 - Combined 400/0.5L
Vetch (Commercial)	Type 3b	Combined 4/0.5L	B	5 individual seeds/0.5L
Vetch (Tare)	Type 3b	Combined 4/0.5L	B	5 individual seeds/0.5L

8.5.3 Revised Weed Seed Standards – All Wheat Grades

Category	Revised Definition	Grade		
		Milling Grade*	AUH2, AGP1, AUW1, HPS1, DR3, SFE2(SA), SFW1	Fed1
Count of individual seeds per half litre:				
A	Castor Oil Plant, Coriander, Crow Garlic / Wild Garlic, Darling Pea, Opium Poppy, Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John’s Wort	Nil		
B	Bathurst Burr, Bulls Head/Caltrop/Cats Head, Cape Tulip, Colombus Grass, Cottonseed, Dodder, Double Gees/Spiny Emex/Three Cornered Jack, Heliotrope (Blue), Heliotrope (Common), Johnson Grass, Noogoora Burr, Parthenium weed, Thornapple, Vetch (Commercial), Vetch (Tare)	5		
C	Jute, Knapweed (Creeping/Russian), Mexican Poppy, Saffron Thistle	10		
D	Bindweed (Field), Darnel (Drake Seed), Hexham Scent/Melilot, Mintweed, Nightshades, Paddy Melon, Patterson’s Curse/ Salvation Jane	30		
E	Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Safflower, Soybean, Sunflower and any other seeds greater than 5mm	1	10	20
Count of all seeds in total per half litre:				
F	Includes all other weed seeds not listed elsewhere in the Standards	50	150	400
Existing Definitions and Tolerances (Max % by weight per half litre sample) remain:				
Current Category	Current Definition	Milling Grade*	AUH2, AGP1, DR3, SFE2 (SA), SFW1	AUW1, HPS1, Fed1
SFS	All Foreign Seeds not specified in Category A-F that fall below the 2.0mm screen during the Screenings process	0.6%	1.2%	1.2%
Unmillable Material above the screen	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods and pieces of seedpods. Excludes contaminants where tolerances already exist	0.6%	1.2% Includes ANW2	2.6%

* Unless otherwise stated, Milling includes APH1, APH2, H1, H2, APW1, APW2, ASW1, ANW1, ANW2, PNC, PNE, ASWS, ASWS, APWN, DR1, DR2, SFE1 (NSW/VIC), SFE1 (SA), SFT1, SFE2 (NSW/VIC), SFT2

8.6 Weed Seeds for the 2015/16 Season – Barley Standards

8.6.1 General Changes – Barley

- For all weed seeds now in Category A to F, tolerances have changed where applicable from the total of all weed seeds in each Type to individual weed seeds in each Category.
- Category G is to be assessed as a count of all weed seeds in total per half litre and includes all weed seeds not listed elsewhere in the Standards.
- For seed pods, seed pods greater than 5mm in diameter were previously in Type 7a. Pods are now to be broken open and the individual weed seeds counted. The exception is:
 - Peanut pods, which will remain as a NIL tolerance (Category A) due to potential allergenic effects.
 - Wild Radish Pods and Milk Thistle Pods that remain in Category E. These pods are not to be broken open. Note that wild radish seeds are in Category G.
- Weed seeds greater than 5mm in diameter, if not already listed in the Standards, are included in Category E.
- Note that pieces of Seed Pods are included in Foreign Material.
- Category G includes all weed seeds not otherwise listed in the Standards.
- Note that the category of Small Foreign Seeds remains.
- Note that the category of Foreign Material remains.
- Note that the category of Coloured Aleurone Layer remains.
- A specific Category F for Black/Wild Oats has been created. Therefore Category G is the “catch-all Category” for all other weed seeds not listed.
- The prior “Foreign Grain, Variations and Type 7b” have been deleted and included in a new Category G.

8.6.2 Specific Weed Seed Changes - Barley

The following table outlines all changes for each seed where relevant. If a weed seed is not listed below, the tolerance has not been altered from that previously applying.

Weed Seed	Prior Barley Standard		New Barley Standard 2015/16	
	Type	Tolerance	Category	Tolerance
Seeds greater than 5mm in diameter, not otherwise listed. Includes all pulse seeds (broad beans, chickpeas, cowpeas, faba beans, field peas, lentils, lupins). Includes other commodities corn (maize), safflower, soybean, sunflower.	Type 7a	Malt1, Malt2, Malt3 - Combined 1/0.5L	E	1 individual seed/0.5L
		Feed1 - Combined 10/0.5L		10 individual seeds/0.5L
		Feed2 - Combined 20/0.5L		20 individual seeds/0.5L
Bathurst burr	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Bellvine	Type 3a	Combined 2/0.5L	G	Malt1, Malt2, Malt3 - Combined 50/0.5L
				Feed1 - Combined 150/0.5L
				Feed2 - Combined 300/0.5L
Bindweed (Field)	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Branched Broomrape	Type 3a	Combined 2/0.5L	Deleted as cannot be assessed	n/a
Bulls Head/Caltrop/ Cats Head	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Cape Tulip	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Cereal Rye	Variations	Malt1, Malt2, Malt3 - Combined 85/0.5L	G	Malt1, Malt2, Malt3 - Combined 50/0.5L
		Feed1 - Combined 500/0.5L		Feed1 - Combined 150/0.5L

Weed Seed	Prior Barley Standard		New Barley Standard 2015/16	
	Type	Tolerance	Category	Tolerance
		Feed2 - Combined 1500/0.5L		Feed2 - Combined 300/0.5L
Colocynth	Type 1	8 individual seeds/0.5L	G	Malt1, Malt2, Malt3 - Combined 50/0.5L Feed1 - Combined 150/0.5L Feed2 - Combined 300/0.5L
Columbus Grass	Type 6	Malt1, Malt2, Malt3 - Nil Feed1 , Feed2 – 40/0.5L	B	5 individual seeds/0.5L
Cottonseed	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Cutleaf Mignonette	Type 4	Combined 20/0.5L	G	Malt1, Malt2, Malt3 - Combined 50/0.5L Feed1 - Combined 150/0.5L Feed2 - Combined 300/0.5L
Darnel / Drake Seed	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Dodder	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Double Gees / Spiny Emex / Three Cornered Jack	Type 3d	1 seed/ 0.5L	B	5 individual seeds/0.5L
Heliotrope (Blue)	Type 3c	Combined 4 seeds/0.5L	B	5 individual seeds/0.5L
Heliotrope (Common)	Type 3c	Combined 4 seeds/0.5L	B	5 individual seeds/0.5L
Hexham Scent/ King Island Melilot	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Hoary Cress	Type 4	Combined 20/0.5L	G	Malt1, Malt2, Malt3 - Combined 50/0.5L Feed1 - Combined 150/0.5L Feed2 - Combined 300/0.5L
Johnson Grass	Type 6	Malt1, Malt2, Malt3 - Nil Feed1 , Feed2 – 40/0.5L	B	5 individual seeds/0.5L
Jute	Type 1	8 individual seeds/0.5L	C	10 individual seeds/0.5L
Knapweed (Creeping / Russian)	Type 5	Combined 40/0.5L	C	10 individual seeds/0.5L
Mexican Poppy	Type 1	8 individual seeds/0.5L	G	Malt1, Malt2, Malt3 - Combined 50/0.5L Feed1 - Combined 150/0.5L Feed2 - Combined 300/0.5L
Mintweed	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
New Zealand Spinach	Type 1	8 individual seeds/0.5L	G	Malt1, Malt2, Malt3 - Combined 50/0.5L Feed1 - Combined 150/0.5L Feed2 - Combined 300/0.5L
Nightshade	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Noogoora Burr	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Oats (Cultivated)	Variations	Malt1, Malt2, Malt3 - Combined 85/0.5L Feed1 - Combined 500/0.5L Feed2 - Combined 1500/0.5L	G	Malt1, Malt2, Malt3 - Combined 50/0.5L Feed1 - Combined 150/0.5L Feed2 - Combined 300/0.5L
Opium Poppy	Type 2	Nil	A	Nil
Paddy Melon	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Parthenium weed	Type 1	8 individual seeds/0.5L	B	5 individual seeds/0.5L
Patterson's Curse / Salvation Jane	Type 5	Combined 40/0.5L	D	30 individual seeds/0.5L

Weed Seed	Prior Barley Standard		New Barley Standard 2015/16	
	Type	Tolerance	Category	Tolerance
Poppy (Field, Horned, Long Head, Wild)	Type 1	8 individual seeds/ 0.5L	G	Malt1, Malt2, Malt3 - Combined 50/0.5L
				Feed1 - Combined 150/0.5L
				Feed2 - Combined 300/0.5L
Rice	Variations	Malt1, Malt2, Malt3 - Combined 85/0.5L	G	Malt1, Malt2, Malt3 - Combined 50/0.5L
		Feed1 - Combined 500/0.5L		Feed1 - Combined 150/0.5L
		Feed2 - Combined 1500/0.5L		Feed2 - Combined 300/0.5L
Saffron Thistle	Type 1	8 individual seeds/ 0.5L	C	10 individual seeds/0.5L
Sesbania pea	Type 5	Combined 40/ 0.5L	G	Malt1, Malt2, Malt3 - Combined 50/0.5L
				Feed1 - Combined 150/0.5L
				Feed2 - Combined 300/0.5L
Skeleton Weed	Type 4	Combined 20/0.5L	G	Malt1, Malt2, Malt3 - Combined 50/0.5L
				Feed1 - Combined 150/0.5L
				Feed2 - Combined 300/0.5L
Thornapple	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Triticale	Variations	Malt1, Malt2, Malt3 - Combined 85/0.5L	G	Malt1, Malt2, Malt3 - Combined 50/0.5L
		Feed1 - Combined 500/0.5L		Feed1 - Combined 150/0.5L
		Feed2 - Combined 1500/0.5L		Feed2 - Combined 300/0.5L
Variegated Thistle	Type 4	Combined 20/0.5L	G	Malt1, Malt2, Malt3 - Combined 50/0.5L
				Feed1 - Combined 150/0.5L
				Feed2 - Combined 300/0.5L
Vetch (Commercial)	Type 3b	Malt1, Malt2, Malt3, Feed1 - Combined 4/0.5L	B	5 individual seeds/0.5L
		Feed2 - Combined 10/0.5L		
Vetch (Tare)	Type 3b	Malt1, Malt2, Malt3, Feed1 - Combined 4/0.5L	B	5 individual seeds/0.5L
		Feed2 - Combined 10/0.5L		
Wheat	Variations	Malt1, Malt2, Malt3 - Combined 85/0.5L	G	Malt1, Malt2, Malt3 - Combined 50/0.5L
		Feed1 - Combined 500/0.5L		Feed1 - Combined 150/0.5L
		Feed2 - Combined 1500/0.5L		Feed2 - Combined 300/0.5L
Wild Oats (Black Oats)	Variations	Malt1, Malt2, Malt3 - Combined 25/0.5L	F	Malt1, Malt2, Malt3 – 25 seeds/0.5L
		Feed1 - Combined 50/0.5L		Feed1 – 50 seeds/0.5L
		Feed2 - Combined 100/0.5L		Feed2 – 100 seeds/0.5L
Wild Radish Seed	Variations	Malt1, Malt2, Malt3 - Combined 25/0.5L	G	Malt1, Malt2, Malt3 - Combined 50/0.5L
		Feed1 - Combined 50/0.5L		Feed1 - Combined 150/0.5L
		Feed2 - Combined 100/0.5L		Feed2 - Combined 300/0.5L

8.6.3 Revised Weed Seed Categories – All Barley Grades

Category	Revised Definition	Grade				
		Malt1	Malt2	Malt3	Feed1	Feed2
Count of individual seeds per half litre:						
A	Castor Oil Plant, Coriander, Crow Garlic / Wild Garlic, Darling Pea, Opium Poppy, Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	Nil				
B	Bathurst Burr, Bulls Head/Caltrop/Cats Head, Cape Tulip, Colombus Grass, Cottonseed, Dodder, Double Gees/Spiny Emex/Three Cornered Jack, Heliotrope (Blue), Heliotrope (Common), Johnson Grass, Noogoora Burr, Parthenium weed, Thornapple, Vetch (Commercial), Vetch (Tare)	5				
C	Jute, Knapweed (Creeping/Russian), Mexican Poppy, Saffron Thistle	10				
D	Bindweed (Field), Darnel (Drake Seed), Hexham Scent/Melilot, Mintweed, Nightshades, Paddy Melon, Patterson's Curse/ Salvation Jane	30				
E	Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Safflower, Soybean, Sunflower and any other seeds greater than 5mm. includes Wild Radish pods and Milk Thistle Pods	1			10	20
F	Black/wild oats	25			50	100
Count of all seeds in total per half litre:						
G	Includes all other weed seeds not listed elsewhere in the Standards [previous Type 7b, Variations (wild radish seed), Foreign Grain (wheat, cereal rye, triticale, oats, rice)]	50			150	300
Existing Definitions and Tolerances remain:						
Foreign Material	Other than already specified. Includes pieces of seed pods (Max % by weight per half litre sample)	1.0%				
Coloured Aleurone Layer	Coloured Aleurone Layer (Blue/Black) (Max count per half litre)	Nil			100	
SFS	All Foreign Seeds not specified in category A-G that fall below the 2.2mm screen during the Screenings process (Max % by weight)	0.6%			1.2%	2.0%

8.7 Weed Seeds for the 2015/16 season – Sorghum Standards

8.7.1 General Changes – Sorghum

Note that in previous weed seed information papers, the proposed weed seed changes were listed for the existing four sorghum grades. As a result of the proposed revision to all sorghum grades, the prior proposed weed seed tolerances have been altered. The following changes to weed seed tolerances for sorghum will apply provided those proposed changes to sorghum grades are agreed and implemented for the 2015/16 season.

- In grade No.1:
 - For all weed seeds now in Category A to E tolerances have changed where applicable from the total of all weed seeds in each Type to individual weed seeds in each Category.
 - Category F and Category G is to be assessed as a count of all weed seeds in total per half litre.
 - Category G includes all weed seeds not listed elsewhere in the Standards.
 - Saffron Thistle is included in Category C with an individual tolerance of 10 seeds/0.5L.
- In grade No.2:
 - For all weed seeds now in Category A to D tolerances have changed where applicable from the total of all weed seeds in each Type to individual weed seeds in each Category.
 - For all weed seeds now in Category E, Category F, Category G and SFS the tolerance is to be assessed as the % by weight of all weed seeds in total per half litre.
 - Saffron Thistle is included in the combined Category of E, Category F, Category G and SFS, with a combined tolerance of 4% by weight.
- For seed pods, seed pods greater than 5mm in diameter were previously in Type 7a. Pods are now to be broken open and the individual weed seeds counted. The exception is:
 - Peanut pods, which will remain as a NIL tolerance (Category A) due to potential allergenic effects.
 - Wild Radish Pods and Milk Thistle Pods that remain in Category E. These pods are not to be broken open.
- For weed seeds greater than 5mm in diameter, if not already listed in the Standards, these are included in Category E.
- Note that the category of Foreign Material remains (with a revised tolerance for the No.1 grade as recommended in the sorghum grade review).
- Note that while they occur relatively infrequently in sorghum the category of Small Foreign Seeds remains. For the No.1 grade, the tolerance for SFS has been set at 1%. For the No.2 grade, SFS is combined with weed seeds in Category E, Category F and Category G.

8.7.2 Specific Weed Seed Changes - Sorghum

The following table outlines all changes for each seed where relevant. If a weed seed is not listed below, the tolerance has not been altered from that previously applying.

Weed Seed	Prior Sorghum Standard		New Sorghum Standard 2015/16	
	Type	Tolerance	Category	Tolerance
Seeds greater than 5mm in diameter, not otherwise listed. Includes all pulse seeds (broad beans, chickpeas, cowpeas, faba beans, field peas, lentils, lupins). Includes other commodities corn (maize), safflower, soybean, sunflower.	Type 7a	No1, No.1a, No.2 - Combined 50/0.5L	E	No.1 - 20 individual seeds/0.5L
		No.3 - Combined 4% by weight/0.5L		No.2 - Combined 4% by weight/0.5L
Bathurst burr	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Bellvine	Type 3a	Combined 2/0.5L	G	No.1 - Combined 400/0.5L

Weed Seed	Prior Sorghum Standard		New Sorghum Standard 2015/16	
	Type	Tolerance	Category	Tolerance
				No.2 - Combined 4% by weight/0.5L
Bindweed (Field)	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Branched Broomrape	Type 3a	Combined 2/0.5L	Deleted as cannot be assessed	n/a
Bulls Head/Caltrop/ Cats Head	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Cape Tulip	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Colocynth	Type 1	8 individual seeds/0.5L	G	No.1 - Combined 400/0.5L No.2 - Combined 4% by weight/0.5L
Columbus Grass	Type 7a	No.1, No.1a, No.2 - Combined 50/0.5L	F	No.1 - Combined 50/0.5L
		No.3 - Combined 4% by weight/0.5L		No.2 - Combined 4% by weight/0.5L
Cottonseed	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Cutleaf Mignonette	Type 4	Combined 20/0.5L	G	No.1 - Combined 400/0.5L No.2 - Combined 4% by weight/0.5L
Darnel / Drake Seed	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Dodder	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Double Gees / Spiny Emex / Three Cornered Jack	Type 1	8 individual seeds/0.5L	B	5 individual seeds/0.5L
Heliotrope (Blue)	Type 3c	Combined 8/0.5L	B	5 individual seeds/0.5L
Heliotrope (Common)	Type 3c	Combined 8/0.5L	B	5 individual seeds/0.5L
Hexham Scent/ King Island Melilot	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Hoary Cress	Type 4	Combined 20/0.5L	G	No.1 - Combined 400/0.5L No.2 - Combined 4% by weight/0.5L
Johnson Grass	Type 7a	No.1, No.1a, No.2 - Combined 50/0.5L	F	No.1 - Combined 50/0.5L
		No.3 - Combined 4% by weight/0.5L		No.2 - Combined 4% by weight/0.5L
Jute	Type 1	8 individual seeds/0.5L	C	10 individual seeds/0.5L
Knapweed (Creeping / Russian)	Type 5	Combined 40/0.5L	C	10 individual seeds/0.5L
Mexican Poppy	Type 1	8 individual seeds/0.5L	C	10 individual seeds/0.5L
Mintweed	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
New Zealand Spinach	Type 1	8 individual seeds/0.5L	G	No.1 - Combined 400/0.5L No.2 - Combined 4% by weight/0.5L
Nightshade	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Noogoora Burr	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Opium Poppy	Type 1	8 individual seeds/0.5L	A	Nil
Paddy Melon	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Parthenium weed	Type 1	8 individual seeds/0.5L	B	5 individual seeds/0.5L
Patterson's Curse / Salvation Jane	Type 5	Combined 40/0.5L	D	30 individual seeds/0.5L
Poppy (Field, Horned, Long Head, Wild)	Type 1	8 individual seeds/0.5L	G	No.1 - Combined 400/0.5L No.2 - Combined 4% by weight/0.5L
Saffron Thistle	Type 6	No.1, No.1a, No.2 - Combined 10/0.5L	C	No.1 - 10 individual seeds/0.5L
		No.3 - Combined 4%	G	No.2 - Combined 4% by

Weed Seed	Prior Sorghum Standard		New Sorghum Standard 2015/16	
	Type	Tolerance	Category	Tolerance
		by weight/0.5L		weight/0.5L.
Sesbania pea	Type 5	Combined 40/ 0.5L	G	No.1 - Combined 400/0.5L No.2 - Combined 4% by weight/0.5L
Skeleton Weed	Type 4	Combined 20/0.5L	G	No.1 - Combined 400/0.5L No.2 - Combined 4% by weight/0.5L
Thornapple	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Variegated Thistle	Type 4	Combined 20/0.5L	G	No.1 - Combined 400/0.5L No.2 - Combined 4% by weight/0.5L
Vetch (Commercial)	Type 3b	Combined 4/0.5L	B	5 individual seeds/0.5L
Vetch (Tare)	Type 3b	Combined 4/0.5L	B	5 individual seeds/0.5L
Wild Oats (Black)	Type 7b	No.1, No.1a, No.2 - Combined 400/0.5L No.3 - Combined 4% by weight/0.5L	D	30 individual seeds/0.5L

8.7.3 Revised Weed Seed Categories – All Sorghum Grades

Note – The following will be dependent on the outcome of the review of the 2015/16 sorghum Standards.

Category	Revised Definition	Grade	
		No.1	No.2
Count of individual seeds per half litre:			
A	Castor Oil Plant, Coriander, Crow Garlic / Wild Garlic, Darling Pea, Opium Poppy, Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	Nil	
B	Bathurst Burr, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Double Gees/Spiny Emex/Three Cornered Jack, Heliotrope (Blue), Heliotrope (Common), Noogoora Burr, Parthenium weed, Thornapple, Vetch (Commercial), Vetch (Tare)	5	
C	Jute, Knapweed (Creeping/Russian), Mexican Poppy, Saffron Thistle	10	
D	Bindweed (Field), Black/Wild Oats, Darnel (Drake Seed), Hexham Scent/Melilot, Mintweed, Nightshades, Paddy Melon, Patterson's Curse/ Salvation Jane	30	
E	Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Safflower, Soybean, Sunflower and any other seeds greater than 5mm. Includes Wild Radish pods and Milk Thistle pods	20	4.0% by weight *
Count of all seeds in total per half litre:			
F	Colombus Grass, Johnson Grass	50	
G	Includes all other weed seeds not listed elsewhere in the Standards	400	
Existing Definitions remain:			
SFS	All Foreign Seeds not specified in category A-G that fall below the 2.0mm screen during the Screenings process (Max % by weight)	1.0%	
Foreign Material	All material other than sorghum. Includes pieces of seed pods (Max % by weight)	2.0%	4.0%

Note *

- Assessment and tolerance based on maximum weight per half litre sample of all seeds in Category E, Category F, Category G and SFS combined for the No.2 grade only.
- Includes Saffron Thistle for No.2 grade only. Note for the No.1 grade, Saffron Thistle is included in Category C.
- Tolerance of 4.0% by weight applies for No.2 grade only.

8.8 Weed Seeds for the 2015/16 season – Oat Standards

8.8.1 General Changes – Oats

- For all weed seeds now in Category A to E, tolerances have changed where applicable from the total of all weed seeds in each Type to individual weed seeds in each Category.
- Category F is to be assessed as a count of all weed seeds in total per half litre and includes all weed seeds not listed elsewhere in the Standards.
- For seed pods, seed pods greater than 5mm in diameter were previously in Type 7a. Pods are now to be broken open and the individual weed seeds counted. Except for:
 - Peanuts, where a nil tolerance applies to all peanut seeds/pods or other material.
 - Note that Wild Radish Pods and Milk Thistle Pods remain as Unmillable Material above the Screen and pods are not to be broken open.
- For weed seeds greater than 5mm in diameter, if not already listed in the Standards, are included in Category E.
- Note that the category of Small Foreign Seeds remains however the tolerance has been increased for consistency with other commodities from 0.5% to 0.6% for Prime and Milling Oats.

8.8.2 Specific Weed Seed Changes - Oats

The following table outlines all changes for each weed seed where relevant. If a weed seed is not listed below, the tolerance has not been altered from that previously applying.

Weed Seed	Prior Oat Standard		New Oat Standard 2015/16	
	Type	Tolerance	Category	Tolerance
Seeds greater than 5mm in diameter, not otherwise listed. Includes all pulse seeds (broad beans, chickpeas, cowpeas, faba beans, field peas, lentils, lupins). Includes other commodities corn (maize), safflower, soybean, sunflower.	Type 7a	Prime Milling, Milling No.1 - Combined 1/0.5L	E	1 individual seed/0.5L
		Feed No.1 - Combined 20/0.5L		20 individual seeds/0.5L
Bathurst burr	Type 3a	Nil	B	5 individual seeds/0.5L
Bellvine	Type 3a	Nil	F	Prime Milling - Combined 20/0.5L
				Milling No.1 - Combined 50/0.5L
				Feed No. 1 - Combined 250/0.5L
Bindweed (Field)	Type 4	Combined 10/0.5L	D	30 individual seeds/0.5L
Branched Broomrape	Type 3a	Nil	Deleted as cannot be assessed	n/a
Bulls Head/Caltrop/ Cats Head	Type 3a	Nil	B	5 individual seeds/0.5L
Cape Tulip	Type 3a	Nil	B	5 individual seeds/0.5L
Colocynth	Type 1	5 individual seeds/0.5L	F	Prime Milling - Combined 20/0.5L
				Milling No.1 - Combined 50/0.5L
				Feed No. 1 - Combined 250/0.5L
Columbus Grass	Type 7a	Prime Milling, Milling No.1 - Combined 1/0.5L	B	5 individual seeds/0.5L
		Feed No.1 - Combined 20/0.5L		

Weed Seed	Prior Oat Standard		New Oat Standard 2015/16	
	Type	Tolerance	Category	Tolerance
Cottonseed	Type 3a	Nil	B	5 individual seeds/0.5L
Cutleaf Mignonette	Type 4	Combined 10/0.5L	F	Prime Milling - Combined 20/0.5L
				Milling No.1 - Combined 50/0.5L
				Feed No. 1 - Combined 250/0.5L
Darnel / Drake Seed	Type 4	Combined 10/0.5L	D	30 individual seeds/0.5L
Dodder	Type 3a	Nil	B	5 individual seeds/0.5L
Double Gees / Spiny Emex / Three Cornered Jack	Type 2	Nil	B	5 individual seeds/0.5L
Heliotrope (Blue)	Type 3c	Combined 4/0.5L	B	5 individual seeds/0.5L
Heliotrope (Common)	Type 3c	Combined 4/0.5L	B	5 individual seeds/0.5L
Hexham Scent/ King Island Melilot	Type 4	Combined 10/0.5L	D	30 individual seeds/0.5L
Hoary Cress	Type 4	Combined 10/0.5L	F	Prime Milling - Combined 20/0.5L
				Milling No.1 - Combined 50/0.5L
				Feed No. 1 - Combined 250/0.5L
Johnson Grass	Type 7a	Prime Milling, Milling No.1 - Combined 1/0.5L	B	5 individual seeds/0.5L
		Feed No.1 - Combined 20/0.5L		
Jute	Type 1	5 individual seeds/0.5L	C	10 individual seeds/0.5L
Knapweed (Creeping / Russian)	Type 5	Combined 40/0.5L	C	10 individual seeds/0.5L
Mexican Poppy	Type 1	5 individual seeds/0.5L	C	10 individual seeds/0.5L
Mintweed	Type 4	Combined 10/0.5L	D	30 individual seeds/0.5L
New Zealand Spinach	Type 1	5 individual seeds/0.5L	F	Prime Milling - Combined 20/0.5L
				Milling No.1 - Combined 50/0.5L
				Feed No. 1 - Combined 250/0.5L
Nightshade	Type 4	Combined 10/0.5L	D	30 individual seeds/0.5L
Noogoora Burr	Type 3a	Nil	B	5 individual seeds/0.5L
Opium Poppy	Type 2	Nil	A	Nil
Paddy Melon	Type 4	Combined 10/0.5L	D	30 individual seeds/0.5L
Parthenium weed	Type 1	5 individual seeds/0.5L	B	5 individual seeds/0.5L
Patterson's Curse / Salvation Jane	Type 5	Combined 40/0.5L	D	30 individual seeds/0.5L
Poppy (Field, Horned, Long Head, Wild)	Type 1	5 individual seeds/0.5L	F	Prime Milling - Combined 20/0.5L
				Milling No.1 - Combined 50/0.5L
				Feed No. 1 - Combined 250/0.5L
Saffron Thistle	Type 6	Prime Milling – 2 seeds/0.5L	C	10 individual seeds/0.5L
		Milling No.1 – 5 seeds/0.5L		
		Feed No. 1 – 10 seeds/0.5L		
Sesbania pea	Type 5	Combined 40/ 0.5L	F	Prime Milling - Combined

Weed Seed	Prior Oat Standard		New Oat Standard 2015/16	
	Type	Tolerance	Category	Tolerance
				20/0.5L
				Milling No.1 - Combined 50/0.5L
				Feed No. 1 - Combined 250/0.5L
Skeleton Weed	Type 4	Combined 10/0.5L	F	Prime Milling - Combined 20/0.5L
				Milling No.1 - Combined 50/0.5L
				Feed No. 1 - Combined 250/0.5L
Thornapple	Type 3a	Nil	B	5 individual seeds/0.5L
Variegated Thistle	Type 4	Combined 10/0.5L	F	Prime Milling - Combined 20/0.5L
				Milling No.1 - Combined 50/0.5L
				Feed No. 1 - Combined 250/0.5L
Vetch (Commercial)	Type 3b	Combined 4/0.5L	B	5 individual seeds/0.5L
Vetch (Tare)	Type 3b	Combined 4/0.5L	B	5 individual seeds/0.5L
Wild Oats	Type 1	Prime Milling – 5 individual seeds/0.5L	C	Prime Milling - 10 individual seeds/0.5L
	Variations	Milling No.1 – 10 individual seeds/0.5L		Milling No.1 - 10 individual seeds/0.5L
	Type 8	Feed No. 1 – 100 individual seeds/0.5L	D	Feed No. 1 - 30 individual seeds/0.5L

8.8.3 Revised Weed Seed Categories – All Oat Grades

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Category	Revised Definition	Grade		
		Prime	Milling No.1	Feed No.1
Count of individual seeds per half litre:				
A	Castor Oil Plant, Coriander, Crow Garlic / Wild Garlic, Darling Pea, Opium Poppy, Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	Nil		
B	Bathurst Burr, Bulls Head/Caltrop/Cats Head, Cape Tulip, Colombus Grass, Cottonseed, Dodder, Double Gees/Spiny Emex/Three Cornered Jack, Heliotrope (Blue), Heliotrope (Common), Johnson Grass, Noogoora Burr, Parthenium weed, Thornapple, Vetch (Commercial), Vetch (Tare)	5		
C	Black/Wild Oats (all grades except Feed No.1), Jute, Knapweed (Creeping/Russian), Mexican Poppy, Saffron Thistle	10		
D	Bindweed (Field), Black/Wild Oats (Feed No.1 grade only), Darnel (Drake Seed), Hexham Scent/Melilot, Mintweed, Nightshades, Paddy Melon, Patterson's Curse/ Salvation Jane	30		
E	Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Safflower, Soybean, Sunflower and any other seeds greater than 5mm	1	20	
Count of all seeds in total per half litre:				
F	Includes all other weed seeds not listed elsewhere in the Standards	20	50	250
Existing Definitions remain:				
Unmillable Material above the screen	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods and pieces of seedpods (Max % by weight)	2.0%	n/a	
SFS	All Foreign Seeds not specified in category A-F that fall below the 2.0mm screen during the Screenings process (Max % by weight)	0.6%		3.0%

8.9 Weed Seeds for the 2015/16 season – Triticale Standards

8.9.1 General Changes – Triticale

- For all weed seeds now in Category A to E, tolerances have changed where applicable from the total of all weed seeds in each Type to individual weed seeds in each Category.
- Category F is to be assessed as a count of all weed seeds in total per half litre and includes all weed seeds not listed elsewhere in the Standards.
- For seed pods, seed pods greater than 5mm in diameter were previously in Type 7a. Pods are now to be broken open and the individual weed seeds counted. Except for:
 - Peanuts, where a nil tolerance applies to all peanut seeds/pods or other material.
 - Note that Wild Radish Pods and Milk Thistle Pods remain as Unmillable Material above the Screen and pods are not to be broken open.
- For weed seeds greater than 5mm in diameter, if not already listed in the Standards, are included in Category E.
- Note that the category of Small Foreign Seeds remains.

8.9.2 Specific Weed Seed Changes - Triticale

The following table outlines all changes for each seed where relevant. If a weed seed is not listed below, the tolerance has not been altered from that previously applying.

Weed Seed	Prior Triticale Standard		New Triticale Standard 2015/16	
	Type	Tolerance	Category	Tolerance
Seeds greater than 5mm in diameter, not otherwise listed. Includes all pulse seeds (broad beans, chickpeas, cowpeas, faba beans, field peas, lentils, lupins). Includes other commodities corn (maize), safflower, soybean, sunflower.	Type 7a	Combined 10/0.5L	E	1 individual seed/0.5L
Bathurst burr	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Bellvine	Type 3a	Combined 2/0.5L	F	Combined 150/0.5L
Bindweed (Field)	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Branched Broomrape	Type 3a	Combined 2/0.5L	Deleted as cannot be assessed	n/a
Bulls Head/Caltrop/ Cats Head	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Cape Tulip	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Colocynth	Type 1	8 individual seeds/ 0.5L	F	Combined 150/0.5L
Columbus Grass	Type 6	Combined 50/0.5L	B	5 individual seeds/0.5L
Cottonseed	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Cutleaf Mignonette	Type 4	Combined 20/0.5L	F	Combined 150/0.5L
Darnel / Drake Seed	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Dodder	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Double Gees / Spiny Emex / Three Cornered Jack	Type 1	8 individual seeds/ 0.5L	B	5 individual seeds/0.5L
Heliotrope (Blue)	Type 3c	Combined 8/0.5L	B	5 individual seeds/0.5L
Heliotrope (Common)	Type 3c	Combined 8/0.5L	B	5 individual seeds/0.5L
Hexham Scent/ King Island Melilot	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Hoary Cress	Type 4	Combined 20/0.5L	F	Combined 150/0.5L
Johnson Grass	Type 6	Combined 50/0.5L	B	5 individual seeds/0.5L
Jute	Type 1	8 individual seeds/ 0.5L	C	10 individual seeds/0.5L
Knapweed (Creeping / Russian)	Type 5	Combined 40/0.5L	C	10 individual seeds/0.5L
Mexican Poppy	Type 1	8 individual seeds/ 0.5L	C	10 individual seeds/0.5L

Weed Seed	Prior Triticale Standard		New Triticale Standard 2015/16	
	Type	Tolerance	Category	Tolerance
Mintweed	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
New Zealand Spinach	Type 1	8 individual seeds/ 0.5L	F	Combined 150/0.5L
Nightshade	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Noogoora Burr	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Paddy Melon	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Parthenium weed	Type 1	8 individual seeds/ 0.5L	B	5 individual seeds/0.5L
Patterson's Curse / Salvation Jane	Type 5	Combined 40/0.5L	D	30 individual seeds/0.5L
Poppy (Field, Horned, Long Head, Wild)	Type 1	8 individual seeds/ 0.5L	F	Combined 150/0.5L
Saffron Thistle	Type 6	Combined 50/0.5L	C	10 individual seeds/0.5L
Sesbania pea	Type 5	Combined 40/ 0.5L	F	Combined 150/0.5L
Skeleton Weed	Type 4	Combined 20/0.5L	F	Combined 150/0.5L
Thornapple	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Variegated Thistle	Type 4	Combined 20/0.5L	F	Combined 150/0.5L
Vetch (Commercial)	Type 3b	Combined 4/0.5L	B	5 individual seeds/0.5L
Vetch (Tare)	Type 3b	Combined 4/0.5L	B	5 individual seeds/0.5L

8.9.3 Revised Weed Seed Categories – Triticale

Category	Revised Definition	Grade
		Triticale
Count of individual seeds per half litre:		
A	Castor Oil Plant, Coriander, Crow Garlic / Wild Garlic, Darling Pea, Opium Poppy, Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John’s Wort	Nil
B	Bathurst Burr, Bulls Head/Caltrop/Cats Head, Cape Tulip, Colombus Grass, Cottonseed, Dodder, Double Gees/Spiny Emex/Three Cornered Jack, Heliotrope (Blue), Heliotrope (Common), Johnson Grass, Noogoora Burr, Parthenium weed, Thornapple, Vetch (Commercial), Vetch (Tare)	5
C	Jute, Knapweed (Creeping/Russian), Mexican Poppy, Saffron Thistle	10
D	Bindweed (Field), Darnel (Drake Seed), Hexham Scent/Melilot, Mintweed, Nightshades, Paddy Melon, Patterson’s Curse/ Salvation Jane	30
E	Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Safflower, Soybean, Sunflower and any other seeds greater than 5mm	1
Count of all seeds in total per half litre:		
F	Includes all other weed seeds not listed elsewhere in the Standards	150
Existing Definitions remain:		
Unmillable Material above the screen	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods and pieces of seedpods (Max % by weight)	5.0%
SFS	All Foreign Seeds not specified in category A-F that fall below the 2.0mm screen during the Screenings process (Max % by weight)	1.2%

8.10 Weed Seeds for the 2015/16 season – Cereal Rye Standards

8.10.1 General Changes – Cereal Rye

- For all weed seeds now in Category A to E, tolerances have changed where applicable from the total of all weed seeds in each Type to individual weed seeds in each Category.
- Category F is to be assessed as a count of all weed seeds in total per half litre and includes all weed seeds not listed elsewhere in the Standards.
- For seed pods, seed pods greater than 5mm in diameter were previously in Type 7a. Pods are now to be broken open and the individual weed seeds counted. Except for
 - Peanuts, where a nil tolerance applies to all peanut seeds/pods or other material.
 - Note that Wild Radish Pods and Milk Thistle Pods remain as Unmillable Material above the Screen and pods are not to be broken open.
- For weed seeds greater than 5mm in diameter, if not already listed in the Standards, are included in Category E.
- Note that the category of Small Foreign Seeds remains.

8.10.2 Specific Weed Seed Changes – Cereal Rye

The following table outlines all changes for each seed where relevant. If a weed seed is not listed below, the tolerance has not been altered from that previously applying.

Weed Seed	Prior Cereal Rye Standard		New Cereal Rye Standard 2015/16	
	Type	Tolerance	Category	Tolerance
Seeds greater than 5mm in diameter, not otherwise listed. Includes pulse seeds (broad beans, chickpeas, cowpeas, faba beans, field peas, lentils, lupins). Includes other commodities corn (maize), safflower, soybean, sunflower.	Type 7a	Combined 10/0.5L	E	1 individual seed/0.5L
Bathurst burr	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Bellvine	Type 3a	Combined 2/0.5L	F	Combined 150/0.5L
Bindweed (Field)	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Branched Broomrape	Type 3a	Combined 2/0.5L	Deleted as cannot be assessed	n/a
Bulls Head/Caltrop/ Cats Head	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Cape Tulip	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Colocynth	Type 1	8 individual seeds/ 0.5L	F	Combined 150/0.5L
Columbus Grass	Type 7a	Combined 10/0.5L	B	5 individual seeds/0.5L
Cottonseed	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Cutleaf Mignonette	Type 2	Nil	F	Combined 150/0.5L
Darnel / Drake Seed	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Dodder	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Double Gees / Spiny Emex / Three Cornered Jack	Variations	1 individual seed/ 0.5L	B	5 individual seeds/0.5L
Heliotrope (Blue)	Type 3c	Combined 8/0.5L	B	5 individual seeds/0.5L
Heliotrope (Common)	Type 3c	Combined 8/0.5L	B	5 individual seeds/0.5L
Hexham Scent/ King Island Melilot	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Hoary Cress	Type 4	Combined 20/0.5L	F	Combined 150/0.5L
Johnson Grass	Type 7a	Combined 10/0.5L	B	5 individual seeds/0.5L
Jute	Type 1	8 individual seeds/ 0.5L	C	10 individual seeds/0.5L
Knapweed (Creeping /	Type 5	Combined 40/0.5L	C	10 individual seeds/0.5L

Weed Seed	Prior Cereal Rye Standard		New Cereal Rye Standard 2015/16	
	Type	Tolerance	Category	Tolerance
Russian)				
Melilotus	Type 6	Combined 5/0.5L	D	30 individual seeds/0.5L – as Hexham Scent / King Island Melilot
Mexican Poppy	Type 1	8 individual seeds/ 0.5L	C	10 individual seeds/0.5L
Mintweed	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
New Zealand Spinach	Type 1	8 individual seeds/ 0.5L	F	Combined 150/0.5L
Nightshade	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Noogoora Burr	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Other cereal grains not listed	Variations	Combined 20/0.5L	F	Combined 150/0.5L
Other oilseeds not listed	Variations	Combined 20/0.5L	F	Combined 150/0.5L
Other pulses not listed	Variations	Combined 20/0.5L	F	Combined 150/0.5L
Paddy Melon	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Parthenium weed	Type 1	8 individual seeds/ 0.5L	B	5 individual seeds/0.5L
Patterson's Curse / Salvation Jane	Type 5	Combined 40/0.5L	D	30 individual seeds/0.5L
Poppy (Field, Horned, Long Head, Wild)	Type 1	8 individual seeds/ 0.5L	F	Combined 150/0.5L
Saffron Thistle	Type 3b	Combined 5/0.5L	C	10 individual seeds/0.5L
Sesbania pea	Type 5	Combined 40/ 0.5L	F	Combined 150/0.5L
Skeleton Weed	Type 6	Combined 5/0.5L	F	Combined 150/0.5L
Thornapple	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Variegated Thistle	Type 4	Combined 20/0.5L	F	Combined 150/0.5L
Vetch (Commercial)	Type 3b	Combined 5/0.5L	B	5 individual seeds/0.5L
Vetch (Tare)	Type 3b	Combined 5/0.5L	B	5 individual seeds/0.5L
Wild Oats (Black)	Variations	Combined 20/0.5L	F	Combined 150/0.5L

8.10.3 Revised Weed Seed Categories – Cereal Rye

Category	Revised Definition	Grade
		Cereal Rye
Count of individual seeds per half litre:		
A	Castor Oil Plant, Coriander, Crow Garlic / Wild Garlic, Darling Pea, Opium Poppy, Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John’s Wort	Nil
B	Bathurst Burr, Bulls Head/Caltrop/Cats Head, Cape Tulip, Colombus Grass, Cottonseed, Dodder, Double Gees/Spiny Emex/Three Cornered Jack, Heliotrope (Blue), Heliotrope (Common), Johnson Grass, Noogoora Burr, Parthenium weed, Thornapple, Vetch (Commercial), Vetch (Tare)	5
C	Jute, Knapweed (Creeping/Russian), Mexican Poppy, Saffron Thistle	10
D	Bindweed (Field), Darnel (Drake Seed), Hexham Scent/Melilot, Mintweed, Nightshades, Paddy Melon, Patterson’s Curse/ Salvation Jane	30
E	Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Safflower, Soybean, Sunflower and any other seeds greater than 5mm	1
Count of all seeds in total per half litre:		
F	Includes all other weed seeds not listed elsewhere in the Standards	150
Existing Definitions remain:		
Unmillable Material above the screen	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods and pieces of seedpods (Max % by weight)	3.0%
SFS	All Foreign Seeds not specified in category A-F that fall below the 1.6mm screen during the Screenings process (Max % by weight)	1.2%

8.11 Weed Seeds for the 2015/16 season – Maize Standards

8.11.1 General Changes – Maize

- For all weed seeds now in Category A to E, tolerances have changed where applicable from the total of all weed seeds in each Type to individual weed seeds in each Category.
- Category F is to be assessed as a count of all weed seeds in total per half litre and includes all weed seeds not listed elsewhere in the Standards.
- For seed pods, seed pods greater than 5mm in diameter were previously in Type 7a. Pods are now to be broken open and the individual weed seeds counted. Except for
 - Peanuts, where a nil tolerance applies to all peanut seeds/pods or other material.
 - Wild Radish Pods and Milk Thistle Pods that are classified as Category E. These pods are not to be broken open.
- For weed seeds greater than 5mm in diameter, if not already listed in the Standards, are included in Category E.
- Note that the category of Foreign Material remains. Includes pieces of seed pods.
- Note that the category of Small Foreign Seeds remains, however the tolerance for Prime has been increased from 0.5% by weight to 0.6% by weight for consistency with all other commodities.

8.11.2 Specific Weed Seed Changes - Maize

The following table outlines all changes for each seed where relevant. If a weed seed is not listed below, the tolerance has not been altered from that previously applying.

Weed Seed	Prior Maize Standard		New Maize 2015/16 Standard	
	Type	Tolerance	Category	Tolerance
Seeds greater than 5mm in diameter, not otherwise listed. Includes all pulse seeds (broad beans, chickpeas, cowpeas, faba beans, field peas, lentils, lupins). Includes other commodities corn (maize), safflower, soybean, sunflower.	Type 7a	Prime maize - Combined 10/0.5L Feed No.1, Feed No.2 - Combined 50/0.5L	E	20 individual seeds/0.5L
Bathurst burr	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Bellvine	Type 3a	Combined 2/0.5L	F	Prime maize - Combined 10/0.5L Feed No.1, Feed No.2 - Combined 50/0.5L
Bindweed (Field)	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Branched Broomrape	Type 3a	Combined 2/0.5L	Deleted as cannot be assessed	n/a
Bulls Head/Caltrop/ Cats Head	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Cape Tulip	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Colocynth	Type 1	8 individual seeds/ 0.5L	F	Prime maize - Combined 10/0.5L Feed No.1, Feed No.2 - Combined 50/0.5L
Columbus Grass	Type 6	Combined 10/0.5L	B	5 individual seeds/0.5L
Cottonseed	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Cutleaf Mignonette	Type 4	Combined 20/0.5L	F	Prime maize - Combined 10/0.5L Feed No.1, Feed No.2 - Combined 50/0.5L
Darnel / Drake Seed	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Dodder	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L

Weed Seed	Prior Maize Standard		New Maize 2015/16 Standard	
	Type	Tolerance	Category	Tolerance
Double Gees / Spiny Emex / Three Cornered Jack	Type 1	8 individual seeds/ 0.5L	B	5 individual seeds/0.5L
Heliotrope (Blue)	Type 3c	Combined 8/0.5L	B	5 individual seeds/0.5L
Heliotrope (Common)	Type 3c	Combined 8/0.5L	B	5 individual seeds/0.5L
Hexham Scent/ King Island Melilot	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Hoary Cress	Type 4	Combined 20/0.5L	F	Prime maize - Combined 10/0.5L Feed No.1, Feed No.2 - Combined 50/0.5L
Johnson Grass	Type 6	Combined 10/0.5L	B	5 individual seeds/0.5L
Jute	Type 1	8 individual seeds/ 0.5L	C	10 individual seeds/0.5L
Knapweed (Creeping / Russian)	Type 5	Combined 40/0.5L	C	10 individual seeds/0.5L
Mexican Poppy	Type 1	8 individual seeds/ 0.5L	C	10 individual seeds/0.5L
Mintweed	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
New Zealand Spinach	Type 1	8 individual seeds/ 0.5L	F	Prime maize - Combined 10/0.5L Feed No.1, Feed No.2 - Combined 50/0.5L
Nightshade	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Noogoora Burr	Type 3a	Combined 2/0.5L	B	5 individual seeds/0.5L
Paddy Melon	Type 4	Combined 20/0.5L	D	30 individual seeds/0.5L
Parthenium weed	Type 1	8 individual seeds/ 0.5L	B	5 individual seeds/0.5L
Patterson's Curse / Salvation Jane	Type 5	Combined 40/0.5L	D	30 individual seeds/0.5L
Poppy (Field, Horned, Long Head, Wild)	Type 1	8 individual seeds/ 0.5L	F	Prime maize - Combined 10/0.5L Feed No.1, Feed No.2 - Combined 50/0.5L
Saffron Thistle	Type 6	Combined 50/0.5L	C	10 individual seeds/0.5L
Sesbania pea	Type 5	Combined 40/ 0.5L	F	Prime maize - Combined 10/0.5L Feed No.1, Feed No.2 - Combined 50/0.5L
Skeleton Weed	Type 4	Combined 20/0.5L	F	Prime maize - Combined 10/0.5L Feed No.1, Feed No.2 - Combined 50/0.5L
Thornapple	Type 2	Nil	B	5 individual seeds/0.5L
Variegated Thistle	Type 4	Combined 20/0.5L	F	Prime maize - Combined 10/0.5L Feed No.1, Feed No.2 - Combined 50/0.5L
Vetch (Commercial)	Type 3b	Combined 4/0.5L	B	5 individual seeds/0.5L
Vetch (Tare)	Type 3b	Combined 4/0.5L	B	5 individual seeds/0.5L
Wild Oats (Black)	Type 7b	Prime maize - Combined 10/0.5L Feed No.1 - Combined 50/0.5L Feed No.2 - Combined 100/0.5L	D	30 individual seeds/0.5L

8.11.3 Revised Weed Seed Categories – All Maize Grades

Category	Revised Definition	Grade	
		Prime	Feed No.1, Feed No.2
Count of individual seeds per half litre:			
A	Castor Oil Plant, Coriander, Crow Garlic / Wild Garlic, Darling Pea, Opium Poppy, Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John’s Wort	Nil	
B	Bathurst Burr, Bulls Head/Caltrop/Cats Head, Cape Tulip, Colombus Grass, Cottonseed, Dodder, Double Gees/Spiny Emex/Three Cornered Jack, Heliotrope (Blue), Heliotrope (Common), Johnson Grass, Noogoora Burr, Parthenium weed, Thornapple, Vetch (Commercial), Vetch (Tare)	5	
C	Jute, Knapweed (Creeping/Russian), Mexican Poppy, Saffron Thistle	10	
D	Bindweed (Field), Black/Wild Oats, Darnel (Drake Seed), Hexham Scent/Melilot, Mintweed, Nightshades, Paddy Melon, Patterson’s Curse/ Salvation Jane	30	
E	Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Safflower, Soybean, Sunflower and any other seeds greater than 5mm. Includes Wild Radish pods and Milk Thistle pods	20	
Count of all seeds in total per half litre:			
F	Includes all other weed seeds not listed elsewhere in the Standards	10	50
Existing Definitions remain:			
SFS	All Foreign Seeds not specified in category A-F that fall below the 4.75mm screen during the Screenings process (Max % by weight)	0.6%	1.6%
Foreign Material	All material other than maize. Includes pieces of seed pods (Max % by weight)	3.0%	5.0%