

UPDATE 4 OF 21 • 02 March 2021

TOPIC: 1st Industry Call for Submissions on 2021/22 GTA Standards

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1. Issue

During deliberations on the development of Grain Trading Standards (Standards) for the 2020/21 season, industry feedback was received by GTA on the proposed changes for 2020/21, and **potential changes for the following 2021/22 season.**

The GTA Trading Standards Committee (Committee) has recently met to discuss industry feedback received and the potential Standards for 2021/22.

This document is provided for industry consideration. It lists the following information on the 2021/22 Standards:

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2. Process for 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 Tuesday 23rd March 2021.

Please lodge your submissions by sending to submissions@graintrade.org.au and title your email – Standards Review 2021/22.

Industry is encouraged to provide supporting evidence for any change proposed in Standards. Preference is for industry to use the proforma for lodging submissions 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 2021/22

3.1 Agreed Change: Visual Recognition Standards Guide – all commodities

Changes have been recommended for several commodities for inclusion in the 2021/22 season version of the VRSG:

- Revised photographs and wording for various defective grain quality parameters.
- These relatively minor changes ae expected to provide greater clarity and aid industry interpretation.
- Where required minor wording changes will also occur in each commodity Standards Booklet to reflect these changes.

Depending on the extent of changes further requested by industry and agreed by the Committee, a revised VRSG may not be produced for 2021/22 with changes considered for adoption in a revised version in future years:

Commodity	Standards Issue / VRSG Page Number	Agreed Outcome	
All	Consistent photos	To ensure the germ is facing in the same direction for all	
		commodities i.e., germ facing downwards.	
All	Terminology	Ensure all headings list a Contaminant where that is present i.e., Pickled grain, Ergot. All other headings to be labelled "Defect".	
Barley	Varietal List (refer Section 3.5 below) p5	Update the list of varieties having a short versus long Rachilla based on varieties advised by Barley Australia.	
Barley	Cleaved p7	Replace side cleaved picture with a grain showing less endosperm.	
Barley	Cleaved p7	As per definition clarification in 2020/21, add a photo of a hormone damaged grain.	
Barley	Severely Damaged p9	Alter the definition as per the Barley Standards Booklet to provide greater clarity on the various depictions of this defect to: "Severely Damaged inc. Fusarium (except WA) Damage to the grain causing it to become severely discoloured. A grain exhibits one or more of the following characteristics: Burnt / Heat Damaged Heat Damaged or Burnt refers to those kernels that have become discoloured. Affected grains appear dark brown, or in severe cases, blackened. May also appear discoloured under the husk on the kernel. Mould Affected grains appear discoloured and visibly affected by mould. Diseased / Other Serious Visual Defects Refers to those kernels that have become discoloured and / or have a serious visual defect that is not otherwise listed in these Standards. Affected grains may have a range of visual appearances. Includes grains affected by Fusarium (except WA). Does not include Field Fungi affected grains, refer to Field Fungi."	
Barley	Severely Damaged p9	Fusarium photo – replace grain with a photo that is more representative of this defect	
Barley	Severely Damaged p9	Add a photo of a grain depicting a greyish surface to the extent required to be classified as Severely Damaged (but which is not classified as Field Fungi or Heavily Discoloured-WA).	
Canola	Broken or Split p12	Alter definition to include "Any level of damage is classified as defective".	

Commodity	Standards Issue / VRSG Page Number	Agreed Outcome	
Canola	Heat Damaged, Bin Burnt or Badly Damaged p12	Alter the heading and definition to reflect the terminology in the canola Standards (refer also to Weather Damaged below), to "Heat Damaged - Heat damaged seeds are those seeds and pieces of seed that are materially discoloured and damaged by heat. Seeds may have a heated odour or a brown powdery appearance when crushed."	
Canola	Weather Damaged p12		
Canola	Green Seeds p13	Increase the size of the photos to aid clarity.	
Desi Chickpeas	Frost Damaged, Shrivelled and Wrinkled p15	Alter the heading and definition to reflect Frost may not be the cause, and cannot be confirmed in a sample, to "Shrivelled and Wrinkled - Visible damage to the seed coat or size and shape of grain whereby the grains are severely distorted and/or shrunken. Seed coats may tightly adhere to the kernel or be brittle. Seed coats may show a level of discolouration depending on the extent of damage. Grains are often smaller than the majority in the sample".	
Desi Chickpeas	Poor Colour p19	Replace last 3 Poor Colour photos with photos of grains that are clearer that more appropriately depict this defect i.e., less darker photos.	
Kabuli Chickpeas	Frost Damaged, Shrivelled and Wrinkled p24	Alter the heading and definition to reflect Frost may not be the cause, and cannot be confirmed in a sample, to "Shrivelled and Wrinkled - Visible damage to the seed coat or size and shape of grain whereby the grains are severely distorted and/or shrunken. Seed coats may tightly adhere to the kernel or be brittle. Seed coats may show a level of discolouration depending on the extent of damage. Grains are often smaller than the majority in the sample".	
Kabuli Chickpeas	Frost Damaged, Shrivelled and Wrinkled p24	Add a photo of 2 grains adhering.	
Faba Beans	Bin Burnt and Heat Damaged p26	As it is not needed, delete the first defective grain.	
Faba Beans	Fungal Affected p26	Add a photo to depict a grain that has an entire legion on the surface of the seed coat (20% coverage), without appearing to or penetrating the kernel.	
Faba Beans	Fungal Affected p26	At the end of the definition add the following wording for clarity "Fungal Affected is included in Poor Colour".	
Faba Beans	Broken, Chipped, Loose Seed Coat and Split p28	the kernel".	
Faba Beans	Frost Damaged, Shrivelled and Wrinkled p29	Alter the heading and definition to reflect Frost may not be the cause, and cannot be confirmed in a sample, to "Shrivelled and Wrinkled - Visible damage to the seed coat or size and shape of grain whereby the grains are severely distorted and/or shrunken. Seed coats may tightly adhere to the kernel or be brittle. Seed coats may show a level of discolouration depending on the extent	

Commodity	Standards Issue / VRSG Page Number	RSG Agreed Outcome	
		of damage. Grains are often smaller than the majority in the sample".	
Faba Beans	Frost Damaged, Stained p29	Revise wording in the definition for greater clarity between staining on the Seed Coat and damage to the kernel due to Frost. Revised wording is as follows: "Seed Coat – Visible damage to the Seed Coat resulting in staining on the Seed Coat only. Is included in Poor Colour." "Kernel – Visible damage to the Seed Coat where the damage can be seen to penetrate through to the kernel. Any level of damage to the kernel is considered defective. Is included in Poor Colour." Alter wording under the photos to reflect the above clarifications.	
Faba Beans	Pea Seed Borne Mosaic Virus P31	To assist to determine what the minimum depiction of this quality parameter is before a grain is classified as defective, remove the first 2 Sound grains.	
Red Lentils	Bin Burnt and Heat Damaged p35	For greater clarity, alter the photo of the defective grain to reflect the difference between this grain and a dark Seed Coat grain under Poor Colour Seed Coat (p36).	
Red Lentils	Poor Colour Seed Coat p36	For greater clarity, alter the last photo of a defective grain to reflect the difference between this grain and a Bin Burnt and Heat Damaged grain (p35).	
Red Lentils	Contrasting Colour p37	Seek advice from Pulse Australia on an upgraded chart to assist industry interpretation of this quality parameter in industry Standards. Seek advice from Pulse Australia on the need for a photo to depict Pea Seed Borne Mosaic Virus, in order to differentiate from Contrasting Colour.	
Lupins	Broken, Chipped, Loose Seed Coat and Split p40	To reflect terminology used in Western Australian Standards, alter the definition for Missing Seed Coat to "Missing Seed Coat (Fully De-Coated - WA) - Where the entire Seed Coat is missing but the kernel remains intact".	
Lupins	Phomopsis p42	Alter definition from "mould" to "mouldy" for consistency with other pulses.	
Lupins	Bin Burnt and Heat Damaged	Add a new photo to reflect this quality parameter listed in Standards.	
Mung Beans	All defects	Seek comments from the Australian Mungbean Association on the potential inclusion of photos of this commodity to the standards required in the VRSG.	
Oats	Severely Damaged p49	Alter the definition as per the Oat Standards Booklet to provide greater clarity on the various depictions of this defect to: "Severely Damaged Damage to the grain causing it to become severely discoloured. A grain exhibits one or more of the following characteristics: Burnt / Heat Damaged Heat Damaged or Burnt refers to those kernels that have become discoloured. Affected grains appear dark brown, or in severe cases, blackened. May also appear discoloured under the husk on the kernel. Mould Affected grains appear discoloured and visibly affected by mould. Note that light Septoria discolouration similar to Mould is not included in the definition of Severely Damaged - refer to Stained Grains. Diseased / Other Serious Visual Defects	

Commodity	Standards Issue / VRSG Page Number	Agreed Outcome	
		Refers to those kernels that have become discoloured and / or have a serious visual defect that is not otherwise listed in these Standards. Affected grains may have a range of visual appearances.	
Oats	Severely Damaged p49	Does not include Field Fungi affected grains, refer to Field Fungi." Add a photo of a grain depicting Mould and one of Diseased /	
	, , , ,	Other Serious Visual Defects (if available).	
Oats	Field Fungi p49	Add 2 new photos to depict the minimum level of Field Fungi as follows: Dorsal – Field fungi scattered over the husk. Ventral – Field fungi clumped in one location on the husk.	
Oats	Stained Grains p50	For greater clarity, remove the following sentence as it is not needed "Light Septoria discolouration similar to Mould is not included in the definition of Severely Damaged".	
Oats	Stained Grains - Septoria p50	Alter the definition in the VRSG and Oat Standards Booklet for greater clarity "Septoria is a fungal infection that causes light to dark discolouration on the husk and / or kernel."	
Oats	Stained Grains p50	To depict Stained Grains more accurately and to differentiate from Field Fungi, replace first 2 defective photos with more appropriate grains.	
Oats	Stained Groats p50	Alter the wording under the pictures for consistency with other photos to "Stained Groat – Dorsal" or "Stained Groat – Ventral".	
Field Peas	Front page p52	For greater clarity, revise wording and move pictures to depict Parafield field peas (colour and shape) on the middle line and Kaspa field peas (colour and shape) on the third line.	
Field Peas	Frost Damaged, Shrivelled and Wrinkled p55	Alter the heading and definition to reflect Frost may not be the cause, and cannot be confirmed in a sample, to "Shrivelled and Wrinkled - Visible damage to the seed coat or size and shape of grain whereby the grains are severely distorted and/or shrunken. Seed coats may tightly adhere to the kernel or be brittle. Seed coats may show a level of discolouration depending on the extent of damage. Grains are often smaller than the majority in the sample". Add a new photo of a defective grain that shows "golf ball type dimples".	
Sorghum	Sprouted p58	For greater clarity, replace photo with a more appropriate one showing this defect.	
Sorghum	Mould p59	For greater clarity, replace photo with a more appropriate one showing this defect.	
Wheat	Wheat Image p61	Sheath spelled incorrectly.	
Wheat	Vitreous Kernels p62	Replace last photo with a clearer one depicting a non-vitreous grain on the side. Add wording of "Non-Vitreous" under last 2 grains to clarify they are not vitreous.	
Wheat	Stained p63	Replace both Brush end-Stained grains with clearer photos depicting this defect.	
Wheat	Stained p63	Add the following wording at the end of the definition to refer to all quality parameters included in this defect "Includes grains that show Streaking anywhere on the surface of the grain, and Brush end-Staining beyond the minimum".	
Wheat	Distorted p64	To assist interpretation, add a Sound grain depicting a "Pinched grain".	

Commodity	Standards Issue / VRSG Page Number	Agreed Outcome
Wheat	Severely Damaged p65	Alter the definition as per the Wheat Standards Booklet to provide greater clarity on the various depictions of this defect to: "Severely Damaged Damage to the grain causing it to become severely discoloured. A grain exhibits one or more of the following characteristics: Burnt / Heat Damaged Heat damaged or burnt refers to those kernels that have become severely discoloured. Affected grains appear reddish brown, dark brown or in severe cases, blackened. Mould Affected grains appear discoloured and visibly affected by mould. Diseased / Other Serious Visual Defects Refers to those kernels that have become discoloured and / or have a serious visual defect that is not otherwise listed in these Standards. Affected grains may have a range of visual appearances."
Wheat	Severely Damaged p65	Add a photo of a grain depicting a greyish surface to the extent required to be classified as Severely Damaged (but which is not classified as Field Fungi or White Grain Disorder / Head Scab).
Wheat	White Grain Disorder / Head Scab p66	Replace the Mottled grain (Durum) with a more appropriate wheat Mottled grain.

3.2 Agreed Change: Minor Wording Changes & Other Issues – all cereal commodities

Minor changes to wording in all relevant Standards charts and Standards booklets will occur. These changes will refer to the latest versions of reference material available to assist industry implementation of Standards, including:

- Visual Recognition Standards Guide for 2021/22 (if developed, otherwise all 2021/22 Standards will refer to the prior 2020/21 version).
- The document entitled "Australian Grains Industry Post Harvest Chemical Usage Recommendations and Outturn Tolerances 2021/22" (see http://www.graintrade.org.au/nwpgp).

3.3 Agreed Change: SFS & Type 7b Weed Seed Wording – all commodities

A request was received from industry to further clarify the wording in all Standards (specifically in relation to pulses) regarding the distinction between Small Foreign Seeds (SFS) and Type 7b weed seeds. The Committee agreed further clarification was required, without altering the intent of the definitions that apply. In summary, depending on the commodity and weed seed Type, the following applies:

- Small Foreign Seeds (SFS)
 - o Are those seeds that fall below the screen following shaking.
 - o If any seeds are referenced elsewhere in the Standards, even if they fall below the screen, they are not classified as SFS.
 - o A list of the more common SFS is included in each Standard. That list is not inclusive of all SFS.
- Type 7b Weed Seeds
 - o Are generally those not listed in the Standards, that remain above the screen following shaking.
 - o There may be Type 7b Weed Seeds (i.e., immature) that are small that fall below the screen. These are not classified as SFS but are classified as Type 7b Weed Seeds.
 - As noted above, there may be weeds that are classified as SFS (that are not listed in the SFS table), that are not to be classified as Type 7b Weed Seeds.

It was therefore agreed to alter all references in the Standards (definitions, wording on quality charts, procedures) where required to provide greater clarity and to reflect the above intention of the definitions as currently applied. In addition, the Committee recommended these changes should be made to all relevant commodities. GTA intends to write to other Standards setting groups seeking the relevant changes be made for consistency across commodities.

3.4 Agreed Change: Non-Industry Classified Varieties – all commodities

In 2020 the Committee was requested to develop a GTA grade for a wheat variety that did not require the usual classification for wheat varieties (by Wheat Quality Australia (WQA)). The request arose because the variety was bred for a specific purpose outside of the normal use of milling/feed wheats in Australia. While WQA agreed it did not need to consider that variety, the Committee could not agree on development of a new grade as the procedures and charter of the GTA Standards Committee did not cover such a situation.

At the time, the Committee advised the industry party it would develop a procedure and provide that to industry for future reference and use. The Committee is currently reviewing its charter and developing a procedure to cover the above event, for wheat and all other commodities. Once developed and agreed in 2021, it will be released for use by industry as part of the release of the 2021/22 Standards.

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 2021/22 season Standards are released.

For wheat, Wheat Quality Australia has proposed providing the final Varietal Master List to GTA by 1 August rather than the current 1 September. This proposal is purely an administrative action that will assist publication of the Varietal Master List "once", being in the Wheat Standards Booklet released to industry on 1 August each year.

3.6 Agreed Change: Defect Tolerances SFW1 – Wheat

As advised in 2020, several defective grain quality parameters in the SFW1 Standard were proposed to be altered (loosened) given that many of these quality parameters currently have limits closely aligned to milling grades. However, SFW1 is used as a stockfeed grade.

It was noted that some sectors of industry apply variations as per the tolerances as requested to be altered based on seasonal conditions.

The Committee has re-affirmed its intention to implement the following changes for the 2021/22 season:

Quality Parameter	Prior SFW1 tolerance - 2020/21	Agreed SFW1 tolerance - 2021/22
Stained	15% by count	50% by count
Field Fungi	10 grains per half litre	40 grains per half litre
Dry Green or Sappy	10% by count	Unlimited
Severely Damaged	1 grain per half litre	5 grains per half litre
Insect Damaged	2% by count	4% by count
Over-dried Damaged	Nil	Unlimited

Industry comment is sought on the implementation of those changes for SFW1 in the 2021/22 Standards.

4. Potential Changes for 2021/22 where further Industry Advice is required

4.1 Potential Change: ANW2 – Wheat

Since 2018 several submissions have been received from industry seeking a review of the ANW2 Wheat Standards in relation to various quality parameters, commonly referred to as Dockage. Various concerns were raised in relation to those parameters that were "loosely categorised within Dockage" in the Standards. In summary, issues raised in those submissions included:

- Prior customer concerns with Dockage levels in premium Western Australian grades such as noodle wheat and APWN continue to be raised.
- There are various quality parameters included in the term Dockage, including Unmillable material above the Screen (i.e., chaff), Screenings, Small Foreign Seeds, Type 7(b) Weed Seeds, to name a few.
- Dockage is not assessed "in total" at receival of grower loads or on outturn from all storages but is a parameter listed in some export contracts for certain markets.
- As "total" Dockage is not assessed at receival, there are risks of receival of grain outside of customer Dockage limits.
- Concerns to some extent have been generally raised with the Dockage levels in all wheat grades.

As advised to industry in 2020, following discussion of the various issues related to this subject, the Committee agreed to the following:

- To review the current quality parameters within Australian wheat milling grades that make up Dockage and determine if more appropriate measurements should be considered (i.e., a specific Dockage test).
- To review the various factors and processes along the supply chain that influence the quality of grain outturned related to Dockage.
- To seek further information on the legitimacy of the claim relating to Dockage levels of Australian milling wheat.
- To consider all other relevant issues.

A Working Group has met to discuss the above issues and to consider a further submission from industry on this issue. That Working Group will shortly be provided with data from a trial reviewing several aspects as outlined above. Following that review, the Working Group will consider a way forward and industry will be advised of the findings and recommendations of the Committee in the second round of industry consultations. That document is due for release to industry in late April 2021.

5. Issues for Future Consideration

5.1 Further Research: Nil Tolerance Parameters – All Cereals

The Committee had previously advised industry of a review of various aspects related to this topic including:

- The definition of Nil.
- The applicability of a Nil tolerance to apply for each quality parameter in a bulk grain load.
- Regulatory impacts of any potential change away from Nil.
- Suitable tolerances by quality parameter and commodity to apply.
- The consistency of the definitions and tolerances across commodities.
- The method of assessment, including sample size.

The Committee commenced this activity and has made changes to Standards in previous seasons. The Committee has considered the remaining Nil tolerance parameters and is reviewing a potential change to the contamination of grain with *Eucalyptus spp*. (gumnuts). Following completion of that review industry will be advised of its findings and any recommendations.

No other Nil tolerance parameters will be considered following completion of the review of gumnuts.

5.2 Further Research: Vacuum Sampling of Road Trucks – All Commodities

Industry was advised of a proposal raised in 2018 to review the current use of vacuum probes to obtain a representative sample for the purposes of applying Trading Standards. It was agreed this project should be managed as a whole of industry review. GTA through GTA's Standards Committee offered to facilitate the project on behalf of industry, as it relates to the application of Standards.

The project development phase has continued with the drafting and agreement of Principles that the project will cover. These Principles are currently being considered with a potential sponsor for the project.

5.3 Further Research: Foreign Material – All Cereals

Industry had previously been advised of research that had commenced on ensuring clarity and consistency across commodities of the definition and method of assessment of Foreign Material (FM). Areas of that research focussed on matters such as:

- The current lack of consistency in FM definitions in all cereals leads to sampler confusion, leading to potentially incorrect sample classification.
- A desire for consistency in Standards definitions etc.
- There is not a FM definition in all cereals, again causing wider industry confusion.
- A FM definition and tolerance applies on outturn for some commodities, but there is no clear or consistent industry definition. Hence variations apply, leading to potential differences in market and customer interpretation.
- Current Trading Standards applied at receival do not give sufficient information on total FM levels in grain.
- A separate FM category is required in Trading Standards as there is no suitable other category to capture FM
 in all commodities.
- The risk of outturning grain over FM contractual levels is sometimes high, especially where the major FM contaminants are larger weed seeds.
- For outturn, BHCs and/or marketers need to assess FM to determine suitability for a customer, leading to increased costs and other logistical difficulties.

Since initiating the review the Committee has identified the need to consider the following when developing recommendations. These issues were provided to industry as part of the consultation on 2020/21 Standards:

- Increased time for sample assessment of the FM content.
- Whether there are other implications and should the FM test be made a "mandatory" versus "voluntary" test.
- Extensive industry consultation is needed to reach agreement on FM definitions & levels to apply by commodity.
- Extensive discussions with traders and buyers (domestic/export) to explain all changes and reasons is required.
- The impacts of the change need to be considered across all States of Australia, for all end-use of all cereals.
- Industry views on the desire of the Committee to include the change across all Committees given some commodity sectors may not desire such a change.
- Potential impacts of the change on all non-cereal commodities.

The Committee has reviewed industry feedback on the topic and will further develop recommendations for industry consideration in 2021.

5.4 Further Research: Falling Number v Rapid Visco Analyser – Barley

Industry had previously been advised of the need for research to determine the relationship in barley between Falling Number, Rapid Visco Analyser result, and Germination. Discussions with a potential research organisation to undertake the necessary review are ongoing.

6. Issues not approved for Future Consideration

6.1 Not Approved: Screen Specifications – All Cereals

Various commodities have reference screen specifications outlined in detail in the Standards whereas other do not. As the development of these specifications was not considered a high priority, the project had been deferred until other projects had been completed.

The Committee has reviewed its stance on this subject and given the relatively low to nil impact on industry of this issue, has decided that further work and development on this topic is no longer needed.

6.2 Not Approved: Other Topics – All Cereals

The Committee had previously advised industry of several other quality related issues in the Standards where ongoing research was required. In summary, these included:

- Review of the suitability of sample sizes used for assessment of contaminants.
- Review of the suitability of sample sizes used for assessment of defects.

The Committee has reviewed its stance on this subject. Given there are currently no reasons to alter the methods of assessment for contaminants and defects, and the nil impact on industry of this issue, the Committee has decided that further work and development on this topic is no longer needed.