

Member Update

UPDATE 9 OF 20 • 01 May 2020

TOPIC: 2nd Industry Call for Submissions on 2020/21 GTA Standards

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

1. Issue

In March 2020, Grain Trade Australia (GTA) released an industry submission paper calling for industry input into the development of Grain Trading Standards (Standards) for the 2020/21 season. Feedback was received by GTA from industry on the issues outlined in that paper.

The GTA Standards Committee (Committee) has recently met to discuss industry feedback and to develop potential Standards for 2020/21.

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 Friday 22nd May 2020.

Please lodge your submissions by sending to submissions@graintrade.org.au and title your email – Standards Review 2020/21.

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 2020/21

Unless otherwise noted in the following, industry did not object to the list of changes advised in the first round calling for industry submissions, as listed below.

3.1 Agreed Change: Visual Recognition Standards Guide – all commodities

As advised during 2019 and in the call for the first round of industry submissions, the existing Visual Recognition Standards Guide (VRSG) produced by GTA was being reviewed. The intention of the Committee is to only publish the VRSG when significant changes are required – industry would recall it was not re-published for the 2019/20 season.

The VRSG will be re-published with a range of updates for 2020/21. The following areas will be modified in the 2020/21 version:

- In many instances to provide greater clarity and aid interpretation
- Industry should note that the following table also lists issues considered but not agreed by the Committee.

- Where minor wording changes have been agreed, these will also occur in the relevant Standards Booklet for that commodity.

A draft version of the VRSG for 2020/21 incorporating these changes including revised photos can be obtained by contacting GTA at admin@graintrade.org.au.

Commodity	Standards Issue	Background
All	General	Industry asked rather than listing all commodities alphabetically, instead list alphabetically by grain type i.e. list cereals alphabetically, then oilseeds, then pulses etc. This was not agreed given the effort required for relatively little benefit.
All	Calibration	To assist industry, a printer calibration page has been included.
Cereals	Germ v awn end	Industry requested a consistent depiction for all grains of the germ at the bottom for all grain photos. Not agreed at this time given other work priorities.
Pulses	Poor Colour (dark small grains)	The proposed change to include small dark grains that fall below the screen in all pulses to not be assessed as Poor Colour was not accepted by the Pulse Standards Committee. Hence these grains remain as Poor Colour and no change in the VRSG will occur.
Barley	Varietal List	Annually update the list of varieties having a short versus long Rachilla based on varieties advised by Barley Australia. List has been updated based on advice from Barley Australia.
Barley	Dark Tipped	The existing picture has been altered as it depicted a red/brown colour rather than a brown to black colouring as per the definition. Wording has been altered to include "Discolouration originating at the awn end is not Dark Tipped, refer to Severely Damaged".
Barley	Skinnings	As there are varying depictions of this defect not represented in the existing VRSG, the following changes have been made: Replaced the existing photo of Dorsal (back) to depict a grain with a lighter colour on the kernel underneath the husk, as this is a common depiction of this defect. Added a photo of a grain that meets the definition of Skinnings that is dark under the husk, but does not meet the definition to be classified as Severely Damaged.
Barley	Cleaved	As damage may occur to grains other than those depicted in the VRSG (e.g., Hormonal Damaged grain), the definition in the Barley Standards Booklet has been revised to refer to these grain defect types. No change has been made to the VRSG as the Committee did not deem this necessary.
Barley	Distorted	As there are varying depictions of this defect not represented in the existing VRSG, the following changes have been made: Added a photo to depict the dorsal view of a grain that is collapsed on the dorsal side, is partially skun and is orange in colour under the husk. Added a photo to depict the dorsal view of a grain that is collapsed on the dorsal side, is totally skun and is orange in colour on the kernel. Added a photo to depict the side view of a grain that is collapsed on the dorsal side, is partially skun and is orange in colour under the husk. Wording has been altered to include "Grains may also appear orange in colour".
Barley	Severely Damaged	Added a photo of a sound grain which is dark under the husk. Clarified in the heading that Fusarium in WA is a separate quality parameter and not included in Severely Damaged.
Barley	Coloured Aleurone Layer	Wording has been altered to include "Includes any blue/black colour to any degree that is obvious under the bran layer".
Canola	Frost Damaged	Added a photo to depict this defect. Wording has been added "Frost damaged grains are included in Impurities".
Desi	Stained & Weather Damaged	A submission was received that the Tiger Striping and Speckling definitions in the Standard required clarification. No change was made as the Committee considered the current definition appropriate.

Commodity	Standards Issue	Background
Faba Beans	Insect Damaged and Fungal Affected	To provide greater clarity on the differences between these quality parameters, the prior wording has been re-introduced, being “The lesion generally appears intense dark brown to black and often fluoresces. It is commonly oval to circular and localised in nature, but may vary in shape. The lesion may be similar in colour to mould or weather damaged. The lesion may also be associated with the presence of fungal growth of various colours. A lesion may appear on one or both sides of the seed coat or kernel. A lesion greater than 20% coverage on any one side of the seed coat is considered defective. A lesion less than 20% on any one side of the seed coat is considered sound. Any lesion of any size on the kernel is defective.” The previous photo of a Fungal Affected kernel has been included.
Faba Beans	Frost Damaged, Stained	For greater clarity, wording in the definition has been altered to “Visible damage from frost impacting on the grain resulting in staining on the kernel. Any level of stained on the kernel, as a result of frost, is classified as defective. Where staining does not occur on the kernel, but results in staining only on the seed coat, refer to the Poor Colour definition”. In addition, wording has been added under the four photos of Defective Grains that “Photos do not depict the minimum required”.
Faba Beans	Pea Seed Borne Mosaic Virus	For greater clarity added wording “Is included in Poor Colour”.
Lentils, Red	Fungal Affected	For greater clarity added wording “Is included in Poor Colour”.
Lupins	General varieties	For clarity, revised the size of the photo of each variety to reflect the general difference in size.
Lupins	Frost Damaged, shrivelled and Wrinkled	Replaced the second defective grain photo with a darker grain that is more commonly seen. Removed the previous small whole grain as this was not needed.
Maize	Fungal Affected	For the Silk Cut definition, added the wording “Silk Cut is included in Damaged”. For the Star Burst definition, added the wording “Star Burst is included in the definition of Dead, Mouldy, Storage Mould”.
Mung beans	All defects	The Committee intends to work with the Australian Mungbean Association on revised definitions and photos. It is hoped these will be included when the next version of the VRSG is published at some time in the future.
Oats	Stained Grains	Added new photos depicting the different types of Septoria. For clarity, added wording “Light Septoria discolouration similar to Mould is not included in the definition of Severely Damaged”.
Sorghum	Severely Damaged	Revised the photo to clearly differentiate a dark Severely Damaged grain from those that are classified as Mould.
Sorghum	Sorghum Ergot	Revised the wording for clarity “Any visible ergot to the grain is to be classified as defective.” Sorghum Ergot, <i>Claviceps africana</i> may result in the accumulation of a grey/white fungal mass in empty seed glumes. <i>Cerebella spp.</i> is not a true ergot but is a fungus that often grows on <i>Claviceps africana</i> , producing a large black mass. <i>Cerebella spp.</i> is included in Sorghum Ergot”.
Wheat	Vitreous Kernels	For clarity, circled the area causing the grain in the photo to be classified as non-vitreous.

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

Minor changes to wording in all Standards charts and Standards booklets have been approved given that industry did not object to the following approved changes. These changes refer to the latest versions of reference material available to assist industry implementation of Standards, including:

- Visual Recognition Standards Guide for 2020/21.
- The document entitled “Australian Grains Industry Post Harvest Chemical Usage Recommendations and Outturn Tolerances 2020/21” (see <http://www.graintrade.org.au/nwpgp>).

3.3 Agreed Change: Sticks/Stubble – all cereal commodities

The **current definition** in the Standards has two categories for Sticks/Stubble:

- For Sticks with dimensions inclusive of greater than 1cm in length and 0.5cm in diameter, a nil tolerance applies. Smaller material is classified as Unmillable Material above the screen, Screenings or Other Foreign Material.
- For Stubble with dimensions inclusive of greater than 3cm in length and 1cm in diameter, a nil tolerance applies. Smaller material is classified as Unmillable Material above the screen, Screenings or Other Foreign Material.

It is recognised that:

- Sticks/Stubble greater than a “certain size” or “in inappropriate quantities” are detrimental to grain quality and should have a nil tolerance in Objectionable Material.
- Sticks/Stubble should have the same definition and classification where possible.
- The frequency of occurrence in large proportions in a sample is generally limited.
- Depending on the size and number present in a sample industry classifies this contaminant in a varying number of ways, often being the most “expedient to assess”.

In order to simplify the assessment process, the **following changes have been agreed**, noting these are proposed to occur for the 2020/21 Standards given their impact is expected to be relatively limited:

3.3.1 For all Cereal Commodities:

- Sticks/Stubble have the same definition, being “Sticks/Stubble is defined as ligneous material or crop stubble with dimensions inclusive of greater than 3cm in length and 1cm in diameter”.
- Sticks/Stubble over those revised dimensions (i.e., inclusive of greater than 3cm in length and 1cm in diameter) should remain as Objectionable Material (nil tolerance).

3.3.2 For Wheat, Oats, Cereal Rye and Triticale:

- Sticks/Stubble within those dimensions (i.e., less than 3cm in length and/or 1cm in diameter), will be classified as:
 - Screenings – where Sticks/Stubble fall below the screen
 - Unmillable material above the screen – where Sticks/Stubble remain above the screen

3.3.3 For Barley, Sorghum and Maize:

- Sticks/Stubble within those dimensions (i.e., less than 3cm in length and/or 1cm in diameter), will be classified as:
 - Screenings – where Sticks/Stubble fall below the screen
 - Foreign Material – where Sticks/Stubble remain above the screen

Definitions, tolerances and all wording in all areas of the Standards will be altered to reflect those changes.

3.4 Agreed Change: Objectionable Material – all cereal commodities

The current definition of Objectionable Material will be altered as follows:

- While intended, the current wording for “Other Objectionable Material” does not specifically refer to other contaminants found to be outside of the definition and tolerances in the Standards. For greater clarity, the wording for “Other Objectionable Material” will change to “This refers to any other commercially unacceptable contaminant such as animal excreta, glass, concrete, fertiliser, metal, stones or other contaminants greater than the tolerance or specifications as allowed in the Standards”.
- Given the change for “Sticks/Stubble” as outlined in 3.3 above, the wording in the Objectionable Material definition in the Standards will be altered to reflect that change in definition, being “Sticks/Stubble is defined as ligneous material or crop stubble with dimensions inclusive of greater than 3cm in length and 1cm in diameter”.

3.5 Agreed Change: Severely Damaged – Wheat, Barley, Sorghum, Cereal Rye, Triticale

As previously advised to industry in 2019, a change will be made to the definition and interpretation of Severely Damaged grains in the above cereal commodities. Previously the following applied:

- The tolerance was based on the number of grains in the entire half litre sample
- Thus grains could be large (retained above the sieve) or small (found below the sieve following shaking).

As small grains falling below the screen are generally removed before processing for human consumption and have “relatively little impact” on the quality of the grain, and are not considered a food safety issue, the Committee agreed to make the following changes for all cereal commodities for the 2020/21 season:

- The definition and tolerance to apply only to those grains retained above the screen following shaking.
- Grains previously meeting the definition of Severely Damaged that fall below the screen are no longer classified as Severely Damaged but are permitted in the sample with no limit to apply.

Wording in all sections of the Standards for those commodities will be altered to reflect this change. No change will occur to Maize and Oats given these defects are generally not observed.

3.6 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 2020/21 season Standards are released.

3.7 Agreed Change: New Red Wheat Grade - Wheat

The current grade SFW1 is not a designated grade for Red Wheats (i.e., there is a maximum limit of 150 Red Wheat grains per half litre). The current grade Fed1 is designed for Red Wheats (i.e., unlimited tolerance for Red Wheat in this grade).

Where required, industry sectors have created their own grade for Red Wheat, generally based on the existing SFW1 grade. As there are current and future marketing opportunities for a Red Wheat grade, the Committee agreed to introduce the following grade for the 2020/21 season:

- Creation of a new grade, SFWR, code CSG-152.
- The specifications be as per SFW1 (CSG-151).
- The only variation is that SFWR is for Red Wheat varieties only.

While accepting this change, the existing tolerance in SFW1 allowing for low level contamination of Red Wheat (150 grains per half litre) will remain.

3.8 Agreed Change: Feed Varieties Classification - Wheat

The current SFW1 (CSG-151) Standard has a limit for the presence of “Red/Spring Feed Wheat” of 150 grains per half litre. Given that the majority of non-red wheat varieties grown in Australia are “White spring varieties grown in winter for milling purposes”, this terminology will be altered to “Red or Spring Feed Wheat” for greater clarity.

Additionally, the current Wheat Class list as provided by Wheat Quality Australia lists the class “Feed” below the class “AGP”. That is, varieties not classified as class “AGP” are classified as class “Feed”. Given that under the Bin Grade Classification rules a variety failing AGP1 may be classified as SFW1 before being classified as Fed1, the Bin Grade Classification will be altered as follows:

<u>Class</u>	<u>Bin Grade Cascade</u>
FEED	SFW1/Fed1

All other Classes in the Wheat Standards currently are correct as they list SFW1 above Fed1.

3.9 Agreed Change: Cleaved – Barley

Industry advised the Committee that during the 2019/20 harvest swollen barley grains were observed. These grains:

- Were swollen but smaller in size than normal.
- Were sometimes fused in groups of 2 or 3 grains.
- Were split, revealing the inner endosperm.

Given the grains were split to the extent under the current definition of Cleaved, the Committee agreed to alter the definition of Cleaved to include this particular defect, without requiring a photo in the VRSG. As some in industry were already using this interpretation, the Committee agreed this clarification and revised wording for Cleaved will occur in the 2020/21 Standards.

3.10 Agreed Change: Fungal Stained – Maize

The Committee received advice in 2019 that the current definitions and tolerances required updating. The submission requested the following changes and in 2019 the Committee advised industry these would be made in the 2020/21 Standards:

Silk Cut – It was noted that these types of kernels are not always affected by fungi/moulds but they are generally considered as Damaged by the maize industry when maize is used for human consumption. Of concern to industry is that a Silk Cut kernel creates an entry point for fungi or moulds to enter the kernel. Generally a Silk Cut kernel is damaged and does not hold the same test weight and nutrition as an undamaged kernel. It was recognised that generally these kernels will be taken out during the cleaning process if machine dressed. Hence the industry proposal agreed by the Committee is for Silk Cut to remain under the “Damaged” definition in the Standards for all grades.

Star Burst – Star Burst is generally considered by industry as a precursor to the Fumonisin mycotoxin being present. The Fusarium spp. mould creates the visual Star Burst. Industry has recommended and the Committee agreed that Star Burst therefore should be included under the quality parameter of “Dead, Mouldy or Storage Mould” in 2020/21 Standards.

Note that the above changes to be adopted in the 2020/21 Standards will also be reflected in the next version of the VRSG, due for release on 1 August 2020.

4. Issues for Future Consideration

4.1 Proposed Change: Defect Tolerances SFW1 – Wheat

A submission was received from industry to change (i.e., loosen) various tolerances for several defective grain quality parameters in the SFW1 Standard. The submission requested the change given that the majority of these quality parameters currently have limits closely aligned to milling grades. However SFW1 is used as a stockfeed grade.

The Committee noted that some sectors of industry apply variations to these tolerances as requested based on seasonal conditions.

Not all quality parameters will be altered. Quality parameters such as Sprouted, Distorted, White Grain Disorder and Pink Field Fungi are not proposed to be altered given their impact on the nutritional quality of the grain or potential to be a food safety concern.

The Committee intends to implement the following changes for the 2021/22 season and further industry input into those changes will be sought when developing those Standards:

Quality Parameter	Current SFW1 tolerance - 2020/21	Proposed 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

4.2 Further Research: Dockage - Wheat

A number of submissions were received from industry seeking a review of the current wheat standards in relation to “contaminants”. Various concerns were raised in relation to parameters that were “inter-linked” in the Standards. In summary, issues raised in those submissions:

- Prior customer concerns with Dockage levels in premium Western Australian grades such as noodle wheat and APWN continue.
- There are various quality parameters included in the term Dockage, including Unmillable material above the screen, screenings, small foreign seeds, type 7b weed seeds, to name a few.
- Dockage is not assessed “in total” at receipt of grower loads but is a parameter listed in contracts for various markets.
- As “total” Dockage is not assessed at receipt, there are risks of receipt of grain outside of customer Dockage limits.
- Concerns to some extent have been generally raised with the Dockage levels in all wheat grades.

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.
- 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 will be formed to consider the initial aspects of the project and develop Terms of Reference for the project. Given the wide scope of the topic, the research and review is expected to require significant resources and will take some time to complete. Industry will be kept informed of key elements as the project progresses, including what input will be sought from industry.

4.3 Foreign Material – All Cereals

The Committee had previously advised industry of further research and work required on ensuring clarity and consistency across commodities of the definition and method of assessment of Foreign Material (FM). Several concerns were raised including:

- 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 receipt 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 the review solution:

- Increased time for sample assessment of the FM content.
- Whether there are other implications and should the FM test be made a "mandatory" v "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 intends to continue the review during 2020 and it is hoped that industry will be provided with suitable solutions during 2021.

4.4 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 has continued this activity and considered potential changes to Standards in one area as noted above, being Sticks/Stubble under Objectionable Material. Further work will continue during 2020 and beyond on other quality parameters.

4.5 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 related to the application of Standards.

Negotiations continue with a potential sponsor for the project.

4.6 Further Research: Screen Specifications – All Cereals

Various commodities have reference screen specifications outlined in detail in the Standards whereas other do not. The Committee had commenced development of these specifications however this project had been deferred until the vacuum sampling project has been completed. This stance was again endorsed by the Committee given the relatively low impact on industry of this issue.

4.7 Further Research: Other Topics – All Cereals

The Committee has previously advised industry of several other quality related issues in the Standards where ongoing research is 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.
- Applicability of the existing barley Standards for Falling Number and germination.

As noted above for other lesser priority research projects, given the relatively low impact on industry, these have again been deferred until the vacuum sampling project has been completed. Industry should note discussions have also commenced with other industry stakeholders who may be able to undertake some of these research activities.

5. A Reminder

5.1 Barley Grade Names

Industry is reminded that for barley, Feed1 and Feed2 no longer exist. These grades have been replaced with Bar1 and Bar2. While the majority of industry are using the new grade names, some stakeholders continue to use the old terminology

To minimise confusion and for certainty in negotiating contracts and sales, industry is encouraged to use the new grade names.