

Member Update

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TOPIC: Trading Standards for 2020/21

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Table of Contents

1. Issue	1
2. Background.....	1
3. Agreed Changes for Adoption in 2020/21.....	1
4. Issues for Future Consideration	6

1. Issue

Trading Standards to apply for the 2020/21 season as of 1 August 2020 are now available on the GTA website.

2. Background

GTA Member Updates No.1 of 20 and No.9 of 20 sought feedback from industry on potential changes to Trading Standards (Standards) for the coming 2020/21 season. Feedback was received from a range of industry sectors on the proposed changes and a range of other issues.

The GTA Standards Committee (Committee) met in 2020 on several occasions and reviewed feedback from industry. The Committee recommended changes to the GTA Board and the Board has adopted recommendations as appropriate.

This document lists:

- Changes to Standards for implementation in 2020/21;
- Issues for Future Review & Agreed/Proposed Changes 2021/22.

All 2020/21 Standards and industry submissions received during 2020 on proposed standards can be viewed on the GTA website at http://www.graintrade.org.au/commodity_standards.

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 second round calling for industry submissions, as listed below.

3.1 Agreed Change: Visual Recognition Standards Guide – all commodities

As advised during 2020 the existing Visual Recognition Standards Guide (VRSG) produced by GTA was being reviewed for the commodities listed in that document.

General changes have been made to the document including:

- Re-formatting of wording and photos
- Commodities are now listed in alphabetical order and numbering of each commodity removed as it was not needed

The following areas have been 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).

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”.

Commodity	Standards Issue	Background
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 VRSG were confusing and required clarification. No change was made as the Committee considered the current definition appropriate.
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".
Kabuli Chickpeas	Poor Colour - Bleached	Revised the definition in the Standards (not required in the VRSG) to indicate that white/bleached grains are to be included in the definition of Poor Colour.
Lentils, Red	Fungal Affected	For greater clarity added wording "Fungal Affected 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</i>

Commodity	Standards Issue	Background
		<i>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.

The 2020/21 version of the VRSG can be obtained here <http://www.graintrade.org.au/fact-sheets-publications>

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

Minor changes to wording in all Standards charts and Standards booklets have occurred. These changes were made to 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>).
- For consistency, added a reference to Medic Pods (Type 7a) and Brome Grass (Type 7b) in the list of weed seeds for each commodity where they were not previously listed. Note that the tolerance has not altered.

3.3 Agreed Change: Sticks/Stubble – all cereal commodities

The previous definition in the Standards had 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 was 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 made in 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 of greater than 3cm in length and/or 1cm in diameter”.
- Sticks/Stubble over those revised dimensions (i.e., greater than 3cm in length and/or 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), are to 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), are to 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 have been altered to reflect those changes.

3.4 Agreed Change: Objectionable Material – all cereal commodities

The definition of Objectionable Material has been altered as follows:

- While intended, the previous wording for “Other Objectionable Material” did 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” has changed 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 has been altered to reflect that change in definition, being “Sticks/Stubble is defined as ligneous material or crop stubble with dimensions of greater than 3cm in length and/or 1cm in diameter”.

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

As previously advised to industry in 2019, a change was proposed and has been agreed 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 following changes have been made to 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 has been altered to reflect this change. No change has occurred to Maize and Oats given these defects are generally not observed.

3.6 Varietal Master List – Wheat, Barley, Oats

The Varietal Master List for the above commodities has been reviewed following receipt of the changes from the industry sectors responsible for development and maintenance of those lists.

3.6.1 Wheat

The Varietal Master List for wheat has been revised following receipt of initial changes from Wheat Quality Australia which is the industry body responsible for maintenance of that list (note – will be received by 1 August). All changes are listed in Section 4 of the Wheat Standards Booklet. Any final amendments will be advised to industry by 1 September 2020 following a final review by Wheat Quality Australia.

3.6.2 Barley

The Varietal Master List including comments on the domestic and export demand for each barley variety has been revised based on changes made by Barley Australia which is the industry body responsible for maintenance of that list. All changes are listed in Section 4 of the Barley Standards Booklet.

3.6.3 Oats

Approved oat varieties have been published in the GTA Oat Standards Booklet based on varietal information from the South Australian Research and Development Institute (SARDI) which leads the National Oat Breeding program.

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 following new grade has been created for the 2020/21 season:

- Creation of a new grade, SFWR, code CSG-152.

- The specifications be as per SFW1 (CSG-151).
- While SFWR is designed for Red Wheat varieties, all red or white varieties (except Durum) are accepted into this grade.

While creating this new grade, 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 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”, the reference to “Spring Feed Wheat” has been removed.

Additionally, the Wheat Class list as provided by Wheat Quality Australia previously listed 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 has now been 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

The definition for Cleaved barley has been altered to include a reference to swollen barley grains. These grains:

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

As some in industry were already using this interpretation, the Committee agreed this clarification and revised wording for Cleaved would occur in the 2020/21 Standards.

3.10 Agreed Change: Fungal Stained – Maize

As advised to industry in 2019 the following changes have been made in the 2020/21 Maize 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. Wording now clarifies reflects that definition.

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. Therefore Star Burst is now included under the quality parameter of “Dead, Mouldy or Storage Mould” in the 2020/21 Standards.

As a consequence of the above, the reference to Fungal Affected has been removed from the Standards Booklet definition, noting it remains in the VRSG for guidance for industry.

These changes are also reflected in the revised VRSG released on 1 August 2020.

4. Issues for Future Consideration

4.1 Proposed Change: Defect Tolerances SFW1 – Wheat

A number of defective grain quality parameters in the SFW1 Standard are proposed to be altered (loosened) given that the majority of these quality parameters currently have limits closely aligned to milling grades. However SFW1 is used as a stockfeed grade.

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

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 during 2020 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 included:

- 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 has been 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

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 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 recommendations. These issues were provided to industry as part of the first round of 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 Commodities given some commodity sectors may not desire such a change.
- Potential impacts of the change on all non-cereal commodities.

The Committee reviewed industry feedback on the topic and determined that continued review should occur during 2020. Industry will be provided with an update in 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 during 2020 and industry will be provided with an update in 2021.

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

Industry was advised of a proposal raised in 2018 to review the 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 and industry will be provided with an update in 2021.

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 previously 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 in 2020 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.