



Explanatory Advice Pulse Standards 2021/22 Season

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Explanatory Advice Pulse Standards 2021/22 Season

1. Background

This paper outlines all issues considered and changes made by the Pulse Standards Committee (Committee) in development of the 2021/22 pulse Standards.

These Standards are now adopted and should be used by industry as of 1 August 2021.

2. Changes Adopted in the 2021/22 Season

The Committee implemented the following changes in the 2021/22 Standards.

2.1 Agreed Change: Minor Wording Changes - All pulse commodities

The current links in the Standards to various Australian Government and industry websites and documents for use by industry on a range of issues such as maximum residue limits for chemicals and market quarantine requirements have been updated.

2.2 Agreed Change: Visual Recognition Standards Guide - All pulse commodities in VRSG

Existing sections for pulses (desi chickpeas, kabuli chickpeas, *Angustifolius* lupins, faba beans, field peas and red lentils) in the existing Visual Recognition Standards Guide (VRSG) located on the GTA website at <http://www.graintrade.org.au/fact-sheets-publications> have been reviewed and altered where required to improve clarity.

Where applicable, wording in the Standards Booklet has been altered to reflect the wording in the VRSG.

There are no Broad Bean photographs in the current VRSG, nor are they expected to be added in the short term. Wording in the Standards Booklet and VRSG has been added to clarify that for Broad Beans, the VRSG Faba bean photos for applicable quality parameters should be used.

Other changes are outlined below:

Commodity	Standards Issue / VRSG Page Number	Agreed Outcome / Change
All	Consistent photos	To ensure the germ is facing in the same direction for all commodities i.e., germ facing downwards.
All	Terminology	Ensured all headings list a Contaminant where that is present i.e., Pickled grain. All other headings are labelled "Defect".

Commodity	Standards Issue / VRSB Page Number	Agreed Outcome / Change
Chickpeas, Desi	Bin Burnt and Heat Damaged, Mouldy and Caked – altered heading to “Severely Damaged” and include all these defects in the one section	<p>Altered the terminology and definition to the following for consistency across cereals and pulses:</p> <p>a) “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 grains that have become severely discoloured. Affected grains appear dark brown, or in severe cases, blackened. Mould Affected grains appear discoloured and visibly affected by mould. Other Serious Visual Defects Refers to those grains that have become significantly discoloured and / or have a serious visual defect that is not otherwise listed in these Standards.”</p> <p>b) Under the existing Bin Burnt / Heat Damaged photo, include wording of Heat Damaged.</p> <p>c) Under the existing three Mouldy grain photos, include wording of Mould.</p> <p>d) Under the existing sound Mould photo, alter wording to “Sound – refer to Stained and Weather Damaged”.</p>
Chickpeas, Desi	Frost Damaged, Shrivelled and Wrinkled	<p>Altered the heading and definition to reflect Frost may not be the cause and cannot be confirmed in a sample. Remove reference to “Seed coats may tightly adhere to the kernel or be brittle” as it is not needed.</p> <p>New definition is “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 show a level of discolouration depending on the extent of damage. Grains are often smaller than the majority in the sample”.</p>
Chickpeas, Desi	Poor Colour	<p>Replaced the last 3 Poor Colour Kernel photos with photos of grains that are clearer and more appropriately depict this defect on the kernel i.e., less darker photos.</p> <p>Altered terminology to refer to Severely Damaged.</p>
Chickpeas, Desi	Fungal Affected (e.g., Ascochyta)	<p>a) As per the changes to Severely Damaged, revised wording to remove references to Mould.</p> <p>b) Clarified that Fungal Affected is included in Poor Colour.</p> <p>c) Removed reference to “lesions often fluoresce” as this is not always the case.</p> <p>d) Removed “It may also be associated with the presence of fungal growth of various colours” as there is not enough scientific evidence to confirm or refute that all fungal affected lesions fluoresce more than other seed blemishes.</p>

Commodity	Standards Issue / VRSB Page Number	Agreed Outcome / Change
		<p>Revised definition is now: "Fungal Affected is included in Poor Colour. Lesions are generally visible to the naked eye and appear intense dark brown to black. The lesion may be similar in colour to Severely Damaged or Stained and Weather Damaged. Any lesion of any size is permitted provided it is not also present on the kernel. If the lesion is greater than approximately 20% but does not penetrate to the kernel the grain is classified as Stained and Weather Damaged."</p>
Chickpeas, Kabuli	Poor Colour – Seed Coat	<p>As per the changes to Severely Damaged, revised wording to remove references to Heat Damaged and Bin Burnt, Mouldy and Caked. New definition is: "Seed coats vary from dark brown to black but may be depicted by other colours. Includes Stained and Weather Damaged. Seed coats may be similar in appearance to various other defects such as Severely Damaged. Where any poor colour is present on the seed coat, it is recommended the kernel also be inspected."</p>
Chickpeas, Kabuli	Mouldy and Caked – altered heading to Severely Damaged	<p>Altered the terminology and definition to the following for consistency across cereals and pulses: a) "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 grains that have become severely discoloured. Affected grains appear dark brown, or in severe cases, blackened. Mould Affected grains appear discoloured and visibly affected by mould. Other Serious Visual Defects Refers to those grains that have become significantly discoloured and / or have a serious visual defect that is not otherwise listed in these Standards." b) Under the existing two Mouldy grain photos, included wording of Mould. c) Added a picture of a Sound grain for reference.</p>
Chickpeas, Kabuli	Frost Damaged, Shrivelled and Wrinkled	<p>Altered the heading and definition to reflect Frost may not be the cause and cannot be confirmed in a sample. Removed reference to "Seed coats may tightly adhere to the kernel or be brittle" as it is not needed. New definition is "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 show a level of discolouration depending on the extent of damage. Grains are often smaller than the majority in the sample".</p>
Faba Beans	Cover page	<p>For clarity added wording "Where applicable, broad beans should be assessed using Faba bean visual images".</p>

Commodity	Standards Issue / VRSB Page Number	Agreed Outcome / Change
Faba Beans	Bin Burnt and Heat Damaged, Mouldy & Caked – altered heading to Severely Damaged & included all of these defects in the one section	<p>Altered the terminology and definition to the following for consistency across cereals and pulses:</p> <p>a) "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 grains that have become severely discoloured. Affected grains appear dark brown, or in severe cases, blackened. Mould Affected grains appear discoloured and visibly affected by mould. Other Serious Visual Defects Refers to those grains that have become significantly discoloured and / or have a serious visual defect that is not otherwise listed in these Standards." b) Replaced photos with more suitable grains depicting this quality parameter. c) Under the existing two Heat Damaged / Burnt grain photos, included wording of Heat Damaged.</p>
Faba Beans	Fungal Affected	<p>a) As per the changes to Severely Damaged, revised wording to remove references to Mould. b) Clarified that Fungal Affected is included in Poor Colour. c) Added a photo to depict a grain that has an entire lesion on the surface of the seed coat (20% coverage), without appearing to or penetrating the kernel. d) Removed reference to "lesions often fluoresce" as this is not always the case. e) Removed "It may also be associated with the presence of fungal growth of various colours" as there is not enough scientific evidence to confirm or refute that all fungal affected lesions fluoresce more than other seed blemishes. New definition is "Fungal Affected is included in Poor Colour. Lesions are generally visible to the naked eye and appear intense dark brown to black. The lesion may be similar in colour to Severely Damaged or Stained and Weather Damaged. A lesion greater than 20% coverage on any one side of the seed coat is considered defective. Any lesion of any size on the kernel is defective."</p>
Faba Beans	Sprouted	Replaced photo with a grain that more clearly depicts a Sprouted grain.
Faba Beans	Broken, Chipped, Loose Seed Coat and Split	Added the following wording for greater clarity under the definition for Split Seed Coat – "Split may or may not be tightly adhering to the kernel".
Faba Beans	Frost Damaged, Shrivelled and Wrinkled	<p>a) Altered the heading and definition to reflect Frost may not be the cause and cannot be confirmed in a sample. b) Removed reference to "Seed coats may tightly adhere to the kernel or be brittle" as it is not needed.</p>

Commodity	Standards Issue / VRSB Page Number	Agreed Outcome / Change
		New definition is "Shriveled 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 show a level of discoloration depending on the extent of damage. Grains are often smaller than the majority in the sample".
Faba Beans	Frost Damaged, Stained	<p>a) Revised 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: "Stained and Weather Damaged Stained and Weather Damaged is included in Poor Colour. A general term used to describe visible damage to the seed coat that may or may not otherwise be defined or be distinguishable from other defects in these Standards. Weather Damage may also lead to a Loose Seed Coat or Shriveled and Wrinkled. Seed Coat: Visible damage to the seed coat resulting in staining on the seed coat only. Seed coats may be discoloured or altered in size or shape. Kernel: Any damage to the kernel is classified as defective." b) Altered wording under the photos to reflect the above clarifications.</p>
Faba Beans	Poor Colour	<p>a) As per the changes to Severely Damaged, revised wording to remove references to Heat Damaged and Bin Burnt, Mouldy and Caked. b) Clarified what is included in Poor Colour. New definition is the following "Green is included in Poor Colour. Fungal Affected is included in Poor Colour. Frost Damaged, Stained is included in Poor Colour. Pea Seed Borne Mosaic Virus is included in Poor Colour. Seed coats vary from grey, dark brown to black but may be depicted by other colours. Seed coats may be similar in appearance to various other defects such as Severely Damaged. The photos below depict the minimum requirement of any colour to be classified as defective."</p>
Faba Beans	Pea Seed Borne Mosaic Virus	To assist to determine what the minimum depiction of this quality parameter is before a grain is classified as defective, removed the first 2 Sound grains.
Lentils, Red	Frost Damaged, Shriveled and Wrinkled	<p>a) Altered the heading and definition to reflect Frost may not be the cause and cannot be confirmed in a sample. b) Removed reference to "Seed coats may tightly adhere to the kernel or be brittle" as it is not needed. New definition is "Shriveled 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 show a level of discoloration depending on the extent of damage. Grains are often smaller than the majority in the sample".</p>

Commodity	Standards Issue / VRSB Page Number	Agreed Outcome / Change
Lentils, Red	Bin Burnt and Heat Damaged, Mouldy & Caked – altered heading to Severely Damaged & included all of these defects in the one section	<p>Altered the terminology and definition to the following for consistency across cereals and pulses:</p> <p>a) "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 grains that have become severely discoloured. Affected grains appear dark brown, or in severe cases, blackened. Mould Affected grains appear discoloured and visibly affected by mould. Other Serious Visual Defects Refers to those grains that have become significantly discoloured and / or have a serious visual defect that is not otherwise listed in these Standards." b) Under the existing Heat Damaged / Burnt and Mouldy & Caked grain photos, included wording of Heat Damaged / Burnt and Mould.</p>
Lentils, Red	Poor Colour Seed Coat	<p>a) As per the changes to Severely Damaged, revised wording to remove references to Heat Damaged and Bin Burnt, Mouldy and Caked. b) Clarified what is included in Poor Colour. Definition now reads: "Fungal Affected is included in Poor Colour. Stained and Weather Damaged is included in Poor Colour. Seed coats vary from dark brown to black but may be depicted by other colours. Seed coats may be similar in appearance to various other defects such as Severely Damaged. Does not include Contrasting Colour. Where any poor colour is present on the seed coat, it is recommended the kernel also be inspected."</p>
Lentils, Red	Fungal Affected	<p>a) As per the changes to Severely Damaged, revised wording to remove references to Mould. b) Removed reference to "lesions often fluoresce" as this is not always the case. c) Removed "It may also be associated with the presence of fungal growth of various colours" as there is not enough scientific evidence to confirm or refute that all fungal affected lesions fluoresce more than other seed blemishes. The new definition is "Fungal Affected is included in Poor Colour. Lesions are generally visible to the naked eye and appear intense dark brown to black. The lesion may be similar in colour to Severely Damaged or Stained and Weather Damaged. A lesion greater than 20% coverage on any one side of the seed coat is considered defective. Any lesion of any size on the kernel is defective."</p>

Commodity	Standards Issue / VRSB Page Number	Agreed Outcome / Change
Lupins, Angustifolius	Broken, Chipped, Loose Seed Coat and Split	To reflect terminology used in Western Australian Standards, altered 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, Angustifolius	Frost Damaged, Shrivelled and Wrinkled	a) Altered the heading and definition to reflect Frost may not be the cause and cannot be confirmed in a sample. b) Removed reference to "Seed coats may tightly adhere to the kernel or be brittle" as it is not needed. New definition is "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 show a level of discolouration depending on the extent of damage. Grains are often smaller than the majority in the sample".
Lupins, Angustifolius	Poor Colour (Discoloured – WA)	As per the changes to Severely Damaged, revised wording to remove references to Heat Damaged and Bin Burnt, Mouldy and Caked. New definition is: "Seed coats vary from yellow to tan, dark brown to black but may be depicted by other colours. Seed coats may be similar in appearance to various other defects such as Severely Damaged."
Lupins, Angustifolius	Phomopsis	As per the change to Severely Damaged, removed reference to Mould and Caked. New definition is: "Grains appear sound with a fungal growth readily visible on the seed coat. If kernels are not sound, refer to Severely Damaged".
Lupins, Angustifolius	Mouldy and Caked – alter heading to Severely Damaged	Altered the terminology and definition to the following for consistency across cereals and pulses: a) "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 grains that have become severely discoloured. Affected grains appear dark brown, or in severe cases, blackened. Mould Affected grains appear discoloured and visibly affected by mould. Other Serious Visual Defects Refers to those grains that have become significantly discoloured and / or have a serious visual defect that is not otherwise listed in these Standards." b) Added a photo of Heat Damaged / Burnt defective grain to reflect this defect. Included wording under the photo of Heat Damaged / Burnt. c) Added wording under the photo of Mould. d) Included a sound grain for reference.
Peas, Field	Front page	Revised wording and moved pictures to aid interpretation of Parafield field peas (colour and shape) and Kaspera field peas (colour and shape).

Commodity	Standards Issue / VRSB Page Number	Agreed Outcome / Change
Peas, Field	Bin Burnt and Heat Damaged, Mouldy & Caked – altered heading to Severely Damaged & included all of these defects in the one section	Altered the terminology and definition to the following for consistency across cereals and pulses: a) "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 grains that have become severely discoloured. Affected grains appear dark brown, or in severe cases, blackened. Mould Affected grains appear discoloured and visibly affected by mould. Other Serious Visual Defects Refers to those grains that have become significantly discoloured and / or have a serious visual defect that is not otherwise listed in these Standards." b) Included wording under the photo of Heat Damaged / Burnt. c) Included wording under the photo of Mould.
Peas, Field	Frost Damaged, Shrivelled and Wrinkled	a) Altered the heading and definition to reflect Frost may not be the cause and cannot be confirmed in a sample. b) Removed reference to "Seed coats may tightly adhere to the kernel or be brittle" as it is not needed. c) Added a new sound and defective photo that shows "golf ball type dimples". New definition is "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 show a level of discolouration depending on the extent of damage. Grains are often smaller than the majority in the sample".
Peas, Field	Poor Colour Seed Coat	As per the changes to Severely Damaged, revised wording to remove references to Heat Damaged and Bin Burnt, Mouldy and Caked. The new definition is "Seed coats vary from dark brown to black but may be depicted by other colours. Seed coats may be similar in appearance to various other defects such as Severely Damaged. Where any poor colour is present on the seed coat, it is recommended the kernel also be inspected."
Peas, Field	Poor Colour Kernel	Removed the following wording as it is not needed "Green is included in Poor Colour".

2.3 Agreed Change: Varietal Lists - All pulse commodities

As initially implemented in 2019, the list of varieties by commodity on the Pulse Australia website has been reviewed to ensure all new pulse varieties by commodity are listed.

2.4 Agreed Change: Weed Seeds - All pulse commodities

A request was received from industry to further clarify the wording in all Standards regarding the distinction between the weed seeds to be included in Small Foreign Seeds (SFS), Type 1 to 8 and Cereal Seeds.

Further to this request, the Committee agreed additional clarification was required, without altering the intent of the definitions that apply. In summary, depending on the commodity and weed seed Type, the following now applies:

- Small Foreign Seeds (SFS)
 - Are generally those seeds not uniquely referenced as Types 1 to 8 or Cereal Seeds in the Standards, that fall into the catch-pan following shaking.
 - Are generally those seeds not uniquely referenced as Types 1 to 8 or Cereal Seeds in the Standards, that fall into the catch-pan following shaking.
 - If any seeds are referenced as Types 1 to 8 or Cereal Seeds in the Standards, even if they fall below the screen, they are not classified as SFS.
 - A list of the more common SFS is included in the Standards Booklet. That list is not inclusive of all SFS.
- Type 7(b) Weed Seeds
 - Are generally those not uniquely referenced as Types 1 to 7(a), 7(c), 8 or Cereal Seeds in the Standards, that remain above the screen following shaking.
 - There may be small weed seeds (i.e., immature) listed in Type 1 to 7(a), 7(c), 8 or Cereal Seeds that fall below the screen. These are not classified as Type 7(b) weed seeds or SFS.

All applicable references in the Standards (definitions, wording on quality charts, procedures) where required were altered for greater clarity to reflect the above.

2.5 Agreed Change: Severely Damaged - All pulse commodities

For all pulse commodities, the term “Mould (field and/or storage), Caked, Bin Burnt & Heat Damaged” previously referred to various defects found in pulses caused by a range of factors including:

- Exposure to bacteria or fungi in the field or in storage.
- Exposure to severe heat during storage. Heating occurs via mould damage or incorrect drying of high moisture grain.
- Heat, subsequent mould attack and high moisture conditions may lead to adherence of foreign material or joining of mouldy grains.
- Various other factors that impact on the visual appearance of the grain.

The visual impact on grains of various severe defects may be similar and indistinguishable. In addition, these various factors have severe impacts on the quality of the grain visually whether the defect is caused in the field, during storage or transport and handling or anywhere else prior to grain assessment. Various depictions of this “Mould” quality parameter exist, as shown in the VRSG for each pulse commodity.

During the 2020/21 harvest Botrytis Grey Mould (BGM) was also observed on the Seed Coat and Kernel of desi chickpeas. For this quality parameter, various interpretations of BGM in Standards were made by industry, such as inclusion in Mould or in Poor Colour.

To provide clarity the Committee made the following changes:

- Given there are various defective quality parameters where more than one causal agent may lead to this “Mould” defective quality parameter, individual references to each quality parameter have been removed.
- The cause of the defect may not be able to be determined. Hence all references to the cause in the terminology have been removed. For industry guidance, these changes also have occurred for similar quality parameters in cereal commodities.
- The heading has been altered to Severely Damaged to describe the impact of these factors on the grain. That is, the heading of “Severely Damaged” reflects the visual appearance and quality impact on the grain arising from these defects.
- The previous tolerances continue to apply.
- Bin Burnt has been altered to Burnt, reflecting that this impact on the grain may occur in the field and / or during storage.
- A common term is now used in the Standards and VRSG, being Mould, replacing different terminology such as Mouldy used in some areas of those documents.
- Reference to other serious visual defects has been included in the definition, referring to other visual impacts not specifically stated.
- Revised photos and wording to reflect those changes have been included in the Standards and VRSG as applicable as noted in 2.2 above.

As stated previously, the above does not alter the existing tolerances or interpretation of these various defects in current pulse Standards.

2.6 Agreed Change: Seed Coats - Desi Chickpea

Early in the 2020/21 harvest the view of the Committee was sought on quality parameters identified in desi chickpeas. While there were some sprouted grains due to rain impacts on quality, other quality variations were observed that were not fully defined in the Standards.

To provide a consistent message to industry the following wording has been added to the appropriate definitions in the Standards:

- Desi radicle intact, the Seed Coat also is intact but a small section on the radicle is “thin”, resulting in the kernel being observed below the Seed Coat. Classify grain as sound.
- Desi radicle intact, a small section on the Seed Coat has been removed (i.e., less than 20%), resulting in the kernel being observed below the Seed Coat. Classify grain as Sound.
- Where the Desi radicle is not intact (i.e., broken to any extent or removed), as per the current definition, classify as Broken / Chipped / Loose Seed Coat / Split.

2.7 Agreed Change: Staining on Seed Coat - Faba Beans (& all other pulses)

A request for clarification was received from industry seeking a classification of a type of staining observed on Faba beans:

- The staining was not due to Weather Damage or Frost.
- The Seed Coat surface felt “a bit gritty”, due to a small amount of dirt/plant material adhering to the Seed Coat.

- The adhering material was not significant to the extent that the grain could be called Severely Damaged or Objectionable Material.

As the Staining was relatively light but did detract from the visual appearance of the grain, the Committee agreed to classify the grain as Stained & Weather Damaged, included in the tolerance for Poor Colour.

The definition in the 2021/22 Standards has been updated and now refers to this defect for all pulses.

2.8 Agreed Change: Total Defective No.1 Grade - Field Peas

The Committee received a proposal to alter the Total Defective grain tolerance for CSP - 10.1.3 Field Peas No.1 Minimum Export Standard Machine Dressed. The Committee reviewed that request and agreed to alter the tolerances as follows:

Season	CSP - 10.1.1 PEAS – FIELD NO. 1 RECEIVAL FARMER DRESSED	CSP - 10.1.2 PEAS – FIELD NO. 1 EXPORT FARMER DRESSED	CSP - 10.1.3 PEAS – FIELD NO.1 EXPORT MACHINE DRESSED
Previous 2020/21 Total Defective (max % by weight)	3% by wt.	Container 5% by wt. Bulk 7% by wt.	Container 2% by wt. Bulk 5% by wt.
Agreed 2021/22 Total Defective (max % by weight)	No change	No change	Container 4% by wt. Bulk 5% by wt.

In making this change, several issues were considered, including:

- Machine dressing is a process to remove smaller material in a grain lot, generally Foreign Material and smaller defective pulse grains such as Shrivelled and Splits/Brokens.
- While machine dressing grain and subsequently loading into containers involves limited grain movement, damage can occur to product during that handling phase.
- When machine dressing a commodity, while appropriate care is taken, that process may cause grains to become fragile leading to further subsequent damage following processing during the handling (and loading process).
- Despite sourcing grain as per the current Receival Farmer Dressed standard, some processors/exporters have trouble in meeting the existing tolerance for Total Defective for containers of 2% by weight.
- The proposed change for containers will more practically reflect the systems used to machine dress product.
- The proposed change in quality specifications for containers is not expected to cause significant impacts on the quality of grain supplied to customers under the current grade.

2.9 Agreed Change: Poor Colour No.1 Grade - Faba Beans

The Committee received a proposal to alter the Poor Colour tolerance for all No.1 grade Faba Bean Standards. The Committee reviewed that request and agreed to alter the tolerances as follows:

Season	CSP – 5.2.1 FABA BEAN NO. 1 RECEIVAL FARMER DRESSED	CSP – 5.2.2 FABA BEAN NO. 1 EXPORT FARMER DRESSED	CSP – 5.2.3 FABA BEAN NO.1 EXPORT MACHINE DRESSED
Previous 2020/21 Poor Colour (max % by weight)	3% by wt.	3% by wt.	3% by wt.
Agreed 2021/22 Poor Colour (max % by weight)	4% by wt.	4% by wt.	4% by wt.

In making this change, several issues were considered, including:

- The same current Poor Colour tolerance applies to Receival and Export Standards.
- The industry uses suitable storages to ensure that the quality of grain received does not alter significantly during storage. As the grain quality is appropriately managed during storage, the storage conditions do not significantly impact on the colour of grains outloaded compared with the colour of grain received.
- However, Faba Beans, more so than other pulses, undergo a change in seed coat colour over time due to oxidisation in the seed coat.
- For Farmer Dressed or Machine Dressed product, there is no practical opportunity to alter the level of Poor Colour of grain received versus on outturn. The main reason being that Poor Colour grains are generally a similar size as good colour grains. The exception being that highly weather damaged grain may be significantly smaller than good colour grains, however that weather damaged grain may contain a level of defects that exceeds the No.1 grade, hence there is no opportunity to machine dress the grain to meet the current No.1 grade Poor Colour limit.
- The proposed change for Receival Standards will assist growers to meet the No.1 grade specifications.
- The proposed change in Export Standards, while an increase, is relatively small. It is not expected to cause significant impacts on the quality of grain supplied to customers under this proposed change.

2.10 Agreed Change: Total Defective No.1 Grade - Red Lentils

The Committee received a proposal to alter the Total Defective grain tolerance for CSP - 7.2.2 Red Lentils No.1 Minimum Export Standard Farmer Dressed. The Committee reviewed that request and agreed to alter the tolerances as follows:

Season	CSP – 7.2.1 RED LENTILS NO. 1 RECEIVAL FARMER DRESSED	CSP - 7.2.2 RED LENTILS NO. 1 EXPORT FARMER DRESSED	CSP – 7.2.3 RED LENTILS NO.1 EXPORT MACHINE DRESSED
Previous 2020/21 Total Defective (max % by weight)	4% by wt.	Container 5% by wt. Bulk 10% by wt.	Container 3% by wt. Bulk 5% by wt.
Agreed 2021/22 Total Defective (max % by weight)	No change	Container 6% by wt. Bulk 10% by wt.	No change

In making this change, several issues were considered, including:

- Farmer Dressed product on Receival has a lower tolerance for Total Defective grains that at Export.
- An increased Total Defective tolerance exists for Farmer Dressed product on Export due to the risks of damage to grain during the handling process (receival into storage and on outturn). This is despite using suitable storage types and soft handling techniques.
- This higher Total Defective grain limit is to reflect the expected higher level of Splits/Brokens.
- While receiving Farmer Dressed grain and subsequently loading into containers involves limited grain movement, damage can occur to product during that handling phase.
- Despite sourcing grain as per the current Receival Farmer Dressed standard, some exporters have trouble in meeting the existing tolerance for Total Defective for containers of 5% by weight.
- Several other pulse commodities have a 2% difference in Total Defective grains for Farmer Dressed Receival versus Farmer Dressed Export Standards. Conversely, Red Lentils currently only have a 1% difference.
- The proposed change for containers will more practically reflect the systems used to load containers with Farmer Dressed product and be consistent with the existing variations for other pulse commodities.
- The proposed change in quality specifications for containers is not expected to cause significant impacts on the quality of grain supplied to customers under the current grade.

2.11 Agreed New Grade: No.2 Minimum Receival Standard Farmer Dressed - Desi Chickpeas

Prior Standards only referred to one grade for Desi Chickpeas, be it Receival or Export. Where grain has fallen outside of those grade specifications, commercial arrangements between the parties have attempted to “find a solution” to deliver that grain. Failing that negotiation, this grain has not been able to be delivered.

In some instances, Bulk Handling Companies/Processors etc. have created their own grade to cater for receival of this out of specification grain. Grain may or may not be subsequently used for the human consumption market or for stockfeed, depending on those commercial arrangements and the quality.

To provide greater certainty to the industry on the ability to deliver/receive this out of specification quality of Desi Chickpeas, the Committee agreed to implement for the 2021/22 season and onwards the following grades (note the Committee received a request for the inclusion of an Export Standard subsequent to the release of the first industry consultation paper):

Grade Name	CSP – 4.1.4 Chickpeas – Desi Type No.2 Minimum Receival Standard Farmer Dressed	CSP – 4.1.5 Chickpeas – Desi Type No.2 Minimum Export Standard Farmer Dressed
Total Defective	Maximum 10% by weight, includes Poor Colour	Containers - Maximum 12% by weight, includes Poor Colour & Severely Damaged Bulk - Maximum 15% by weight, includes Poor Colour & Severely Damaged
Of which, Poor Colour	Maximum 5% by weight, included in Total Defective	Maximum 5% by weight, included in Total Defective
Severely Damaged	10 grains per 200 gram sample. Not included in Total Defective	1% by weight. Included in Total Defective
All other specifications	As per 4.1.1 Chickpeas – Desi Type No.1 Minimum Receival Standard Farmer Dressed	As per 4.1.1 Chickpeas – Desi Type No.1 Minimum Receival Standard Farmer Dressed

For the above two grades to be implemented the following changes were made to the grade name only for the following Desi Chickpea grades for the 2021/22 season (i.e. no change to specifications will occur):

Previous 2020/21 Season Grade Name	Agreed 2021/22 Season Grade Name
CSP – 4.1.1 Chickpeas – Desi Type Minimum Receival Standard Farmer Dressed	CSP – 4.1.1 Chickpeas – Desi Type No.1 Minimum Receival Standard Farmer Dressed
CSP – 4.1.2 Chickpeas – Desi Type Minimum Export Standard Farmer Dressed	CSP – 4.1.2 Chickpeas – Desi Type No.1 Minimum Export Standard Farmer Dressed
CSP – 4.1.3 Chickpeas – Desi Type Minimum Export Standard Machine Dressed	CSP – 4.1.3 Chickpeas – Desi Type No.1 Minimum Export Standard Machine Dressed

2.12 Agreed Change: Definition of Caps - Various Commodities

A submission was received seeking clarification on the amount of “seed coat present on split product” in order to fall within the definition of Caps. It was agreed further review of this issue would be considered when developing the 2022/23 season Standards.

Prior to that review being completed, the current definition will apply with an additional sentence added. The definition now reads:

‘Caps are any parts of the Seed Coat adhering to Split or Broken seed. Note that the definition refers to “any parts of the Seed Coat”, no matter the size’.

3. Future Review

3.1 Future Review: Total Defective, “of which” & Defects below Screen

The Committee periodically reviews elements of the Standards to ensure that the Standards amongst other things:

- Are contemporary;
- Are able to meet future marketing challenges;
- The current tolerances are suitable for supplying product to the market for various end-uses;

- Can be met by the production sector; and
- Are set with the aim to be easy to interpret and practical to implement. This assists accuracy of industry interpretation and application.

The Committee is currently implementing a review of sub-categories within a higher-level quality parameter. For example:

- Total Defective, “includes / of which” there is a Poor Colour limit.
- Foreign Material, “includes / of which” various limits apply.

This terminology, being “includes / of which”, may not be the most appropriate nor easiest to use in interpreting the Standards. Various options are being considered in this review, including the removal of the “includes / of which” terminology. The impact on tolerances to apply for all quality parameters affected by any potential change will be included in the review.

The outcome of the review will be provided to industry for consideration and feedback in developing the 2022/23 standards.

3.2 Ongoing Review: Nil Tolerance Parameters - All Pulses

The Committee had previously advised industry of research being undertaken by Grain Trade Australia (GTA) on the applicability of a nil tolerance in Standards in relation to:

- 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.

GTA is currently reviewing all aspects in relation to the Nil tolerance for *Eucalyptus spp* (gumnuts). Following that review their findings will be advised to industry and the Pulse Standards Committee will consider those findings in relation to pulses.

Following completion of the review by GTA for *Eucalyptus spp* (gumnuts), no further research on this topic is expected to occur.

3.3 Ongoing Review: Truck Sampling - All Pulses

In 2018 the Committee was advised of planning for a research project to review the practicalities of using the documented industry agreed sampling procedures for all commodities including pulses, to obtain a representative sample for assessment against Standards. The research would include other aspects of sampling such as the suitability of the probes and reduction in the sample to the size required for assessment as per the Standards.

Development of the research component of the project has been conducted however the project has not commenced yet. Industry will be updated on the status of the project as it further develops and its implications for pulse assessment.