



AOF Oilseed Commodity Standards & Definitions

Proposed Changes 2018/19

Industry Discussion Paper 2nd Round

May 2018

Background

The Australian Oilseeds Federation (AOF) annually reviews the Oilseed, Oil and Meal Trading and Commodity Standards, in response feedback from industry received during the prior 12 months.

The following items have been identified by Industry and the AOF Standards Review Subcommittee as potential changes for implementation in the 2018/19 Standards Manual, effective 1 August 2018.

This discussion paper relates only to proposed changes to the Oilseed Commodity Standards and their respective Definitions, as contained in the;

- AOF Standards Manual, Section 1, Quality Standards, Technical Information & Typical Analysis:
 - Definitions and,
 - Section 1, AOF 1-1, Grain Quality Standards.

The current effective version is 2017/18, Issue 16, 1 August 2017 and is available on the Australian Oilseeds Federation website;

http://www.australianoilseeds.com/Technical_Info/standards_manual.

Any issues that are identified as potential changes for implementation in subsequent years will be discussed, if necessary, in a separate paper at a later date. Currently no future changes to the quality standards have been identified.

Potential changes to the Oil and Meal standards will be addressed at a later time.

This discussion paper includes amendments that have been raised by industry as a result of the March 2018 discussion paper and/or have been subsequently identified by the AOF Standards Review Committee.

Changes included since the March 2018 paper include:

Item 5: Heat Damaged / Bin Burnt – remove all references to Bin Burnt from the Definitions and Quality Standards – amendment.

Item 6: Defective: include additional statement to amend tables in canola quality standards relating the rejection for green seeds.

Note: It is not expected that the change to the definition of defective will affected deductions / payments, however industry is asked to check if there is likely to be an impact and advise the committee.

Item 13: Mould: Add after 1st para: “Mould is included in Defective. Refer also to Defective” and Add “(musty)” after mouldy odour.

Item 29: Polyunsaturated Safflower (CSO 10): remove: - new

Item 30: Non-GM Polyunsaturated Safflower (CSO 10-a): add: - new

Item 31: Monounsaturated Safflower (CSO 11): remove: - new

Item 32: Non-GM Monounsaturated Safflower (CSO 11-a): add: - new

Item 33: Quality Standards – Defective Table: amend: – new

Item 34: Rapid In-field Methods: include section 1; - new

Item 35: Sand / Soil: change: - new

Item 36: Defective – 1,000 seeds: amendment: - new

Item 37: Frost – move frosted seed from Damaged to Impurities - new

Industry is being asked to review and provide comment on the proposed changes contained in this discussion paper.

The committee will consider all comments prior to a final decision on items to be included as amendments for the 2018/19 harvest. The final decision on amendments will be completed by the 1st July 2018, with the AOF Quality Standards updated and ratified by the 31st July 2018 for publication effective 1st August 2018.

Submissions can be sent via email to admin@australianoilseeds.com.

Submissions close on Friday 8th June 2018.

Proposed changes for implementation in the 2018/19 Standards Manual, effective 1 August 2018.

1. National Residue Survey

Update Hyperlink for NRS market information to:

<http://www.agriculture.gov.au/ag-farm-food/food/nrs>

The current hyperlink <http://www.daff.gov.au/agriculture-food/nrs> is out of date.

2. Maximum Residue Limits

Update hyperlink for ComLaw Maximum Residue Limits to:

<https://www.legislation.gov.au/Series/F2012L02501>

The current hyperlink <http://www.comlaw.gov.au/Details/F2014C00821> is out of date.

3. Maximum Residue Limits

Update hyperlink for NRS Maximum Residue Limits database to:

<http://www.agriculture.gov.au/ag-farm-food/food/nrs/databases>

The current hyperlink

<https://www.edaff.gov.au/NRSMRLEExternal/Public/Disclaimer.aspx> is out of date.

4. Definition – opening statement

Add two opening statements to the Definition section:

“The following Definitions are to be read in conjunction with the respective method of assessment defined in the AOF Standards Manual, Section 2, Part 1, Methods of Analysis”.

“The following definitions are also to be reading in conjunction with the Visual Recognition Standards Guide (refer to definition of Visual Recognition Standards Guide)”.

These statements reinforce the need to refer to the methods of analysis and the VRSG when reading the definitions.

5. Heat Damaged and Bin Burnt

Remove all reference to “Bin Burnt” from all Definitions and Quality Standards.

Grain and Pulse standards are moving away from the inclusion of where defect occurred in the description of defects. The standard will only refer to Heat Damaged.

6. Defective

Remove the duplicate categories of defective in the Definitions and in the Oilseed Commodity Standards.

Remove “of which” subcategories” from Defective.

Remove the Max 10% limit for the “Defective (%)” subcategory and the associated deduction in Canola/NonGM Canola/Rapeseed/Juncea, Sunflower (Poly/Mono), Crushing Soybean, Safflower (Poly / Mono), Linseed and Linola commodity standards.

Sunflower Birdseed Grade – change subcategory of “Defective” to “Damaged, Sprouted, Green, Broken/Split” and amended relevant inclusion statement to “Includes Damaged (Diseased, Frost Damaged, Green, Insect Damaged, Weather Stained), Broken or Split, Sprouted and Otherwise Materially Damaged. Includes Sticky Exudate if the grain does not flow freely”.

Canola / Rapeseed / Juncea Quality Tables: Remove “rejectable over 2% using the ruler method” from Green (%) comments.

Currently there are multiple variations on the application of the term Defective and what is and is not included, with most commodity standards including 2 categories of the term “defective”. Typically there is a general category of “Defective <Oilseed> (which include Broken or Split, Heat Damaged / Bin Burnt and Mould) plus a subcategory of “Defective”, which includes Damaged, Sprouted and Green.

The proposal is that in all Oilseed Commodity Standards there will only be one major heading of Defective, which will then include the relevant subcategories;

Defective <oilseed>
Broken and Split
Heat Damaged
Mould
Damaged
Green
Sprouted

NOTE: The following amended tables reflect changes to the term “Defective” and do not necessarily reflect changes to the term Bin Burnt or other potential amendments contained in this discussion paper as these amendments may not progress.

- Canola/NonGM Canola/Rapeseed/Juncea, Sunflower(Poly/Mono), Crushing Soybean, Safflower (Poly/Mono), Linseed and Linola use the term Defective “Canola, etc” and the subcategory term of Defective (note: different limits apply within standards). An example of the current defective standards table for these commodities is:

Defective Safflower (Maximum % wt/wt unless otherwise stated, based on cleaned half litre sample retained above 2.0mm round hole screen)		
Broken or Split (%)	7.0	0.5% deduction for each 1% over the maximum
Heat Damaged, Bin Burnt (per 1,000 seeds)	1	
Mould (count per half litre)	1	
Defective (%) , of which	10.0	0.5% deduction for each 1% over the maximum
Damaged (%)	3.0	Includes Diseased, Frost Damaged, Green, Insect Damaged, Weather Stained and Otherwise Materially Damaged. 0.5% deduction for each 1% over the maximum, rejectable over 10%
Sprouted (%)	5.0	0.5% deduction for each 1% over the maximum

The **amended** Defective table for Canola/NonGM Canola/Rapeseed/Juncea will be as per;

Defective Canola (Maximum % wt/wt unless otherwise stated based on cleaned half litre sample retained above 1.0mm round hole screen)		
Broken or Split (%)	7.0	Includes Insect Damaged. 0.5% deduction for each 1% over the maximum
Heat Damaged, Bin Burnt (per 1,000 seeds)	1	Assessed on crushed seeds
Mould (per 1,000 seeds)	5	Assessed on whole seeds before crushing
Damaged (%)	3.0	Includes Diseased, Weather Damaged and Otherwise Materially Damaged. 0.5% deduction for each 1% over the maximum, rejectable over 10%
Sprouted (%)	5.0	0.5% deduction for each 1% over the maximum
Green (%)	2.0	No penalty up to a maximum of 2%, rejectable over 2% using the ruler method. Alternatively, determine as Chlorophyll, with a maximum of 12ppm and rejectable over.

The **amended** Defective table for Sunflower (Poly/Mono), Safflower (Poly/Mono), Linseed and Linola will be as per;

Defective Sunflower (Maximum % wt/wt unless otherwise stated based on cleaned half litre sample retained above 2.0mm round hole screen)		
Broken or Split (%)	7.0	0.5% deduction for each 1% over the maximum
Heat Damaged, Bin Burnt (per 1,000 seeds)	1	
Mould (count per half litre)	1	
Damaged (%)	3.0	Includes Diseased, Frost Damaged, Green, Insect Damaged, Weather Stained and Otherwise Materially Damaged. Includes Sticky Exudate if the grain does not flow freely. 0.5% deduction for each 1% over the maximum, rejectable over 10%
Sprouted (%)	5.0	0.5% deduction for each 1% over the maximum

The **amended** Defective table for Safflower (Poly/Mono), Linseed and Linola will be as per;

Defective Safflower (Maximum % wt/wt unless otherwise stated, based on cleaned half litre sample retained above 2.0mm round hole screen)		
Broken or Split (%)	7.0	0.5% deduction for each 1% over the maximum
Heat Damaged, Bin Burnt (per 1,000 seeds)	1	
Mould (count per half litre)	1	
Damaged (%)	3.0	Includes Diseased, Frost Damaged, Green, Insect Damaged, Weather Stained and Otherwise Materially Damaged. 0.5% deduction for each 1% over the maximum, rejectable over 10%
Sprouted (%)	5.0	0.5% deduction for each 1% over the maximum

The **amended** Defective table for Crushing Soybean will be;

Defective Soybeans (Maximum % wt/wt unless otherwise specified based on cleaned half litre sample retained above 3.175mm round hole screen)		
Broken or Split (%)	20.0	Soybeans not otherwise damaged that are ¼ of a soybean or less in size retained above the screen. Includes separated hulls. 0.5% deduction for each 1% over the maximum.
Heat Damaged, Bin Burnt (per 1,000 seeds)	1	
Mould (count per half litre)	1	
Damaged (%)	3.0	Includes Diseased, Frost Damaged, Green, Insect Damaged, Weather Stained and Otherwise Materially Damaged. 0.5% deduction for each 1% over the maximum, rejectable over 10%
Sprouted (%)	5.0	0.5% deduction for each 1% over the maximum

- Sunflower Birdseed Grade uses both versions of “defective”, but there are no defects listed under the defective subcategory.

Defective Sunflower (Maximum % wt/wt unless otherwise stated based on visual inspection of a half litre sample)		
Heat Damaged, Bin Burnt (per 1,000 seeds)	1	
Mould (count per half litre)	1	
Defective (%), of which	2.5	All defective sunflower seed except Heat Damaged/Bin Burnt and Mould. Includes Damaged (Diseased, Frost Damaged, Green, Insect Damaged, Weather Stained), Broken or Split, Sprouted and Otherwise Materially Damaged. Includes Sticky Exudate if the grain does not flow freely.

The **amended** Defective table for Sunflower Birdseed Grade will be;

Defective Sunflower (Maximum % wt/wt unless otherwise stated based on visual inspection of a half litre sample)		
Heat Damaged, Bin Burnt (per 1,000 seeds)	1	
Mould (count per half litre)	1	
Damaged, Sprouted, Green, Broken/Split	2.5	Includes Damaged (Diseased, Frost Damaged, Green, Insect Damaged, Weather Stained), Broken or Split, Sprouted and Otherwise Materially Damaged. Includes Sticky Exudate if the grain does not flow freely.

- Edible Milling and Manufacturing Soybeans – the term Total Defective is listed, but as n/a. In the Defective definition, the note is that “For Edible Soybeans separate categories of particular defects occurs”.

Defective Soybeans (Maximum % wt/wt based on cleaned half litre sample retained above 4.75mm round hole screen, unless otherwise stated)		
Broken or Split (%)	10.0	Defined as half soybean or greater parts thereof (with or without hull) that do not come within the definition of Damaged soybeans or Impurities.
Heat Damaged, Bin Burnt (per 1,000 seeds)	1	
Mould (count per half litre)	1	
Total Defective	n/a	
Damaged (%)	3.0	Includes soybeans and pieces of soybean which are diseased, frost damaged, insect damaged, weed stained (including nightshade purple stain), weather stained or otherwise materially damaged.
Of which		
Weather Stained Max (per half litre)	1	Discolouration of the soybean due to any reason that is not indicative of the variety. Includes field fungi discoloured (including purple stain).
Sprouted (entire load)	Nil	Sprouted seeds are those in which the seed coat has split and the primary root has emerged.
Green (%)	2.0	Are soybeans that are green in colour and of a chalky consistency.

The **amended** Defective table for Edible Milling and Manufacturing Soybeans will be;

Defective Soybeans (Maximum % wt/wt based on a cleaned half litre sample retained above a 4.75mm round screen unless otherwise stated)		
Broken or Split (%)	5.0	Defined as half soybean or greater parts thereof (with or without hull) that do not come within the definition of Damaged soybeans or Impurities.
Heat Damaged, Bin Burnt (per 1,000 seeds)	1	
Mould (count per half litre)	1	
Damaged (%)	3.0	Includes soybeans and pieces of soybean which are, diseased, frost damaged, insect damaged, weed stained (including nightshade purple stain), weather stained or otherwise materially damaged.
Of which		
Weather Stained Max (per half litre)	1	Discolouration of the soybean due to any reason that is not indicative of the variety. Includes field fungi discoloured (including purple stain).
Sprouted (entire load)	Nil	Sprouted seeds are those in which the seed coat has split and the primary root has emerged.
Green (%)	2.0	Are soybeans that are green in colour and of a chalky consistency.

(note: the “of which” subcategory of “Damaged” remains in this commodity standard).

- Cottonseed only has “Defective Cottonseed” which only includes Mould.

Defective Cottonseed (Maximum count per half kilogram sample). May be rejectable over.		
Mould (count per half kilogram)	1	

There will be no change to the Cottonseed Defective table.

- Peanuts - In the Defective definition, it is stated that “For Peanuts the category of Defective does not exist, however in the trading standards it is mentioned with the limits being “Unlimited”.

Defective Peanuts (Maximum % wt/wt)		
Broken or Split	Unlimited	
Defective, of which	Unlimited	
Damaged	Unlimited	
Sprouted	Unlimited	
Degraded (entire load)	Nil	Includes smutty seed, hot seed, musty seed, sour seed, rotted seed and mould seed.

The **amended** Defective table for Peanuts will be;

Defective Peanuts (Maximum % wt/wt)		
Broken or Split	Unlimited	
Damaged	Unlimited	
Sprouted	Unlimited	
Degraded (entire load)	Nil	Includes smutty seed, hot seed, musty seed, sour seed, rotted seed and mould seed.

Note: It is not expected that this change will affected deductions / payments, however industry is asked to check if there is likely to be an impact and advise the committee.

7. Defective

Amend “Table 2 Defective Classification” to remove “defective” subcategory.

The **amended** table will be:

Table 2: Defective Classification

Quality Parameter	Oilseed Commodity		
	Canola and Rapeseed	Birdseed Sunflowers	Poly/Mono Sunflowers, Crushing Soybean, Cottonseed, Safflower, Linseed, Linola
Damaged	Y	Y	Y
Green	Y	Y	
Sprouted	Y	Y	Y (except Cottonseed)
Broken or Split	Y	Y	Y (except Cottonseed)
Heat Damaged and Bin Burnt	Y	Y	Y (except Cottonseed)
Mould	Y	Y	Y

This change reflects proposed change to Defective category at item 6.

8. Defective

Remove “Have a nil tolerance (eg musty seed)” from list of defect types.
Add at bottom of list “(Note: Seeds that have a nil tolerance are included in Objectionable Material)”.

Seeds that have a nil tolerance are included in Objectionable Material and the definition should reflect that they are included in that classification.

9. Defective

Remove statement on page 5, “As noted in Table 2, Defective does not include Broken or Split, Heat Damaged/Bin Burnt, Mould”.

This change reflects proposed change to Defective category at item 6.

10. Broken or Split

Amend **Broken or Split** definition to remove “not”, “total”, “seed” and “or Damaged seed”. The revised statement is:

Broken or Split seed is ~~not~~ included in the ~~Total Defective Seed or Damaged seed~~ category.

The amendment reflects the proposed changes to the Defective category at item 6.

11. Definition – add Contaminants

There is currently no definition for contaminants.

Add to Definitions:

Contaminants

Contaminants are defined as all other material other than seed of the Oilseed being assessed. Individual definitions for each contaminant can be found in these standards.

Specific contaminants are listed in the respective commodity standard and generally include:

- Impurities
- Snails / Stones
- Insects
- Ryegrass ergot
- Sand / Soil
- Objectionable Material

Additional contaminants may be listed in the respective commodity standard.

12. Heat Damaged and Bin Burnt

Remove “Refer also to Mould” on page 8.

Heat Damaged / Bin Burnt seeds are not included in Mould.

13. Mould

Amend 2nd paragraph to remove reference to Heat Damaged / Bin Burnt” and add “Objectionable Material”.

Add after 1st para: “Mould is included in Defective. Refer also to Defective”

Add “(musty)” after mouldy odour.

The **amended** statement is:

Mould refers to the presence of fungi or bacteria on seeds. Affected seeds may appear discoloured, rotten, swollen and soft, feel spongy under pressure, show the presence of fungal spores or visibly affected by mould on the seed coat. Mould is included in Defective. Refer also to Defective.

“Note a nil tolerance applies where affected seeds emit a mouldy odour (musty). Refer also to Objectionable Material”.

Seeds with a mouldy odour are included in Objectionable Material not Heat Damaged / Bin Burnt.

14. Damaged

Add after first sentence: “This includes Otherwise Materially Damaged seed”.

Add, “Note: refer to Otherwise Material Damaged” at end of definition.

Otherwise Materially Damaged is listed in the commodity standards under the heading of “Damaged”, but is not mentioned in the **Damaged** definition.

In the **Otherwise Materially Damaged** definition, there is also a cross reference to the “Damaged” category.

15. Definition – Seed Contaminants

Add definition for **Seed Contaminants**.

“Seed Contaminants”

“Seed Contaminants are weed seeds listed in the Weed Seeds definition, except for Edible Milling and Manufacturing Grade Soybeans which are listed in the respective grade trading standard (CSO 6 & CSO 7)”.

The term Seed Contaminants is used in the commodity standards, however there is no definition for Seed Contaminants.

16. Tainting Agent

Add “tainting agent” to Objectionable Material in Commodity Standards.

Tainting Agent is listed in the Definitions under **Objectionable Material**, but is not referenced in the commodity standards.

17. Animal Material

Add “animal material” to Objectionable Material in Commodity Standards.

Animal Material is listed in the Definitions under **Objectionable Material**, but is not referenced in the commodity standards.

18. Fertiliser

Add “fertiliser” to Objectionable Material in Commodity Standards.

Fertiliser is listed in the Definitions under **Objectionable Material**, but is not referenced in the commodity standards.

19. Maximum Residue Limits

Add to the first paragraph in the definition the wording “The Agricultural Pesticides and Veterinary Medicines Authority sets MRLs”.

This is consistent with wording in GTA commodity standards. AOF have this wording under definition for APVMA.

Revised wording will be;

“Maximum Residue Limits (MRLs) are the maximum amount of a chemical residue or its metabolite that is legally permitted on or in an agricultural commodity. *The Agricultural Pesticides and Veterinary Medicines Authority sets MRLs.* These MRLs are set at levels which are not likely to be exceeded if the agricultural or veterinary chemicals”.

20. Unlimited

Remove “=” symbol from definition.

“=” symbol is not required.

21. Reference Materials (Section 1: AOF 1-1 – Oilseed Quality Standards)

Amend “Applicable Date” for GTA VSRG to 1 August 2018.

Remove reference to “Grain Quality Visual Recognition Standards”

The amendment to the applicable date for the GTA VSRG will be subject to GTA approving an update to the VSRG for 2018.

22. Weed Seeds

Amend Table 6: Weed Seed Limits by Species to include “Type” grouping for weed seeds as per Commodity Standards (ie Type A, B, C, D, E).

Seed Contaminants in the Commodity Standards are categorised by type. This is not reflected in the definition.

sticks/stubble and picked seed. ✖		
Seed Contaminants (maximum tolerance by count per half litre to apply to individual seeds) ✖		
Type A (entire load) ✖	Nil ✖	Alligator Weed, Cape Tulips, Castor Oil Plant, Coriander, Creeping Knapweed, Darling Pea, Dodder, Giant Sensitive Plant, Opium Poppy, Parthenium Weed, Ragweed, Rattlepod, Saffron Thistle, Star Burr, Stinkwort, St. Johns Wort ✖
Type B ✖	1 ✖	Burrs (Xanthium spp.) – all except where otherwise stated, Wild Mignonette ✖
Type C ✖	2 ✖	Crow Garlic, Skeleton Weed, Thornapple ✖
Type D ✖	3 ✖	Common Heliotrope, Darnel, Hexham Scent, Jute, Mexican Poppy, Mintweed, Nightshade ✖
Type E ✖	65 ✖	Sesbania Pea ✖

The amended Weed Seeds definition, Table 6 will be:

Common Name ✖	Scientific Name ✖	Tolerance per half litre ✖
Type A (entire load) ✖	✖	✖
Alligator weed ✖	<i>Alternanthera philoxeroides</i> ✖	Nil ✖
Cape Tulips ✖	<i>Hemeria</i> spp. ✖	Nil ✖
Castor Oil Plant ✖	<i>Ricinus communis</i> ✖	Nil ✖
Coriander ✖	<i>Coriandrum sativum</i> ✖	Nil ✖
Creeping Knapweed ✖	<i>Acroptilon repens</i> ✖	Nil ✖
Darling pea ✖	<i>Swansonia</i> spp. ✖	Nil ✖
Dodder ✖	<i>Cuscuta</i> spp. ✖	Nil ✖
Giant Sensitive plant ✖	<i>Mimosa invisa</i> ✖	Nil ✖
Opium Poppy ✖	<i>Papaver somniferum</i> ✖	Nil ✖
Parthenium weed ✖	<i>Parthenium hysterophorus</i> ✖	Nil ✖
Ragweed ✖	<i>Ambrosia</i> spp. ✖	Nil ✖
Rattlepod ✖	<i>Crotalaria</i> spp. ✖	Nil ✖
Saffron Thistle ✖	<i>Carthamus lanatus</i> ✖	Nil ✖
St. Johns Wort ✖	<i>Hypericum perforatum</i> ✖	Nil ✖
Star Burr ✖	<i>Acanthospermum hispidum</i> ✖	Nil ✖
Stinkwort ✖	<i>Inula graveolens</i> ✖	Nil ✖
Type B ✖	✖	✖
Burrs – all, except where listed in this table ✖	<i>Xanthium</i> spp. ✖	1 ✖
Wild mignonette ✖	<i>Reseda lutea</i> ✖	1 ✖
Type C ✖	✖	✖
Crow Garlic ✖	<i>Allium vineale</i> ✖	2 ✖
Skeleton weed ✖	<i>Chondrilla juncea</i> ✖	2 ✖
Thornapple ✖	<i>Datura</i> spp. ✖	2 ✖
Type D ✖	✖	✖
Common Heliotrope ✖	<i>Heliotropium europeum</i> ✖	3 ✖
Darnel ✖	<i>Lolium temulentum</i> ✖	3 ✖
Hexham scent ✖	<i>Melilotus indicus</i> ✖	3 ✖
Jute ✖	<i>Crotalaria solitaria</i> ✖	3 ✖
Mexican poppy ✖	<i>Argemone mexicana</i> ✖	3 ✖
Mintweed ✖	<i>Salvia reflexa</i> ✖	3 ✖
Nightshade ✖	<i>Solanum</i> spp. ✖	3 ✖
Type E ✖	✖	✖
Sesbania pea ✖	<i>Sesbania cannibina</i> ✖	65 ✖

23. Stored Product Insects

Update the list of Stored Product Insects to be consistent with other Standards.

The **revised** list is:

Common Name	Scientific Name
Bean Weevil	<i>Acanthoscelides obtectus</i>
Flour mite	<i>Acarus siro</i>
Murky meal caterpillar	<i>Aglossa caprealis</i>
Foreign grain beetle	<i>Ahasverus advena</i>
Lesser mealworm	<i>Alphitobius diaperinus</i>
Pea and bean beetle – Southern cowpea weevil	<i>Callosobruchus chinensis</i>
Pea and Bean Weevil – Cowpea weevil	<i>Callosobruchus maculatus</i>
Cowpea weevil	<i>Callosobruchus phaseoli</i>
Dried fruit beetle	<i>Carpophilus dimidiatus</i>
Dried fruit beetle	<i>Carpophilus hemipterus</i>
Dried fruit beetle	<i>Carpophilus ligneus</i>
Dried fruit beetle	<i>Carpophilus obsoletus</i>
Rice Moth	<i>Corcyra cephalonica</i>
Flat Grain Beetle	<i>Cryptolestes spp</i>
White-shouldered house moth	<i>Endrosis sarcitrella</i>
Tropical Warehouse Moth	<i>Ephestia cautella</i>
Cacao moth/warehouse moth	<i>Ephestia elutella</i>
Mediterranean flour moth	<i>Ephestia kuehniella</i>
Broad-horned flour beetle	<i>Gnatocerus cornutus</i>
Tobacco beetle/cigarette beetle	<i>Lasioderma serricorne</i>
Long-headed flour beetle	<i>Latheticus oryzae</i>
Spider beetle black	<i>Mezium affine</i>
Spider beetle	<i>Mezium americanum</i>
Mottled grain moth	<i>Nemapogon granella</i>
Merchant grain beetle	<i>Oryzaephilus mercator</i>
Saw Tooth Grain Beetle	<i>Oryzaephilus surinamensis</i>
Small-eyed flour beetle	<i>Palorus ratzeburgi</i>
Depressed flour beetle	<i>Palorus subdepressus</i>
Indian Meal Moth	<i>Plodia interpunctella</i>
Psocids/Book lice	<i>Psocoptera sp</i>
White-marked spider beetle	<i>Ptinus fur</i>
Australian spider beetle	<i>Ptinus tectus</i>
Meal moth	<i>Pyrallis farinalis</i>
Lesser Grain Borer	<i>Rhyzopertha dominica</i>
Granary Weevil	<i>Sitophilus granarius</i>
Rice Weevil	<i>Sitophilus oryzae</i>
Maize Weevil	<i>Sitophilus zeamais</i>
Angoumois Grain Moth	<i>Sitotroga cerealella</i>
Yellow mealworm	<i>Tenebrio molitor</i>
Dark mealworm	<i>Tenebrio obscurus</i>
Cadelle	<i>Tenebroides mauritanicus</i>
Rust-red Flour Beetle	<i>Tribolium castaneum</i>
Confused Flour Beetle	<i>Tribolium confusum</i>
Warehouse Beetle	<i>Trogoderma variable</i>
Hairy fungus beetle	<i>Typhaea stercorea</i>

24. Genetic Modification

Remove the wording “The low level presence of up to 0.9%”, “is allowed in non-GM canola” and “Canola is rejectable over this limit”.

Remove the wording “The low level presence of up to 5% of GM events approved by the Australian Government Office of the Gene Technology Regulator is allowed in non-GM canola meal. Canola meal is rejectable over this limit”.

Add the wording “Genetic Modification is the direct manipulation of an organism's genes using biotechnology. More information on biotechnology and genetic modification can be found on the Office of the Gene Technology Regulator (OGTR) website, <http://www.ogtr.gov.au/>.”

Add the wording “In these definitions, Genetic Modification refers to”.

Add the wording “Specific limits for the low level presence of approved GM events are specified in the relevant commodity standards”.

Add the wording “Refer to Low Level Presence.”

The current definition is specific to canola and canola meal. With the potential for new approved GM Oilseeds being released commercially, this definition should allow for different LLPs and commodities.

The revised wording will be:

Genetic Modification

Genetic Modification is the direct manipulation of an organism's genes using biotechnology. More information on biotechnology and genetic modification can be found on the Office of the Gene Technology Regulator (OGTR) website, <http://www.ogtr.gov.au/>.

In these definitions, Genetic Modification refers to GM events approved by the Australian Government Office of the Gene Technology Regulator.

Specific limits for the Low Level Presence (LLP) of approved GM events are specified in the relevant commodity standards.

Where required, genetic modified seed or meal is to be expressed as the percentage by weight of the clean seed or meal and reported to the nearest 0.1%.

Refer to Low Level Presence.

25. Weeds Seeds – Nil

Add the wording Note: “refer to definition of Nil where a weed seed is listed as Nil”.

This wording helps clarify how a “Nil” tolerance is applied in respect to weed seeds.

26. Plant Export Operations

Update Hyperlink for Department of Agriculture, Plant Export Operations to:

<http://www.agriculture.gov.au/export/micor>

The current hyperlink <http://www.daff.gov.au/micor/plants> is out of date.

27. Plant Export Operations

Add “Importing countries may apply tighter limits for some pests, weed seeds and diseases than specified in these standards. Exporters should check importing country requirements.”

28. Weed Seeds –Table 6: Saffron Thistle

Amend the tolerance for Saffron Thistle in Table 6 from Nil to 1 seed / ½ litre (ie as per item 22, move from a Type A Weed Seed to a Type B Weed Seed).

Under the current AOF Weed Seeds standards, Saffron Thistle is Nil tolerance, which means seeds cannot be or detected present in any sample or part of the load (refer to definition of “Nil”).

According to Agriculture Victoria Note Number: LC0225, Published: August 2006 and updated: June 2007:

Saffron thistle is native to the Mediterranean region and western Asia. It has spread widely to other temperate areas including North and South America, South Africa and New Zealand, but is considered an important weed only in Australia, where it has been declared noxious in all States.

Saffron thistle is closely related to safflower, *Carthamus tinctorius*, and has been widely cultivated as a source of oil and yellow dye.

In the GTA cereal standards, Saffron Thistle is listed as a Type 6 weed seed, which allows up to 10 seeds / ½ litre in milling grade wheat. It should be noted that it is likely that a proportion of these seeds may be removed during the pre-milling seed cleaning process. In the case of Oilseeds, it is likely these seeds would pass through the pre-cleaners in the crushing process.

Given the widespread presence of this weed seed, it is unreasonable to apply a nil tolerance in any part of a load. This proposal will apply the next lowest level of tolerance for this weed seed of 1 seed / ½ litre.

The revised Table 6: Weed Seeds will be:

Common Name	Scientific Name	Tolerance per half litre
Type A (entire load)		
Alligator weed	<i>Alternanthera philoxeroides</i>	Nil
Cape Tulip	<i>Hemeria spp.</i>	Nil
Castor Oil Plant	<i>Ricinus communis</i>	Nil
Coriander	<i>Coriandrum sativum</i>	Nil
Creeping Knapweed	<i>Acrotilon repens</i>	Nil
Darling pea	<i>Swansonia spp.</i>	Nil
Dodder	<i>Cuscuta spp.</i>	Nil
Giant Sensitive plant	<i>Mimosa invisa</i>	Nil
Opium Poppy	<i>Papaver somniferum</i>	Nil
Parthenium weed	<i>Parthenium hysterophorus</i>	Nil
Ragweed	<i>Ambrosia spp.</i>	Nil
Rattlepod	<i>Crotalaria spp.</i>	Nil
St. John's Wort	<i>Hypericum perforatum</i>	Nil
Star Burr	<i>Acanthospermum hispidum</i>	Nil
Stinkwort	<i>Inula graveolens</i>	Nil
Type B		
Saffron Thistle	<i>Carthamus lanatus</i>	1
Burrs – all, except where listed in this table	<i>Xanthium spp.</i>	1
Wild mignonette	<i>Reseda lutea</i>	1
Type C		
Crow Garlic	<i>Allium vineale</i>	2
Skeleton weed	<i>Chondrilla juncea</i>	2
Thorn apple	<i>Datura spp.</i>	2
Type D		
Common Heliotrope	<i>Heliotropium europaeum</i>	3
Darnel	<i>Lolium temulentum</i>	3
Hexham scent	<i>Melilotus indicus</i>	3
Jute	<i>Corchorus olitorius</i>	3
Mexican poppy	<i>Argemone mexicana</i>	3
Mintweed	<i>Salvia reflexa</i>	3
Nightshade	<i>Solanum spp.</i>	3
Type E		
Sesbania pea	<i>Sesbania cannibina</i>	65

29. Polyunsaturated Safflower - (CSO 10)

Delete commodity quality standard for Polyunsaturated Safflower (CSO 10).

The Polyunsaturated Safflower commodity quality standard (CSO 10) is being replaced by a Non-GM Polyunsaturated Safflower (CSO 10-a). The commodity standard Polyunsaturated Safflower (CSO 10) will no longer be applicable.

30. Non-GM Polyunsaturated Safflower - (CSO 10-a)

Add a quality standard for “Non-GM Polyunsaturated Safflower (CSO 10-a)”.

Include under Physical & Chemical Parameters; General; the wording “The low level presence of up to 0.9% of GM events approved by the Australian Government Office of the Gene Technology Regulator is permitted.”

A GM high oleic Safflower is being released for commercial production and while it is expected that the GM Safflower will be marketed under a closed loop system, it is necessary to establish a Non-GM standard.

Table 12: Non-GM Polyunsaturated Safflower Standard

Commodity : SAFFLOWER – Polyunsaturated - Non-GM		Standard Reference No: CSO 10 - a
Parameter	Specification	Comment/Price Adjustment
Physical & Chemical Parameters		
General		Safflower of the species <i>Carthamus tinctorius</i> . The low level presence of up to 0.9% of GM events approved by the Australian Government Office of the Gene Technology Regulator is permitted.
Accepted Varieties	As per Masterlist	Approved safflower varieties as listed in these Standards or on the AOF website.
Oil (%)	38.0 base level	2% premium or deduction for each 1% above or below 38%
Linoleic Acid Min (%)	75.0	
Free Fatty Acid (%)	2.0 base level	2% deduction for each 1% over the base level, rejectable over 3.0%
Moisture Max (%)	8.0	2% deduction for each 1% over maximum
Test Weight	Unlimited	
Protein	Unlimited	
Seed Retention	Unlimited	
Germination	Unlimited	

31. Monounsaturated Safflower - (CSO 11)

Delete commodity quality standard for Monounsaturated Safflower (CSO 11).

The Monounsaturated Safflower commodity quality standard (CSO 11) is being replaced by a Non-GM Monounsaturated Safflower (CSO 11-a). The commodity standard Monounsaturated Safflower (CSO 11) will no longer be applicable.

32. Non-GM Monounsaturated Safflower - (CSO 11-a)

Add a quality standard for “Non-GM Monounsaturated Safflower (CSO 11-a). Include under Physical & Chemical Parameters; General:, the wording “The low level presence of up to 0.9% of GM events approved by the Australian Government Office of the Gene Technology Regulator is permitted.”

A GM high oleic Safflower is being released for commercial production and while it is expected that the GM Safflower will be marketed under a closed loop system, it is necessary to establish a Non-GM standard.

Table 13: Non-GM Monounsaturated Safflower Standard

Commodity : SAFFLOWER – Monounsaturated – Non-GM		Standard Reference No: CSO 11-a
Parameter	Specification	Comment/Price Adjustment
Physical & Chemical Parameters		
General		Safflower of the species <i>Carthamus tinctorius</i> . The low level presence of up to 0.9% of GM events approved by the Australian Government Office of the Gene Technology Regulator is permitted.
Accepted Varieties	As per Masterlist	Approved safflower varieties as listed in these Standards or on the AOF website.
Oil (%)	38.0 base level	2% premium or deduction for each 1% above or below 38%
Oleic Acid Min (%)	75.0	
Free Fatty Acid (%)	2.0 base level	2% deduction for each 1% over the base level, rejectable over 3.0%
Moisture Max (%)	8.0	2% deduction for each 1% over maximum
Test Weight	Unlimited	
Protein	Unlimited	
Seed Retention	Unlimited	
Germination	Unlimited	

33. Quality Standards – Defective table

Remove “MouldMould” from defective tables in various quality standards and replace with “Mould”.

Defective tables in Rapeseed (CSO 2), Polyunsaturated Sunflower (CSO 3), Monounsaturated Sunflower (CSO 4) and Birdseed Sunflower (CSO 5) contain the wording “MouldMould”. This is to be replaced with “Mould”.

34. Rapid In-field methods

Include a new Sub-section 7 in Section 1: AOF 1-1 – Oilseed Quality Standards to list rapid in-field methods of assessment.

Remove Rapid in-field methods of assessment from Section 2, Part 1, methods of Analysis, Oilseed Methods.

The intention is to make rapid in-field methods used for the classification of oilseeds at the point of delivery more readily available.

Methods to be included in Section 1 of the AOF Standards Manual include:

Sampling of Oilseeds and Meals	AOF 4 –1.1
Impurity Content of Oilseeds - Rapid Acceptance Test	AOF 4 –1.2a
Impurity Content of Canola - Rapid Test using Aspirator	AOF 4 - 1.2b
Moisture Content of Oilseeds by Meter	AOF4 –1.4
Green Seed in Canola	AOF4 –1.21

35. Sand / Soil

Amend limit for Sand / Soil in Canola / Rapeseed quality standards from 0.06% to 0.1%.

There has been a request from industry to change the limit for sand/soil in the canola standards from two decimal places to one decimal place.

Sand and soil are objects of quarantine enforced by the Department of Agriculture. The working limit is taken to be 0.03% (Japan has a working tolerance of 0.03% for seeds for consumption).

This change will affect Canola (CSO 1), Non-GM Canola (CSO 1-a), Canola Quality Juncea (CSJ 1-a) and Rapeseed (CSO 2).

36. Defective – 1,000 seeds

Amend assessment of defective canola to be on a 1,000 seed sample (unless otherwise stated).

Defective canola seeds are currently required to be assessed on a “Maximum % wt/wt unless otherwise stated based on cleaned half litre sample retained above 1.0mm round hole screen”.

This includes Broken or Split, Damaged and Sprouted. Examining all canola seeds in a ½ litre sample is impracticable.

The proposal is to amend the Canola (CSO 1), Non-GM Canola (CSO 1-a), Canola Quality Juncea (CSJ 1-a) and Rapeseed (CSO 2) quality tables to reflect that defective canola is assessed on a 1,000 seed sample.

An example of the revised Defective Canola table is;

(Note: this example includes other proposed amendments.)

Defective Canola (Maximum % count unless otherwise stated based on a 1,000 seed sample retained above 1.0mm round hole screen)		
Broken or Split (%)	7.0	Includes Insect Damaged. 0.5% deduction for each 1% over the maximum
Heat Damaged (per 1,000 seeds)	1	Assessed on crushed seeds
Mould (per 1,000 seeds)	5	Assessed on whole seeds before crushing
Damaged (%)	3.0	Includes Diseased, Weather Damaged and Otherwise Materially Damaged. 0.5% deduction for each 1% over the maximum, rejectable over 10%
Sprouted (%)	5.0	0.5% deduction for each 1% over the maximum
Green (%)	2.0	No penalty up to a maximum of 2%. Alternatively determine as Chlorophyll, with a maximum of 12ppm and rejectable over.

37. Frost - canola.

Remove frosted canola seeds from “Damaged” and include in “Impurities”.

Amend definition of “Damaged” to remove frost for canola.

Amend definition of “Frost Damaged” to remove damaged and include impurities for canola.

Amend definition of “Impurities” to include frost for canola.

Amend AOF Methods of Analysis AOF 4-1.2a , AOF 4-1.2b and AOF 4-1.3 to include frosted canola seeds when determining impurities.

The 2017/18 AOF Trading Standards Changes – proposed future:

4.17 For Frost, these seeds may be sucked up in the Aspirator and be included in the material for Impurities, depending on the method of using the Aspirator. A review has proposed the following changes:

- a. Include Frost in Impurities.*
- b. Remove Frost from Damaged.*
- c. Review the deductions to apply to Frost and all other impacts on pricing.*
- d. If the above is approved, there will not be the need to introduce a photo in the Visual Recognition Standards Guide. If the above is not approved, the inclusion of a photo will be considered.*

Frosted canola seeds are generally recognised as intact skins with no core.

This has two major impacts on processing canola.

1. The oil content of frosted seeds is very low, with levels somewhere around 10%, which gives a very low commercial extraction capacity.
2. A key step in crushing canola seed is “flaking”, which ruptures the oil cells to allow the oil to be extracted. Due to their relatively small size, these seeds will pass through the rollers without being properly “flaked” and the oil cells will not be properly ruptured. This reduces the ability for subsequent steps to extract any oil in the seeds.

When frosted seeds are crushed, they are not properly processed and have little to no commercial value.

Under the current canola Commodity Standards, frosted seeds are classified as Damaged, with a deduction only applying if the seed is accepted with a defect above the maximum limit (max 3.0% total defective – 0.5% deduction for each 1% over the maximum). If the level of frosting in a load is less than the maximum limit, then there is no deduction.

Impurities are included in the Corrected Net weight of at load, with a deduction of 1% for each 1% of impurities up to 4%, 2% deduction for each 1% of impurities over 4%.

While frosted seed are very light, under this proposal, they would be included in impurities and would be effectively subject to a deduction of 1% for each 1% by weight.

It should be noted however, that NIR testing for oil content is conducted on a clean seed basis, which means all impurities are removed prior to testing. Including frosted seeds in impurities would result in potentially low oil content frosted seeds being removed from sample prior to testing on NIR.