



AOF Standards Manual

Explanatory Guide

Amendments 2018

1 August 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.

In 2018, the AOF issued industry discussion papers in March 2018 and May 2018 that outlined proposed changes to the AOF Standards Manual for implementation in 2018/19. This gave industry the opportunity to consider the proposed changes and provide feedback to the AOF.

Industry feedback was considered by the AOF Standards Committee who then recommended a number of changes to the AOF Executive. The AOF Executive has approved the following changes to the AOF Standards Manual, effective 1 August 2018.

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

1. **Minor formatting and Grammatical changes**

There are a number of minor formatting and grammatical changes to the manual. These were made to improve the readability of the document and to highlight some clauses.

2. **National Residue Survey**

Hyperlink for NRS market information updated to:

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

3. **Maximum Residue Limits**

Hyperlink for ComLaw Maximum Residue Limits updated to:

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

4. **Maximum Residue Limits**

Hyperlink for NRS Maximum Residue Limits database updated to:

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

5. **Definition – opening statement**

Two opening statements added to the Definition section:

“The following Definitions are to be read in conjunction with the respective method of assessment defined 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)”.

6. **Heat Damaged and Bin Burnt**

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

7. **Defective**

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

The “of which” subcategories” removed from Defective.

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 removed.

Sunflower Birdseed Grade – subcategory of “Defective” changed to “Damaged, Sprouted, Green, Broken/Split” and amend 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”.

“Total Defective” removed from Edible Soybean grades.

The amended tables in the respective quality standards are:

Canola/NonGM Canola/Rapeseed/Junce as per;

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. Frost Damaged seeds are not included in Damaged (refer Impurities). -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.

Sunflower (Poly/Mono) 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 (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

Sunflower Birdseed Grade;

Defective Sunflower (Maximum % wt/wt unless otherwise stated based on visual inspection of a half litre sample)		
Heat Damaged (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.

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 (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

Edible Milling Grade Soybeans;

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 (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.

Edible Manufacturing Grade Soybeans;

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 (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.

Crushing Soybean;

Defective Soybeans (Maximum % wt/wt unless otherwise specified based on a cleaned half litre sample retained above a 3.175mm round hole screen)		
Broken or Split (%)	20.0	Soybeans not otherwise damaged that are % 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 (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.

Cottonseed;

No change to the Cottonseed Defective table.

Peanuts;

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.

8. Defective

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

The amended table is:

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

9. Defective

“Have a nil tolerance (eg musty seed)” removed from list of defect types.

Added at bottom of list “(Note: Seeds that have a nil tolerance are included in Objectionable Material)”.

10. Defective

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

11. Broken or Split

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

“Broken or Split seed is included in the Defective category.”

12. Definition – add definition for Contaminants

Contaminants

Contaminants are defined as all other material other than seed of the Oilseed being assessed and includes Objectionable Material that has a nil tolerance. Individual definitions for each contaminant can be found in these standards.

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

- Impurities, including Foreign Material, Snails / Stones, Insects, Ryegrass ergot and Sand / Soil.
- Objectionable Material.

Additional contaminants may be listed in the respective commodity standard.

13. Heat Damaged

“Refer also to Mould” removed on page 8.

14. Mould

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

After 1st para: “Mould is included in Defective. Refer also to Defective” has been added.

“(musty)” after mouldy odour has been added.

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”.

15. Damaged

After first sentence added “This includes Otherwise Materially Damaged seed”.

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

16. Definition – 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).

17. Tainting Agent

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

18. Animal Material

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

19. Fertiliser

“fertiliser” added to Objectionable Material in Commodity Standards.

20. Weed Seeds

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

The tolerance for Saffron Thistle amended in Table 6 from Nil to 1 seed / ½ litre

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 spp.</i>	Nil
Castor Oil Plant	<i>Ricinus communis</i>	Nil
Coriander	<i>Coriandrum sativum</i>	Nil
Creeping Knapweed	<i>Acranthion 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. Johns 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
Thornapple	<i>Datura spp.</i>	2
Type D		
Common Heliotrope	<i>Heliotropium curassavicum</i>	3
Darnel	<i>Lolium temulentum</i>	3
Hexhamscint	<i>Melilotus indicus</i>	3
Jute	<i>Corchorus solitarius</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

21. Stored Product Insects

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

Stored Product Insects list add as a new table.

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>Gnathocerus 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>Pyralis 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>

22. **Maximum Residue Limits**

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

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

For publications held on the GTA website, the “Applicable Date” amended to “as per current digital copy on GTA website”.

Reference to “Grain Quality Visual Recognition Standards” removed.

24. **Unlimited**

Remove “=” symbol from definition.

25. **Genetic Modification**

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

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” has been removed.

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/>” has been added.

The wording “In these definitions, Genetic Modification refers to” has been added.

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

The wording “Refer to Low Level Presence.” has been added.

The revised wording is:

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.

26. **Weeds Seeds – Nil**

The wording Note: “refer to definition of Nil where a weed seed is listed as Nil” has been added.

27. Polyunsaturated Safflower - (CSO 10)

The commodity quality standard for Polyunsaturated Safflower (CSO 10) has been deleted.

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

A quality standard for “Non-GM Polyunsaturated Safflower (CSO 10-a)” has been added.

Included 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.”

29. Monounsaturated Safflower - (CSO 11)

The commodity quality standard for Monounsaturated Safflower (CSO 11) has been deleted.

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

A quality standard for “Non-GM Monounsaturated Safflower (CSO 11-a)” has been added.

Included 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.”

31. Oilseed Meals and Hulls

In Table 1, Quality Specifications, Oilseed Meals and Hulls (refer Section 1, AOF 1-3), standards SAF:M 362/79 and SAF:M 361/79 amended to;

Remove Safflower Meal Solvent and Safflower Meal Pressed.

Add Non-GM Safflower Meal Solvent and Non-GM Safflower Meal Pressed.

32. Quality Standards – Defective table

The duplicate wording “MouldMould” has been removed from defective tables in various quality standards and replace with “Mould”.

33. Sand / Soil

Limit for Sand / Soil in all Canola / Juncea / Rapeseed quality standards has been changed from 0.06% to 0.1%.

34. Plant Export Operations

Hyperlink for Department of Agriculture, Plant Export Operations updated to:
<http://www.agriculture.gov.au/export/micor>.

35. Plant Export Operations

The wording “Importing countries may apply tighter limits for some pests, weed seeds and diseases than specified in these standards. Exporters should check importing country requirements.” has been added to the definition.

36. Defective – 1,000 seeds - Canola

The assessment of defective canola, including Juncea and rapeseed, using a half litre samples has been amended to be a% count on a 1,000 seed sample (unless otherwise stated).

37. Frost - canola.

Frosted canola seeds removed from “Damaged” and included in “Impurities”.

Definition of “Damaged” amended to remove frost for canola and include in impurities.

Definition of “Frost Damaged” amended to remove damaged and include impurities for canola.

Definition of “Impurities” amended to include frost for canola.

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