

**Section 7**

**Oat Receival Standards**

**and**

**Classification Procedures**

7.1	Oat Classification Procedures .....	4
7.2	Prime Milling Oat Receival Standards (POAT).....	7
	Application.....	7
	Standard.....	7
	Physical Characteristics .....	7
1.1	Pickling Compounds/Red Dyed Grains/Coloured Grains .....	7
1.2	Chemicals Not Approved For Stored Grain .....	7
1.3	Odours/Sour and Musty/Tainting Agents.....	7
1.4	Objectionable Matter .....	7
1.5	Live Stored Grain Insects.....	7
	Pea Weevil.....	7
2.	Eligible Varieties.....	8
3.	Moisture Content.....	8
4.	Test Weight .....	8
5.	Screenings (below the screen) .....	8
6.	Weed Seeds .....	8
7.	Defective Grains .....	9
8.	Contaminants .....	9
7.3	Milling Oat Receival Standards (MOAT).....	11
	Application.....	11
	Standard.....	11
	Physical Characteristics .....	11
1.1	Pickling Compounds/Red Dyed Grains/Coloured Grains .....	11
1.2	Chemicals Not Approved For Stored Grain .....	11
1.3	Odours/Sour and Musty/Tainting Agents.....	11
1.4	Objectionable Matter .....	11
1.5	Live Stored Grain Insects.....	11
	Pea Weevil.....	11
2.	Eligible Varieties.....	12
3.	Moisture Content.....	12
4.	Test Weight .....	12
5.	Screenings (below the screen) .....	12
6.	Weed Seeds .....	12
7.	Defective Grains .....	12
7.1	Damaged Grains (Groats).....	12
7.2	Weather Stained Grains .....	13
7.3	Weather Stained Kernels .....	13
7.4	Field Fungi.....	13
7.5	Dry Green/Sappy Oats.....	13

7.6	Frost Damaged.....	13
7.7	Insect Damaged.....	13
7.8	Shot & Sprouted.....	13
7.9	Heat Damaged/Bin Burnt.....	13
7.10	Storage Mould/Musty/Mould .....	13
8.	Contaminants.....	13
7.2	Smut and Cereal Ergots .....	13
7.3	Ryegrass Ergot.....	13
7.4	Field Insects.....	13
7.5	Grain Insects.....	13
7.6	Snails .....	14
7.7	Earth and Sand.....	14
7.4	Feed Oat Receival Standards (FOAT).....	15
	Application .....	15
	Standard.....	15
	Physical Characteristics .....	15
1.1	Pickling Compounds/Red Dyed Grains/Coloured Grains .....	15
1.2	Chemicals Not Approved For Stored Grain .....	15
1.3	Odours/Sour and Musty/Tainting Agents .....	15
1.4	Objectionable Matter.....	15
1.5	Live Stored Grain Insects.....	15
	Pea Weevil.....	16
2.	Eligible Varieties .....	16
3.	Moisture Content .....	16
4.	Test Weight .....	16
5.	Screenings (below the screen).....	16
6.	Weed Seeds .....	16
7.	Defective Grains .....	16
7.1	Damaged Grains (Groats) .....	17
7.2	Weather Stained Grains .....	17
7.3	Weather Stained Kernels.....	17
7.4	Field Fungi .....	17
7.5	Dry Green/Sappy Oats.....	17
7.6	Frost Damaged.....	17
7.7	Insect Damaged.....	17
7.8	Shot & Sprouted.....	17
7.9	Heat Damaged/Bin Burnt.....	17
7.10	Storage Mould/Musty/Mould .....	17
8.	Contaminants.....	17
8.1	Smut and Cereal Ergots .....	17

8.2	Ryegrass Ergot.....	17
8.3	Field Insects.....	17
8.4	Grain Insects.....	18
8.5	Snails.....	18
8.6	Earth and Sand.....	18

The role of AusBulk Ltd when receiving oats is to ensure that the grain is fit for storage. However in order to accommodate the various clients who purchase oats, we have included the classification procedures and standards for the major oat grades.

## 7.1 Oat Classification Procedures

The following classification procedure is to be used for the receipt of all Oat grades.

1. Sample the load presented for delivery according to the Receival Sampling procedure detailed in section 1 to produce a representative Grower Load Composite (GLC) sample. Ensure the sample is mixed thoroughly.
2. From the GLC sample draw a subsample to be tested for moisture content. Oat moisture is determined using the Kett moisture meter according to the instructions in section 2.

If the moisture content exceeds 13.0% then the load must be rejected and issued a Temporary Decline Notice.

If the moisture exceeds 12.5% but not 13.0% then retest 2 further samples and average the three results using the Kett's averaging function.

Should one of the repeats exceed 13.0%, the load must immediately be issued with a Temporary Decline Notice.

Should the average moisture content be above 12.5% the load must be rejected and issued a Temporary Decline Notice.

If the average moisture content is below 12.5% the classification can continue.

Note: for POAT, these limits must be 0.5% lower, as the maximum moisture content for POAT is 12%.

3. Check the sample for any signs of objectionable contaminants subject to Nil tolerance, as mentioned below.
4. Fill the 1/2 litre measure and determine the Test Weight of the sample using the 1/2 litre measure and balance method according to section 2.
5. Pour the contents from the half litre measure into the 2.0mm screen on the Agtator. Press the button to make the Agtator shake back and forth 40 times.
6. For PRIME MILLING OATS ONLY , separate the chaff and straw remaining above the screen and weigh this. This is the % Unmillable.
7. For PRIME MILLING OATS ONLY , pick out the foreign material ( non pure oat material) from above the 2.0mm screen and weigh this. This is the % Foreign Material.
8. Inspect the screenings sample for presence of field insects or dead grain insects.
9. Inspect the screen and the bottom tray for Seed Contaminants. Seed Contaminant list are sourced from the AWB Ltd Weed Seed list.

Exceptions to the tolerances listed below are identified in the bin grade sections later on the chapter.

10. Weed Seed Tolerances are listed for each grade. The Weed Seeds for each category are listed below.

<b>TOLERANCE (Maximum per half litre)</b>
<b>TYPE 1 Tolerances Refer To The Maximum Allowed For Each Individual Seed Listed</b>
Colocynth, Three Corner Jacks/Spiny Emex/Double Gee, Jute, Long Head Poppy, Mexican Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach
<b>For Types 2 - 8, Tolerances Refer To The Total Of All Seeds Named In Each Type</b>
<b>Type 2</b>
Castor Oil Plant, Coriander, Crow or Wild Garlic, Darling Pea, Opium Poppy, Ragweed, Rattlepods, Common Broomrape, Starburr, St. John's Wort, Parthenium Weed
<b>Type 3a</b>
Bathurst & Noogoora Burr, Bulls Head or Caltrop or Cats Head, Cape Tulip, Cottonseed, Dodder, Thornapple, Bellvine
<b>Type 3b</b>
Vetch (Wild Tare) Vetch (Commercial)
<b>Type 3c</b>
Heliotrope (Blue) Heliotrope (Common)
<b>Type 4</b>
Field Bindweed, Cutleaf Mignonette, Drake Seed, Hexham Scent (Melilotus)*, Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle
*Hexham scent (melilotus) can only be received if there is no discernible tainting odour imparted
<b>Type 5</b>
Creeping Knapweed (Or Russian Knapweed), Salvation Jane (Paterson's Curse), Sesbania Pea
<b>Type 6</b>
Saffron Thistle
<b>Type 7</b>
Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Field Peas, Safflower, Soybean, Sunflower
<b>Type 8</b>
Barley, Bindweed (Black & Australian), Wheat, Durum Wheat, Black Oats, Sand oats, Wild Oats, Common Oats, Rice, Cereal Rye, Triticale, Turnip Weed, Forage Sorghum and Other Weed Seeds Not Specified In Types 1-7 or Small foreign seeds
Small Foreign Seeds % by weight <b>SS</b>

11. Place the contents that passed through the screen back into the 1/2 litre measure that is on the scales. This is the % Screenings.
12. From the thoroughly mixed half litre sample count 200 Oats. Inspect this grain for weather-stained grains, weather-stained kernels, shot and sprouted grain, green oats, and in Milling Oat grades, other oat varieties.
13. At Manual Load Entry (MLE) sites record the results of the quality tests along with the pay and bin grade in the quality section of the Receival Weighnote according to the instructions in the Commodity Document Manual. Ensure that the quality test data entered is compatible with the classification, otherwise the

weighnote will be held in error when it is entered at Head Office, delaying payment to the grower until the information is corrected.

At Operational Management System (OMS) sites enter the test results and the variety code onto the computer according to the instructions in the OMS User Guide. The computer can derive a list of the acceptable provisional and bin grades in order of rank. However it is important to remember that this is only an aid for the classifier and does not absolve the classifier from the responsibility of classifying the load.

All tests performed and the results shall be included on the weighnote. In order to perform this quickly and efficiently, the codes listed below shall be used. These codes are also listed on the Oat Classification Chart.

\*Refers to a test automatically on the weight ticket.

Test	CODE	Test	CODE
Commodity - oats	OA	Green oats	GO
Moisture	MO*	Snails - conical	SNC
Test weight	TW*	Snails - round	SNR
Screenings	SC*	Dead grain insects	DI
Foreign grain	FG	Field insects	FI
Weather stained grains	WS	Small weed seeds	SW
Weather stained kernels	WK	Large weed seeds	LW
Shot grain	SH	Three corner jacks	TJ
Sprouted grain	SP	Black or wild oats	BW
Varietal admixtures	VA		

14. Ask the grower for the variety of Oats to fill in the weight ticket. There are restrictions for the varieties that can go into both Feed and Milling Oats. The following varietal codes are to be used on the weight ticket when receiving Oats for weight tickets.

Variety	Code	Variety	Code	Variety	Code
Algeria	ALGR	Echidna*	ECHD	Moore	MOOR
Avon	AVON	Eurabbie	EURA	Mortlock*	MORT
Bandicoot	BAND	Euro*+	EURO	Murray*	MURR
Betong	BETT	Glider	GLID	Numbat	NUMB
Bulban	BULB	Hotham	HOTH	Golden Orient	ORNT
Cassia	CASS	Irwin	IRWN	Pallinup*	PALL
Coolabah	COOL	Kalgan	KALG	Potoroo	POTR
Cooba	COOB	Kent	KENT	Quoll	QUOL
Coomaloo	COOM	Kherson	KHER	Swan*	SWAN
Dalyup*	DALY	Marloo	MARL	Wallaroo	WALL
Dolphin	DOLP	Mixed/Not Named	NTOA	West*	WEST

\* Denotes Milling Variety

+ Denotes Prime Milling Variety

15. Draw the appropriate amount of sample from the GLC sample to add to the Cell Composite or Bin Grade Composite samples (see section 1.3 to 1.4) and collect any other samples requested by Clients (ABB Grain Ltd or AusBulk Ltd Head Office for another client).

## 7.2 Prime Milling Oat Receival Standards (POAT)

### Application

The following standard applies for the receival of Prime Milling Oats. (POAT)

### Standard

#### Physical Characteristics

**The following contaminants are subject to a NIL tolerance.**

##### 1.1 Pickling Compounds/Red Dyed Grains/Coloured Grains

Including Fenaminosulf, triadimenol, carboxin, flutriafol, bitertanol and any other fungicide added to the grain as a seed dressing. Also included are any marker dyes commonly used during crop spraying operations, which have stained the grain.

There is a **NIL** tolerance for Fusarium (pink) fungal stained grains.

##### 1.2 Chemicals Not Approved For Stored Grain

No contact insecticides including Dryacide are approved for the use on Oats. Only approved fumigants such as Phosphine can be used provided that the approved application rates have been used.

If a Grower indicates that the load has been treated with a chemical either shortly before harvesting or prior to delivery then the classifier should contact Head Office Quality Services department to determine whether the chemical and the treatment rate are acceptable for receival at your site.

##### 1.3 Odours/Sour and Musty/Tainting Agents

Grain which has any commercially objectionable foreign odour due to tainting agents or improper storage causing mould, souring or musty odours.

Any contaminant which imparts an objectionable taint or smell to the load such as eucalyptus, Wild Garlic, Melilotus or Coriander.

##### 1.4 Objectionable Matter

Sticks, Stones, glass, concrete or any other commercially unacceptable contaminant, smell or taste.

##### 1.5 Live Stored Grain Insects

Live stored grain insects include the Lesser Grain Borer, (*Rhyzopertha dominica*), Saw Toothed Grain Beetle (*Oryzaephilus surinamensis*), Rust Red Flour Beetle (*Tribolium castaneum*), Confused Flour Beetle (*Tribolium confusum*), Granary Weevil (*Sitophilus granarius*), Rice Weevil (*Sitophilus oryzae*), Flat Grain Beetle (*Cryptolestes spp*), any other stored grain pest, and the Pea Weevil (*Bruchus pisorum*).

For a guide to Insect identification consult the 'Insects of Stored Grain' pocket book or wall chart available in all sampling offices.

#### Pea Weevil

When peas are detected in a load after sampling, it will be necessary to confirm that they are free of live pea weevil and/or larvae; this means that the peas will need to be broken open. If peas are not found in the probed sample but are obvious on the surface of the load, several peas are to be collected at random in a safe manner and checked for infestation.

This is to be carried out using the "pea crusher" supplied. Up to 10 peas are placed into the cylinder and the piston rammed home to break open the peas. The peas are then inspected for pea weevil infestation. As pea weevil will most likely be in the larval stage, care should be exercised when breaking open the peas as the grub can easily be lost in the debris. If no live pea weevil and/or larvae are found, the load can be classified.

## 2. Eligible Varieties

The only allowable variety into POAT is Euro. There is a **NIL** tolerance for other varieties.

## 3. Moisture Content

The maximum moisture content for the receipt of Prime Milling Oats is **12.5%**.

## 4. Test Weight

The minimum test weight for the receipt of Prime Milling Oats is **52.5 kg/hl**.

## 5. Screenings (below the screen)

The Maximum allowable screenings in Prime Milling Oats is **5.0%** by weight. Prime Milling Oats are tested for screenings by weighing the product that goes through a 2.0mm screen

### 5.1 Unmillable Material (above the screen)

The Maximum allowable unmillable material in Prime Milling Oats is **2.0% by weight**. Prime Milling Oats are tested for unmillable material by weighing the chaff and stalk above a 2.0mm screen.

### 5.2 Foreign Material

The maximum allowable Foreign Material in Prime Milling Oats is **2.0% by weight**. Prime Milling Oats are tested for Foreign Material by removing all of the non-oat material from above and below the screens

## 6. Weed Seeds

Type 1 Tolerances Refer To The Maximum Allowed For Each Individual Seed Listed.

For Types 2 - 8 Tolerances Refer To The Total Of All Seeds Named In Each Type.

Seed Contaminants	Tolerance	Exceptions
Type 1*	5	NIL tolerance for Double Gees/3 Corner Jacks/Spiny Emex
Type 2	NIL	
Type 3A	NIL	
Type 3B	4	
Type 3C	4	
Type 4	10	
Type 5	40	
Type 6	2	
Type 7	1	
Type 8	20	Black Oats – MAX 5 / ½ litre
Small Foreign Seeds (% by weight)	0.5%	

## 7. Defective Grains

Defective Grains are measured as a % per 200 grains.

### **7.1 Damaged Grains (Groats)**

There is maximum 2% tolerance for damaged oats.

### **7.2 Weather Stained Grains**

Weather stained grains are those oats whose husks are discoloured by water damage. There is an allowable limit of **5 %** by count from 200 grains. (10 grains in a 200 oat count).

### **7.3 Weather Stained Kernels**

If weather stained kernels are detected the husks must be removed. There is a **NIL** tolerance for weather stained kernels in Milling Oats.

### **7.4 Field Fungi**

There is a **NIL** tolerance for grains affected by field fungi.

### **7.5 Dry Green/Sappy Oats**

Green Oats are those that have been harvested at an immature stage of development.

Maximum allowable green oats is **1 %** as a count from 200 oats (2 seeds allowable per 200 Oats).

### **7.6 Frost Damaged**

There is a maximum tolerance of **1%** as a count from 200 grains ( 2 seeds allowable per 200 Oats).

### **7.7 Insect Damaged**

There is a maximum tolerance of **1%** as a count from 200 grains ( 2 seeds allowable per 200 Oats).

### **7.8 Shot & Sprouted**

Sprouted Grains are those with visible root growth or the presence of a "chit" poking out of the germ end of the grain.

There is a **NIL** tolerance for shot and sprouted grains in Milling Oats.

### **7.9 Heat Damaged/Bin Burnt**

There is a **NIL** tolerance for Heat Damaged and Bin Burnt grains.

### **7.10 Storage Mould/Musty/Mould**

There is a **NIL** tolerance for Heat Damaged and Bin Burnt grains.

## 8. Contaminants

### **8.1 Smut and Cereal Ergots**

There is a **NIL** tolerance for all smut species and cereal ergots

### **8.2 Ryegrass Ergot**

Tolerance applies to the maximum length ( in cm ) that pieces are not to exceed when aligned end to end.

Ryegrass ergot not to exceed **2 cm maximum in length**.

### **8.3 Field Insects**

Field Insects include Grasshoppers, Woodbugs, Ladybirds and any other field insects that are not damaging to stored grain.

Tolerances are for dead or live insects and refer to whole bodies or body portions for all field insects except Grasshoppers. For Grasshoppers, 6 legs, 3 body parts or 2 wings, constitute 1 insect. The tolerance is for dead or alive Grasshoppers and refers to whole bodies.

The maximum allowable limit for field insects is **3 per ½ litre**.

The maximum allowable limit for Sitona Weevil is **10 per ½ litre**.

#### **8.4 Grain Insects**

Grain insects are those which attack or inhabit stored grain.

For a guide to Insect identification consult the "Insects of Stored Grain" pocket book or wall chart available in all sampling offices. If you are unsure of the identification of any insect detected in the sample then the load should be declined until it can be identified. Contact your Area or Head Office for assistance.

It is allowable to have **5 dead grain insects per ½ litre in milling oats**.

#### **8.5 Snails**

Snails refer to whole bodies or substantially whole (more than half) Snail shells irrespective of size of the White Snail (*Cernvella virgata*), White Italian Snail (*Theba pisana*), Pointed Snail (*Cochlicella acuta*), Small Pointed Snail (*Cochlicella barara*) and Cernuella neglecta.

The maximum allowable level of snails is **1 snail per ½ litre**.

#### **8.6 Earth and Sand**

There is a maximum limit of **50 grains of sand per ½ litre**.

There is a maximum limit of **3 pea size pieces of earth per ½ litre**.

## 7.3 Milling Oat Receival Standards (MOAT)

### Application

The following standard applies for the receival of Milling Oats. (MOAT)

### Standard

#### Physical Characteristics

**The following contaminants are subject to a NIL tolerance.**

##### 1.1 Pickling Compounds/Red Dyed Grains/Coloured Grains

Including Fenaminosulf, triadimenol, carboxin, flutriafol, bitertanol and any other fungicide added to the grain as a seed dressing. Also included are any marker dyes commonly used during crop spraying operations, which have stained the grain.

There is a **NIL** tolerance for Fusarium (pink) fungal stained grains.

##### 1.2 Chemicals Not Approved For Stored Grain

No contact insecticides including Dryacide are approved for the use on Oats. Only approved fumigants such as Phosphine can be used provided that the approved application rates have been used.

If a Grower indicates that the load has been treated with a chemical either shortly before harvesting or prior to delivery then the classifier should contact Head Office Customer Services Department to determine whether the chemical and the treatment rate are acceptable for receival at your site.

##### 1.3 Odours/Sour and Musty/Tainting Agents

Grain which has any commercially objectionable foreign odour due to tainting agents or improper storage causing mould, souring or musty odours.

Any contaminant which imparts an objectionable taint or smell to the load such as eucalyptus, Wild Garlic, Melilotus or Coriander.

##### 1.4 Objectionable Matter

Sticks, Stones, glass, concrete or any other commercially unacceptable contaminant, smell or taste.

##### 1.5 Live Stored Grain Insects

Live stored grain insects include the Lesser Grain Borer, (*Rhyzopertha dominica*), Saw Toothed Grain Beetle (*Oryzaephilus surinamensis*), Rust Red Flour Beetle (*Tribolium castaneum*), Confused Flour Beetle (*Tribolium confusum*), Granary Weevil (*Sitophilus granarius*), Rice Weevil (*Sitophilus oryzae*), Flat Grain Beetle (*Cryptolestes spp*), any other stored grain pest, and the Pea Weevil (*Bruchus pisorum*).

For a guide to Insect identification consult the 'Insects of Stored Grain' pocket book or wall chart available in all sampling offices.

##### Pea Weevil

When peas are detected in a load after sampling, it will be necessary to confirm that they are free of live pea weevil and/or larvae; this means that the peas will need to be broken open. If peas are not found in the probed sample but are obvious on the surface of the load, several peas are to be collected at random in a safe manner and checked for infestation.

This is to be carried out using the "pea crusher" supplied. Up to 10 peas are placed into the cylinder and the piston rammed home to break open the peas. The peas are then inspected for pea weevil infestation. As pea weevil will most likely be in the larval stage, care should be exercised when breaking open the peas as the grub can easily be lost in the debris. If no live pea weevil and/or larvae are found, the load can be classified.

## 2. Eligible Varieties

Varieties eligible to be allowed into Milling No.1 Oats are Echidna, Euro, Swan, Dalyup, Mortlock, West, Murray and Pallinup. There is an allowance for **10%** of other varieties measured using a count from 200 oats.

## 3. Moisture Content

The maximum moisture content for the receipt of Milling Oats No. 1 is **12.5%**.

## 4. Test Weight

The minimum test weight for the receipt of Milling Oats No. 1 is **51.0 kg/hl**.

## 5. Screenings (below the screen)

The Maximum allowable screenings in Milling Oats No. 1 is **10.0%** by weight. Milling Oats No. 1 Oats are tested for screenings by weighing the product that goes through a 2.0mm screen

## 6. Weed Seeds

\*Type 1 Tolerances Refer To The Maximum Allowed For Each Individual Seed Listed.

For Types 2 - 8 Tolerances Refer To The Total Of All Seeds Named In Each Type.

Seed Contaminants	Tolerance	Exceptions
Type 1*	5	NIL tolerance for Double Gees/3 Corner Jacks/Spiny Emex
Type 2	NIL	
Type 3A	NIL	
Type 3B	4	
Type 3C	4	
Type 4	10	
Type 5	40	
Type 6	5	
Type 7	1	
Type 8	50	Black Oats – MAX 10 / ½ litre
Small Foreign Seeds (% by weight)	0.5%	

## 7. Defective Grains

Defective Grains are measured as a % per 200 grains.

### 7.1 Damaged Grains (Groats)

There is maximum **2%** tolerance for damaged oats.

## 7.2 Weather Stained Grains

Weather stained grains are those oats whose husks are discoloured by water damage. There is an allowable limit of **5 %** by count from 200 grains. (10 grains in a 200 oat count).

## 7.3 Weather Stained Kernels

If weather stained kernels are detected the husks must be removed. There is a **NIL** tolerance for weather stained kernels in Milling Oats.

## 7.4 Field Fungi

There is a **NIL** tolerance for grains affected by field fungi.

## 7.5 Dry Green/Sappy Oats

Green Oats are those that have been harvested at an immature stage of development.

Maximum allowable green oats is **5 %** as a count from 200 oats (10 seeds allowable per 200 Oats).

## 7.6 Frost Damaged

There is a maximum tolerance of **1 %** as a count from 200 grains ( 2 seeds allowable per 200 Oats).

## 7.7 Insect Damaged

There is a maximum tolerance of **1 %** as a count from 200 grains ( 2 seeds allowable per 200 Oats).

## 7.8 Shot & Sprouted

Sprouted Grains are those with visible root growth or the presence of a "chit" poking out of the germ end of the grain.

There is a **NIL** tolerance for shot and sprouted grains in Milling Oats.

## 7.9 Heat Damaged/Bin Burnt

There is a **NIL** tolerance for Heat Damaged and Bin Burnt grains.

## 7.10 Storage Mould/Musty/Mould

There is a **NIL** tolerance for Heat Damaged and Bin Burnt grains.

## 8. Contaminants

### 7.2 Smut and Cereal Ergots

There is a **NIL** tolerance for all smut species and cereal ergots

### 7.3 Ryegrass Ergot

Tolerance applies to the maximum length ( in cm ) that pieces are not to exceed when aligned end to end.

Ryegrass ergot not to exceed **2 cm maximum in length**.

### 7.4 Field Insects

Field Insects include Grasshoppers, Woodbugs, Ladybirds and any other field insects that are not damaging to stored grain.

Tolerances are for dead or live insects and refer to whole bodies or body portions for all field insects except Grasshoppers. For Grasshoppers, 6 legs, 3 body parts or 2 wings, constitute 1 insect. The tolerance is for dead or alive Grasshoppers and refers to whole bodies.

The maximum allowable limit for field insects is **3 per ½ litre**.

The maximum allowable limit for Sitona Weevil is **10 per ½ litre**.

### 7.5 Grain Insects

Grain insects are those which attack or inhabit stored grain.

For a guide to Insect identification consult the "Insects of Stored Grain" pocket book or wall chart available in all sampling offices. If you are unsure of the identification of any insect detected in the sample then the load should be declined until it can be identified. Contact your Area or Head Office for assistance.

It is allowable to have **5 dead grain insects per ½ litre.**

#### **7.6 Snails**

Snails refer to whole bodies or substantially whole (more than half) Snail shells irrespective of size of the White Snail (*Cernvella virgata*), White Italian Snail (*Theba pisana*), Pointed Snail (*Cochlicella acuta*), Small Pointed Snail (*Cochlicella barara*) and *Cernuella neglecta*.

The maximum allowable level of snails is **1 snail per ½ litre.**

#### **7.7 Earth and Sand**

There is a maximum limit of **50 grains of sand per ½ litre.**

There is a maximum limit of **3 pea size pieces of earth per ½ litre.**

## 7.4 Feed Oat Receival Standards (FOAT)

### Application

The following standard applies for the receival of No.1 Feed Oats (FOAT). FOA2 and FOA3 standards will be issued if required during Harvest.

FOA3 cannot be received without approval from Head Office. Standards will be drawn up each year to reflect the quality issues facing oats for that season.

### Standard

#### Physical Characteristics

<b>The following contaminants are subject to a NIL tolerance.</b>
---

##### 1.1 Pickling Compounds/Red Dyed Grains/Coloured Grains

Including Fenaminosulf, triadimenol, carboxin, flutriafol, bitertanol and any other fungicide added to the grain as a seed dressing. Also included are any marker dyes commonly used during crop spraying operations, which have stained the grain.

There is a **NIL** tolerance for Fusarium (pink) fungal stained grains.

##### 1.2 Chemicals Not Approved For Stored Grain

No contact insecticides including Dryacide are approved for the use on Oats. Only approved fumigants such as Phosphine can be used provided that the approved application rates have been used.

If a Grower indicates that the load has been treated with a chemical either shortly before harvesting or prior to delivery then the classifier should contact Head Office Quality Services department to determine whether the chemical and the treatment rate are acceptable for receival at your site.

##### 1.3 Odours/Sour and Musty/Tainting Agents

Grain which has any commercially objectionable foreign odour due to tainting agents or improper storage causing mould, souring or musty odours.

Any contaminant which imparts an objectionable taint or smell to the load such as eucalyptus, Wild Garlic, Melilotus or Coriander.

##### 1.4 Objectionable Matter

Sticks, Stones, glass, concrete or any other commercially unacceptable contaminant, smell or taste.

##### 1.5 Live Stored Grain Insects

Live stored grain insects include the Lesser Grain Borer, (*Rhyzopertha dominica*), Saw Toothed Grain Beetle (*Oryzaephilus surinamensis*), Rust Red Flour Beetle (*Tribolium castaneum*), Confused Flour Beetle (*Tribolium confusum*), Granary Weevil (*Sitophilus granarius*), Rice Weevil (*Sitophilus oryzae*), Flat Grain Beetle (*Cryptolestes* spp), any other stored grain pest, and the Pea Weevil (*Bruchus pisorum*).

For a guide to Insect identification consult the 'Insects of Stored Grain' pocket book or wall chart available in all sampling offices.

## Pea Weevil

When peas are detected in a load after sampling, it will be necessary to confirm that they are free of live pea weevil and/or larvae; this means that the peas will need to be broken open. If peas are not found in the probed sample but are obvious on the surface of the load, several peas are to be collected at random in a safe manner and checked for infestation.

This is to be carried out using the "pea crusher" supplied. Up to 10 peas are placed into the cylinder and the piston rammed home to break open the peas. The peas are then inspected for pea weevil infestation. As pea weevil will most likely be in the larval stage, care should be exercised when breaking open the peas as the grub can easily be lost in the debris. If no live pea weevil and/or larvae are found, the load can be classified.

### 2. Eligible Varieties

All Oat varieties are accepted into the Feed Oat No.1 grades EXCEPT Saia, NZ Cape and Mortgage Lifter.

### 3. Moisture Content

The maximum moisture content for the receipt of Feed Oat No.1 is **12.5%**.

### 4. Test Weight

The minimum test weight for the receipt of Feed Oat No.1 is **48.0 kg/hl**.

### 5. Screenings (below the screen)

The Maximum allowable screenings in Feed Oat No.1 is **20.0%** by weight. Feed Oat No.1 are tested for screenings by weighing the product that goes through a 2.0mm screen

### 6. Weed Seeds

Type 1 Tolerances Refer To The Maximum Allowed For Each Individual Seed Listed.

For Types 2 - 8 Tolerances Refer To The Total Of All Seeds Named In Each Type.

Seed Contaminants	Tolerance	Exceptions
Type 1*	5	
Type 2	NIL	
Type 3A	NIL	
Type 3B	4	
Type 3C	4	
Type 4	10	
Type 5	40	
Type 6	10	
Type 7	20	
Type 8	250	Black Oats – MAX 100 / ½ litre
Small Foreign Seeds (% by weight)	3 %	

### 7. Defective Grains

Defective Grains are measured as a % per 200 grains.

### 7.1 Damaged Grains (Groats)

There is no limit for damaged oats.

### 7.2 Weather Stained Grains

Weather stained grains are those oats whose husks are discoloured by water damage. There is an allowable limit of **20 %** by count from 200 grains. (40 grains in a 200 oat count).

### 7.3 Weather Stained Kernels

If weather stained kernels are detected the husks must be removed. There is an allowable limit of **20 %** by count from 200 grains. (40 grains in a 200 oat count).

### 7.4 Field Fungi

There is a **NIL** tolerance for grains affected by field fungi.

### 7.5 Dry Green/Sappy Oats

Green Oats are those that have been harvested at an immature stage of development.

There is **no limit** for Dry Green/Sappy Oats.

### 7.6 Frost Damaged

There is a maximum tolerance of **20%** as a count from 200 grains ( 40 seeds allowable per 200 Oats).

### 7.7 Insect Damaged

There is a maximum tolerance of **5%** as a count from 200 grains ( 10 seeds allowable per 200 Oats).

### 7.8 Shot & Sprouted

There is no limit for early sprouted grains.

There is a **NIL** tolerance for sprouted grains with visible root growth or the presence of a "chit" poking out of the germ end of the grain.

### 7.9 Heat Damaged/Bin Burnt

There is a **NIL** tolerance for Heat Damaged and Bin Burnt grains.

### 7.10 Storage Mould/Musty/Mould

There is a **NIL** tolerance for Heat Damaged and Bin Burnt grains.

## 8. Contaminants

### 8.1 Smut and Cereal Ergots

There is a **NIL** tolerance for all smut species and cereal ergots

### 8.2 Ryegrass Ergot

Tolerance applies to the maximum length ( in cm ) that pieces are not to exceed when aligned end to end.

Ryegrass ergot not to exceed **2 cm maximum in length**.

### 8.3 Field Insects

Field Insects include Grasshoppers, Woodbugs, Ladybirds and any other field insects that are not damaging to stored grain.

Tolerances are for dead or live insects and refer to whole bodies or body portions for all field insects except Grasshoppers. For Grasshoppers, 6 legs, 3 body parts or 2 wings, constitute 1 insect. The tolerance is for dead or alive Grasshoppers and refers to whole bodies.

The maximum allowable limit for field insects is **3 per ½ litre**.

The maximum allowable limit for Sitona Weevil is **10 per ½ litre**.

#### **8.4 Grain Insects**

Grain insects are those which attack or inhabit stored grain.

For a guide to Insect identification consult the "Insects of Stored Grain" pocket book or wall chart available in all sampling offices. If you are unsure of the identification of any insect detected in the sample then the load should be declined until it can be identified. Contact your Area or Head Office for assistance.

It is allowable to have **5 dead grain insects per ½ litre in milling oats**.

#### **8.5 Snails**

Snails refer to whole bodies or substantially whole (more than half) Snail shells irrespective of size of the White Snail (*Cernvella virgata*), White Italian Snail (*Theba pisana*), Pointed Snail (*Cochlicella acuta*), Small Pointed Snail (*Cochlicella barara*) and Cernuella neglecta.

The maximum allowable level of snails is **1 snail per ½ litre**.

#### **8.6 Earth and Sand**

There is a maximum limit of **50 grains of sand per ½ litre**.

There is a maximum limit of **3 pea size pieces of earth per ½ litre**.