# GOVERNMENT NOTICES • GOEWERMENTSKENNISGEWINGS

#### **DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES**

NO. R. 632 03 MAY 2019

AGRICULTURAL PRODUCT STANDARDS ACT, 1990 (ACT No. 119 OF 1990)

# REGULATIONS RELATING TO THE GRADING, PACKING AND MARKING OF PULSES INTENDED FOR SALE IN THE REPUBLIC OF SOUTH AFRICA

The Minister of Agriculture has under section 15 of the Agricultural Product Standards Act, 1990 (Act No. 119 of 1990) –

- (a) made the regulations set out in the Schedule; and
- (b) determined that the said regulations shall come into operation twelve months after date of publication

#### **SCHEDULE**

#### **Definition**

- **1.** In these regulations, unless the context indicates otherwise, any word or expression to which a meaning has been assigned in the Act shall have that meaning and –
- "address" means a physical address in the Republic of South Africa and includes the street or road number or name, and the name of the town, village or suburb and, in the case of a farm, the name or number of the farm and of the magisterial district in which it is situated;
- "animal filth" means any part of an animal which may contaminate the product such as dead rodents, dead birds, dung, droppings, pellets hair and/or feathers of any animal;
- "Ascochyta" means the fungal disease that attacks lentils, peas and chickpeas plant and seeds, and which causes dark-coloured lesions on the seed coat which result the product being considered a damaged pulses;
- "black gram" threshed seeds of the black gram plant of (Vigna mungo (L.) Hepper);
- "bleached peas" means green peas which one-eight or more of the surface of the cotyledon is bleached to a distinct yellow colour which is in marked contrast to its natural colour;
- "broken pulses" in whole pulse means pulses in which the cotyledons are separated or one cotyledon has been broken. In split pulses means pulses in which the cotyledon has been broken;
- "bulk quantity" means a quantity of more than 10 kg of pulses , whether sold in containers or in loose quantities;
- "chick peas" means dried, peeled and split seeds of Cicer arientinum;
- "chips" means pieces or fragments relevant to the class of split pea;

#### "consignment" means -

- (a) a quantity of pulses of the same class, which belongs to the same producer, importer, packer or owner and which is delivered at a particular time under cover of the same consignment note, delivery note or receipt, or is delivered by the same vehicle or bulk container; or
- in the case where such quantity referred to in paragraph (a), is subdivided into different types of packaging, or classes, each quantity of such different types of packaging or classes;
- "container" means a bag or other suitable packing unit in which pulses in retail or bulk quantities are packed;

## "cracked seed coat" in peas and chickpeas means -

- (a) peas with cracked seed coats, (if the peas are otherwise damaged, they are included in the tolerance for damage, not cracked seed coats);
- (b) peas with all or part of the seed coat removed; and
- (c) broken peas with less than one-fourth of the pea broken off, (broken peas with more than one-fourth of the pea broken off are considered damaged);
- "damaged pulses" means pulses that are distinctly damaged by weather, Ascochyta, diseased/fungi infected, shrivelled, cracked seed coat, split pulses, stained, chips, white caps, soiled or discoloured to such an extent that the damage materially affects the quality of the pulses;
  - (a) **Damaged lentils** include peeled, split, broken, sprouted, distinctly green, frost damaged, distinctly deteriorated or discoloured by weather or disease, insect damaged, heat damaged or otherwise damaged in a way which materially affects quality.
  - (b) Damaged peas include split or broken peas where more than one-fourth of the pea is broken off, Whole peas that are sprouted, heated, shrivelled, damaged by insects, badly deteriorated or discoloured by weather or by disease, or that are otherwise damaged in a way that seriously affects their appearance or quality.
  - (c) Damaged chickpeas include whole or broken chickpeas that are sprouted, frost damaged, heated, damaged by insects, distinctly deteriorated or discoloured (discernible green colour) by weather or by disease, or that are otherwise damaged in a way that seriously affects their quality.
- "defective pulses" means pulses of which the quality or colour are adversely affected by the extent to which they are damaged, heat damaged, insect damaged, or sprouted;
- "discoloured pulses" means pulses that are distinctly blemished and/or off colour from the characteristic colour of the predominating class;
- "foreign matter" means any matter other than fragments of pulse kernels, animal filth, glass, metal, stones, coal, and poisonous seeds that does not naturally form part of pulses;
- "good coloured pulses" means pulses that are practically free from discolouration and have the uniform natural colour and appearance characteristics of the predominating colour of the pulse;
- "green" means chickpea that when cut in half, there is a distinct green colour throughout the seed and seedcoat;
- "heat damaged pulses" means whole and fragments of pulses which have been materially and

internally discoloured as a result of heat;

- "insect" means an insect of a kind that is detrimental to pulses, irrespective of the stage of development thereof and whether it is alive or dead;
- "Insect damaged pulses" means whole and pieces of pulses which are damaged by weevil or other insects;
- "lentils" threshed seeds of the lentil plant of (*Lens culinaris Medic, Lens esculenta Moench*) and which varieties may have a wide range of seed coat colours from green, red, speckled green, black and tan. The cotyledon colour may be red, yellow or green;
- "main panel" means that part of the label or container bearing the trade mark, trade name or brand name in greatest prominence and any other part of the label or container bearing the trade mark, trade name or brand name in equal prominence;
- "mixed lentils" means lentils that consist of a mixture of different colour or classes of lentils;
- "mixed peas" means peas and chickpeas that consist of a mixture of different colour or class of peas;
- "mixed pulses" means mixture of pulses with or without additional grains and/or seeds in any proportion that are sound and may be marketed as mixed pulses or soup mix or any other suitable or appropriate name;
- "mouldy pulses" means pulse kernels or fragments of pulse kernels that -
  - (a) may or not have a typical mouldy odour and/or;
  - (b) are infected by fungi and are characterised by black, blue, green, yellow or white fungi growth and/or fungi spores and/or;
  - (c) are infected by diplodia-co rot and are characterised by light brown to greyish fungi growth or a dull black discolouration of the pulse kernel; and
  - (d) are infected by fusarium-cob rot and are characterised by a dull pink to red and light brown to dark brown or black stain of the pulse kernel;
- "mung beans" threshed seeds of the mung or green gram plant of Vigna radiata;
- "other classes or not true type" means pulses that do not have the normal characteristic shape, size, colour or other properties of a particular class;
- "poisonous seeds" means the seeds or bits of seeds of plant species that may present a hazard to human or animal health when consumed, including seeds of Argemone Mexicana L., Convolvulus spp., Crotalaria spp., Canavalia Ensiformus, Datura spp., Ipomoea Purpurea, Lolium Temulentum, Ricinus Communis or Xanthium spp.;
- "packer" means a person or company packing pulses for sale, a person/company on whose behalf pulses are packed for sale and a person/company importing pulses for sale;
- "peas" means dried, peeled and split seeds of Pisum sativum;
- "peeled and broken pulses" means pulses and pieces of pulses which are otherwise sound but which are less than three-quarters of whole seeds or where less than one-half of the seed coat is intact; Lentils with cracked or clipped seed coats are considered sound when the cotyledons are firmly held together;

- "pulses" means dry leguminous seeds of Lentils (Lens culinaris Medic, Lens esculenta Moench);

  Peas of Pisum Sativum L; Chickpeas of Cicer Arientinum L; Black gram of Vinga Mungo;

  Mung beans of Vigna Radiata; Cowpeas of Vigna Unguiculata; Pigeon peas of Cajanus

  Cajan;
- "retail quantity" means a quantity of 10 kg or less of pulses, irrespective whether sold in containers or in loose quantities;
- "sclerotia" means hard masses of fungal tissue produced by fungus *Sclerotinia Sclerotiorum*. The sclerotia vary in size and form and consist of a dark black exterior, a white interior and a rough surface texture;
- "screenings" means all matters other than pulses that can be removed from the original sample by use of an approved device and procedure;
- "shrivelled pulses" means pulses which are distinctly shrivelled in contrast to the natural shape and appearance of a normally developed seed and shows three or more intense pleats;
- "sound" means free from all internal and external defects which detrimentally affect the quality of the pulses;
- "split pulses" means pulses without their seedcoat, with the two cotyledons separated from the other which are sound;
- "sprouted pulses" means pulses that are considered sprouted when the seed coat splits and the primary root emerges from between the cotyledons. Sprouted is considered in the total tolerance for damage;

#### "stained pulses" means -

- (a) seeds with a significant number of distinct spot on the seed coat;
- (b) seeds with distinct brown discolouration on the seed coat;
- (c) seed with Ascochyta, seeds with dark-coloured lesions on the seed coat, seeds with fungal growth are considered damaged; and
- (d) seeds of green lentils with significant blue-black discolouration of the seed coat;
- "stones and sand" means hard shales, coal, hard earth pellets and any other non-toxic materials of similar consistency. Fertilizer pellets are assessed as stones when constituting 1.0% or less of the net sample weight;
- "the Act" means the Agricultural Product Standards Act, 1990 (Act No. 119 of 1990);
- "unscreened pulses" means the uncleaned sample of pulses;
- "white caps" means split peas with seedcoats attached; and
- **"whole pulses"** means pulses with one-fourth or less of the cotyledons removed and with the remainder of the cotyledons firmly held together;

#### Scope of Regulations

2. These regulations are the minimum standard applicable to a pulse that are destined for sale in the Republic of South Africa but does not include ready-to-eat pulses.

#### Restrictions on the sale of pulses

- 3. (1) A person may not sell pulses in the Republic of South Africa
  - (a) unless the pulse concerned are sold according to the classes prescribed in regulation 4;
  - (b) unless the pulse concerned comply with the standards for classes prescribed in regulation 5;
  - (c) unless the pulse concerned comply with the standards for grades prescribed in regulation 6;
  - (d) unless the pulse concerned are packed in type of containers and in the manner prescribed in regulations 7 and 8;
  - (e) unless the pulse concerned are marked with the particulars and in the manner prescribed in regulations 9, 10 and 11;
  - (f) if the pulse concerned contain a substance that has thus been prescribed as a substance which it may not contain;
  - (g) if the pulse concerned are packed in a container or in such a manner that has thus been prescribed as a container or a manner in which it may not be packed; and
  - (h) if the pulse concerned are marked with particulars or in such a manner that has thus been prescribed as particulars or manner in which it may not be marked.
- (2) The Executive Officer may grant written exemption, entirely or partially, to any person on such conditions as he or she deems necessary, from the provisions of subregulation (1).

#### PART I

#### **QUALITY STANDARDS**

## 4. Type groups for Pulses

Type groups of pulses shall for the purpose of the application of these regulations be classified as follows:

#### (a) Lentils shall be classified as either split or whole:

- (i) Brown lentils
- (ii) Red lentils
- (iii) Green lentils
- (iv) Black lentils
- (v) Yellow lentils
- (vi) French or Le Puy lentils
- (vii) Mixed lentils

#### (b) Peas shall be classified as either split or whole :

- (i) Green peas
- (ii) Yellow peas
- (iii) Pigeon peas
- (iv) Cowpeas
- (v) Chickpeas
- (vi) Mixed peas

#### (c) Beans shall be classified as:

- (i) Mung beans
- (ii) Black gram

## (d) Mixture of different pulses shall be classified as:

(i) Mixed pulses

#### 5. Standards for classes of pulses

The consignment of pulses shall -

- (a) consist of matured dried seeds of pulses;
- (b) be free from any toxin, chemical or any other substance that renders it unsuitable for human consumption or for processing into or utilisation thereof as food or feed;
- (c) not contain more poisonous seeds or ergot sclerotinia than permitted in terms of the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972);
- (d) be free from any mouldy odours, abnormal flavours, odour, taste or colour not typical of undamaged and sound pulses;
- (e) be free from animal filth, glass, metal, coal or insects; and

(f) have a moisture content not exceeding the following limits per pulse type:

	TYPE OF PULSE	MOISTURE CONTENT
(i)	Lentils	14%
(ii)	Peas	16%
(iii)	Chickpeas	14%
(iv)	Beans	16%

Mixed pulses use the moisture of the predominant pulse type

#### 6. Grades standards for Pulses

- (1) Whole and split pulses shall for the purpose of the application of these regulations be graded as –
  - (a) Grade 1, Grade 2 or Grade 3 in the case of pulses in retail quantities: provided that pulses in retail quantities of 5 kg and more may also be graded as Undergrade; and
  - (b) Canning Grade, Grade 1, Grade 2, or Grade 3 in the case of pulses in bulk quantities.
- (2) The consignment of whole pulses, split pulses and canning grade shall comply with the permissible deviations as set out in Table 1, 2, 3 and 4 of the Annexure A.

#### **PART II**

#### PACKING AND MARKING REQUIREMENTS

#### Requirements for containers

- 7. The containers in which pulses are packed shall
  - (a) be manufactured from a material that -
    - (i) will protect the contents thereof against contamination; and
    - (ii) will not impart any undesirable flavour or odour to the contents thereof.
  - (b) be so strong that they will not tear or break during normal storage, handling and transport practices;
  - (c) be whole, with the exception of grain probe marks: Provided that grain probe marks will not be permissible in the case of pulses in retail quantities, notwithstanding the presence of micro-perforations which allow for air release in retail form-fill and seal packaging;
  - (d) be clean;
  - (e) be closed or sealed properly in a manner permitted by the nature thereof; and
  - (f) in the case of pulses in retail quantities, be previously unused for any purpose.

#### Packing requirements

**8.** (1) Each package shall contain pulses of the same type and the class designation, except in the case of the class with mixed pulses.

#### Marking requirements

Marking of containers in which pulses in retail quantities are packed

- 9. (1) (a) Subject to the provisions of paragraphs (b), each container in which pulses in retail quantities are sold shall, either on the main panel or in another conspicuous place thereon, be marked with
  - (i) the name or registered trade mark and address of the packer/importer;
  - (ii) class of the pulses;
  - (iii) grade of the pulses (optional);
  - (iv) net weight of the pulses packed therein; and
  - (v) the expression "Product of" followed by the name of the country of origin thereof or the country of origin declared as required by regulations published in terms of the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act 54 of 1972).
  - (b) Any illustration on the container shall be an accurate representation of the

contents, especially as far as colour and type of pulses is concerned.

- (2) When pulses destined for sale in the retail trade are kept for sale in loose quantities
  - (a) pulses of different form class and grades shall, except in the case of the type group known as Mixed pulses, be kept separate; and
  - (b) the particulars referred to in subregulation (1)(a) shall be indicated in clearly legible letters and figures with a vertical height of at least 10,0 mm on a notice board displayed at those pulses.

#### Marking of containers in which pulses are packed in bulk quantities

- **10.** (1) Subject to the provisions of subregulation (2), each container containing pulses in bulk, shall be marked clearly and legibly with block letters on the container itself, or on a label affixed to the container, with the following particulars:
  - (a) the name of the product/class/grade;
  - (b) the country of origin;
  - (c) a lot identification;
  - (d) net weight of the pulses packed therein; and
  - (e) the name and address of the packer of those pulses as required by regulation 9: Provided that the lot identification and the name and address of the packer may be replaced by an identification mark, if such identification mark is clearly identifiable with the accompanying sales documents.
  - (2) The country of origin may in the case of pulses destined for further processing or packing be omitted, if the country of origin is indicated on the accompanying sales documents.

#### Indications of packer

- 11. (1) The name of the packer of pulses that is marked on the container shall
  - (a) consist of the initials and surname or trade name of the packer or, in the case of imported pulses in retail quantities, the importer concerned; and
  - (b) be preceded by the expression "Packed by" or, in the case of pulses imported into the Republic in the containers in which they are to be sold in the retail trade, be preceded by the expression "Imported by".
  - (2) The address as contemplated in regulation 1 of the schedule of the packer of pulses and be marked on such container immediately after the particulars referred to in subregulation (1)
  - (3) If pulses are packed on behalf of a person
    - (a) the particulars referred to in subregulation (1) (a) shall be replaced by the initials and surname or trade name of the person on whose behalf those pulses have been packed;
    - (b) such initials and surname or trade name shall be preceded by the expression "packed for":

- (c) the address of such person shall be indicated in the place of the address referred to in subregulation (2);
- (d) such address shall be marked on a container immediately after the particulars referred to in paragraph (a); and
- (e) the particulars referred to in subregulations (1) and (2) may in addition thereto be marked on a container.

#### Restricted particulars

**12.** (1) No word, mark, illustration, depiction or any other method of expression that constitutes a misrepresentation, directly or by implication creates or may create a misleading impression regarding the quality, nature or class of pulses shall appear on a container in which pulses are packed, or on a label attached to such container.

#### **PART III**

#### **SAMPLING**

#### General

- **13.** (1) A sample of a consignment shall for the purpose of the application of these regulations be obtained by
  - (a) in the case of pulses in retail quantities packed in containers,
    - (i) randomly taking from the number of containers concerned, at least the applicable number of containers mentioned in column 2 of Table below; and

#### **SAMPLING PLAN**

1 NUMBER OF CONTAINERS	2 MINIMUM NUMBER OF CONTAINERS TO BE SELECTED AT RANDOM					
Less than 10	2					
11 to 50	4					
More than 50	6					

- (ii) sampling each such container by hand in the manner set out in regulation 14: Provided that if the contents per container is 1 kg or less, the total contents of all the chosen containers will be taken as sample;
- (b) in the case of pulses in bulk quantities
  - (i) sampling each bag in that consignment with a grain probe as contemplated in regulation 15 or by hand as contemplated in regulation 12 if it consists of 100 bags or less; or
  - (ii) by otherwise sampling at least 10 per cent of the bags in that consignment chosen at random, but with a minimum of 100 bags, with a grain probe as contemplated in regulation 15 or by hand as contemplated in regulation 14. Provided that at least 25 bags in a consignment shall be sampled and where a consignment consist of less than 25 bags, all bags in that consignment shall be sampled.
- (2) A sample taken in terms of this regulation is considered to be representative of the consignment from which it was obtained.

#### Sampling by hand

- 14. The sampling of a consignment by hand shall be done as follows:
  - (a) Open the containers in the consignment that have to be sampled.
  - (b) Insert the open hand into such container or the loose quantity concerned, close the hand into a fist and thereafter withdraw it evenly.
  - (c) Place the material enclasped by the hand in a suitable collecting tray.
  - (d) Repeat the procedure described in paragraph (b) alternately at various depths in the containers or loose quantities concerned, and place the material thus removed in the collecting tray referred to in paragraph (c).
  - (e) Take more or less equal quantities or material from each container that is sampled.
  - (f) Thoroughly mix the material thus obtained and divides it by means of a sample divider to obtain a sample of at least 1 kg of material.

#### Sampling by means of a bag probe

- **15.** (1) The sampling of a consignment with a bag probe shall be done as follows:
  - (a) Insert the tapered end of the bag probe upwards at an angle of approximately 30 degrees with the horizontal line and with the aperture thereof downwards, into each bag chosen from that consignment, until the end of the probe is approximately in the centre of such bag.
  - (b) Turn the bag probe through approximately 180 degrees on the longitudinal axis thereof so that the aperture thereof is at the top.
  - (c) Extract the bag probe with a slight shaking movement and diminishing speed from the bag concerned to ensure that a relatively even and increasing flow of pulses is maintained through the aperture thereof closer to the side of the bag.
  - (d) Place the material contained in the bag probe in a suitable container.
  - (e) Repeat the procedure described in subparagraphs (a), (b) and (c) alternately at various depths of alternate bags and place the material thus removed in the container referred to in subparagraph (d).
  - (f) Take approximately equal quantities of material from each bag that is sampled.
  - (g) Thoroughly mixes the material thus obtained and divide it by means of a sample divider to obtain a sample of at least 1 kg.
  - (2) A bag probe referred to in subregulation (1) shall
    - (a) be long enough so that the end thereof will reach the center of a bag being sampled;
    - (b) consist of a cylindrical tube with a tapered end and an aperture close to the end; and
    - (c) have a diameter not exceeding 22mm.

#### Sampling if contents differ

- 16. If it appears from an examination of the pulses in bulk quantities taken in accordance with regulation 15(b) from different bags in a consignment, that the contents of those bags differ conspicuously –
  - (a) the respective bags shall be separated from each other;
  - (b) all the bags in the consignment concerned shall be sampled in order to make such classification and separation; and
  - (c) each group of bags of a particular grade in the consignment concerned shall for the purposes of these regulations be deemed to be a separate consignment.

## Obtaining of a working sample

**17.** (1) A working sample is obtained by dividing the representative sample of the consignment according to the (International Association for Cereal Science and Technology) ICC.101/1 method.

#### **PART IV**

## INSPECTION METHODS AND DETERMINATION OF DEVIATIONS

# Determination of undesirable odours and harmful substances, poisonous seeds, mites and insect content

18. A consignment of pulses shall be sensorially assessed and sorted by hand in order to determine whether the sample has an undesirable odours, contains poisonous seeds, insects and mites.

#### Determination of foreign matter content, other classes, stones and sand content

- **19.** The percentages of foreign matter, other classes, stones and sand in a consignment of pulses shall be determined as follows:
  - (a) Prepare a working sample by measuring off 1 kg of material from the sample of the consignment.
  - (b) Remove all the foreign matter, other classes, all the stones and sand separately from the working sample and determine the respective masses thereof.
  - (c) Express the masses thus determined, as percentages of 1 kg.
  - (d) Such percentages shall respectively represent the percentage of foreign matter, other classes, the percentage of stones and sand in the consignment concerned.

#### Determination of defective pulses

- 20. The percentages of defective pulses in a consignment shall be determined as follows:
  - (a) Prepare a working sample by measuring off from the quantity of the sample from which the stones, sand and foreign matter have been removed as contemplated in regulation 19.
  - (b) Obtain a working sample of at least 500 g of pulses.
  - (c) Remove all defective pulses separately from the working sample and determine the respective masses thereof.
  - (d) Express the respective masses thus determined, as percentages of the mass of the applicable working sample.
  - (e) Such percentages shall respectively represent the percentage of defective pulses in the consignment concerned.

## Determination of the percentage damaged pulses

- 21. The percentage damaged pulses in a consignment shall be determined as follows:
  - (a) Obtain a working sample of at least 250 g of un-screened pulses.
  - (b) Remove all damaged pulses by hand separately from the working sample and determine the respective masses thereof.
  - (c) Express the mass thus determined as a percentage of the mass of the working sample.

(d) Such percentage represents the percentage damaged pulses in the consignment.

#### Determination of the amount of sprouted pulses

- 22. The amount of sprouted pulses in a consignment shall be determined as follows:
  - (a) Obtain a working sample of 1000 g of un-screened pulses.
  - (b) Remove all sprouted kernels by hand and determine the amount thereof.
  - (c) Such amount represents the amount of sprouted pulses in the consignment.

#### Determination of bleached peas

- 23. The amount of bleached peas in a consignment shall be determined as follows:
  - (a) Obtain a working sample of 200 g of screened pulses.
  - (b) Remove all suspected bleached kernels by hand.
  - (c) Remove the seed coat from suspected kernels to determine the size of the bleached area on the cotyledons and determine the amount thereof.
  - (d) Such amount represents the amount of bleached pulses in the consignment.

#### PART V

#### **MOISTURE CONTENT**

#### **Determination of moisture content**

**24.** (1) The moisture content of a consignment of pulses shall be determined with an instrument that is suitable for the purpose, has been calibrated for pulses and according to the directions for use of the instrument concerned: Provided that the results thus obtained are in accordance (±0,3 per cent) with the results obtained by the 72 hour oven dried method. [(American Association of Cereal Chemists) AACC Method 44/15A/1981].

#### **PART VI**

## Offences and penalties

**25.** Any person who contravenes or fails to comply with any provision of these regulations shall be guilty of an offence and upon conviction be liable to a fine or imprisonment in accordance with section 11 of the Act.

## ANNEXURE A.

## MAXIMUM PERCENTAGE(%) PERMISSIBLE DEVIATIONS FOR LENTILS

## TABLE 1

	STANDARDS FOR GRADES OF LENTILS								
NATURE OF DEFECTS									
DEFECTS	CANI	NING GR	ADES	WH	OLE LEN	SPLIT LENTILS			
	Grade 1	Grade 2	Grade 3	Grade 1	Grade 2	Grade 3	Grade 1	Grade 2	
Foreign matter	0.2	0.5	0.5	0.2	0.5	1.0	0.2	0.5	
2. Stones and sand	0.10	0.2	0.3	0.10	0.2	0.3	0.2	0.3	
3. Defective lentils									
3.1 Heat damage	0.2	0.5	1.0	0.2	0.5	1.0	0.2	0.5	
3.2 Damaged lentils	2.0	3.0	3.5	2.0	3.5	5.0	2.0	3.5	
3.3 Insect damage	0.3	0.8	1.5	0.3	0.8	1.5	0.3	0.8	
3.4 Sprouted	2.0	3.0	3.5	2.0	3.5	5.0	2.0	3.5	
3.5 Other classes	3.0	8.0	8.0	3.0	8.0	8.0	3.0	8.0	
4. Deviations in paragraph (1),(2), (3): provided that such deviations are individually within the specified limits	3.5	8.5	8.5	3.5	8.5	8.5	3.0	8.0	

- means not applicablemeans no limit

## MAXIMUM PERCENTAGE(%) PERMISSIBLE DEVIATIONS FOR PEAS

## TABLE 2

TABLE 2									
	STANDARDS FOR GRADES OF PEAS								
NATURE OF									
DEFECTS	CANNING GRADES			WHOLE PEAS			SPLIT PEAS		
	Grade Grade Grade			Grade Grade Grade			Grade Grade Grade		
	1	2	3	1	2	3	1	2	3
1. Foreign matter	0.1	0.2	0.5	0.1	0.2	0.5	0.1	0.2	0.5
Stones and sand	0.1	0.2	0.5	0.1	0.2	0.5	0.1	0.2	0.5
3. Defective Peas									
3.1 Insect damaged	0.3	0.8	2.0	0.3	0.8	2.0	0.5	1.0	2.0
3.2 Heat damage	0.1	0.2	0.5	0.2	0.5	1.0	0.2	0.5	1.0
3.3 Damaged peas	2.0	4.0	10.0	2.0	5.0	10.0	2.0	4.0	10.0
3.4 Bleached	2.0	3.0	5.0	2.0	3.0	5.0	2.0	3.0	5.0
3.5 Shrivelled	2.0	4.0	8.0	2.0	4.0	8.0	2.0	4.0	6.0
3.6 Cracked seeds	5.0	8.0	13.0	5.0	7.0	13.0	-	-	-
3.7 Other Classes	0.5	1.0	2.0	0.5	1.0	2.0	0.3	0.8	1.5
3.8 Split peas	0.5	1.0	5.0	0.5	1.0	5.0	-	-	-
3.9 Chips	0.0	0.0	0.0	6.0	9.0	12.0	6.0	9.0	12.0
3.10 White caps	-	-	-	-	-	-	1.0	2.0	3.0
3.11 Whole peas	-	-	-		-	-	0.5	1.0	2.0
3.12 Sprout	2.0	3.0	5.0	2.0	3.0	5.0	-	-	-
4. Deviations in paragraph (1),(2), (3): provided that such deviations are individually within the specified limits	2.0	3.5	6.0	2.0	3.5	6.0	2.0	4.0	6.0

- means not applicable
  \* means no limit
- means no limit

## MAXIMUM PERCENTAGE(%) PERMISSIBLE DEVIATIONS FOR CHICKPEAS

## TABLE 3

	STANDARDS FOR GRADES OF CHICKPEAS							
NATURE OF DEFECTS	CANNING	GRADES		OLE (PEAS	SPLIT CHICKPEAS			
	Grade 1 Grade 2		Grade 1	Grade 2	Grade 1	Grade 2		
1. Foreign matter	0.3	0.5	0.3	0.5	0.3	0.5		
Stones and sand	0.1	0.4	0.2	0.4	0.2	0.4		
3. Defective chickpeas								
3.1 Insect damaged	0.8	1.5	1.0	2.0	1.0	2.0		
3.2 Heat damage	0.1	0.2	0.1	0.2	0.1	0.2		
3.3 Damaged chickpeas	0.5	1.0	1.0	2.0	1.0	2.0		
3.4 Shrivelled/green	2.0	4.0	4.0	8.0	4.0	8.0		
3.5 Cracked seed coat	3.0	5.0	5.0	7.0	5.0	7.0		
3.6 Splits	1.0	2.0	1.0	2.0	-	-		
3.7 Other classes	0.5	1.0	0.5	1.0	1.0	2.0		
4. Deviations in paragraph (1),(2), (3): provided that such deviations are individually within the specified limits	2.0	3.5	2.0	4.0	2.0	4.0		

- means not applicable
- \* means no limit

# $\begin{array}{c} {\sf MAXIMUM\ PERCENTAGE(\%)\ PERMISSIBLE\ DEVIATIONS\ FOR\ MUNG\ BEANS\ AND\ BLACK} \\ {\sf GRAM} \end{array}$

**TABLE 4** 

	STANDARDS FOR GRADES OF MUNG BEANS AND BLACK GRAM						
NATURE OF							
DEFECTS	CAN	INING GRA	DES	NORMAL GRADES			
	Grade 1	Grade 2	Grade 3	Grade 1	Grade 2	Grade 3	
1. Foreign matter	1.5	2.0	3.0	1.5	2.0	3.0	
2. Stones and sand	0.2	0.5	0.6	0.3	0.5	0.6	
3. Defective beans							
3.1 Insect damaged	1.0	3.0	5.0	1.0	4.0	5.0	
3.2 Broken seeds	2.0	4.0	6.0	2.0	5.0	7.0	
3.3 Damaged pulses	2.0	4.0	6.0	2.0	5.0	6.0	
3.4 Immature seeds	1.0	1.5	3.0	1.0	2.0	3.0	
3.5 Other classes	1.0	1.5	2.0	1.0	2.0	4.0	
3.6 Cracked seed coat	1.0	1.0	2.0	-	-	-	
3.8 Pod Scale	3.0	6.0	12.0	3.0	6.0	12.0	
4. Deviations in paragraph (1),(2), (3): provided that such deviations are individually within the specified limits	4.0	8.0	15.0	4.0	7.0	15.0	

- means not applicable
- \* means no limit